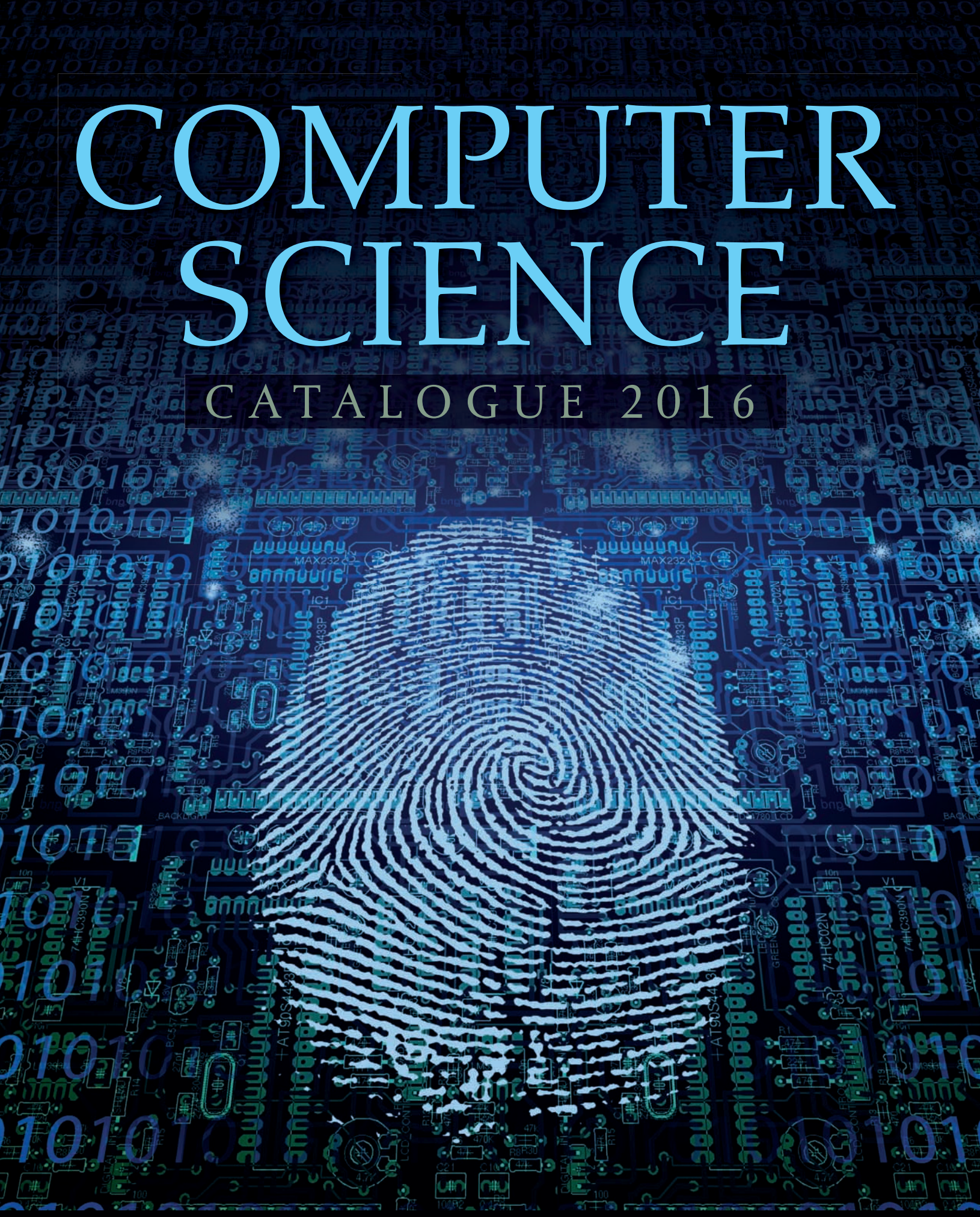
COMPUTER SCIENCE

CATALOGUE 2016



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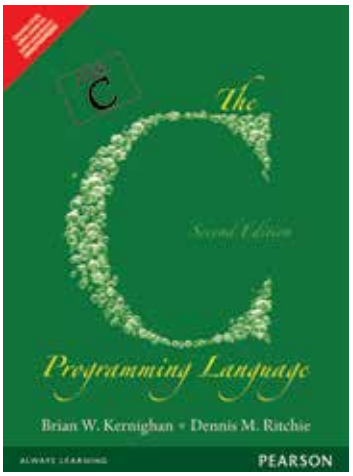


The C Programming Language, 2/e

Brian W. Kernighan | Dennis M. Ritchie

ISBN : 9789332549449
Copyright Year : 2015

About the Book

This second edition describes C as defined by the ANSI standard. This book is meant to help the reader learn how to program in C. The book assumes some familiarity with basic programming concepts like variables, assignment statements, loops, and functions. A novice programmer should be able to read along and pick up the language.

Features

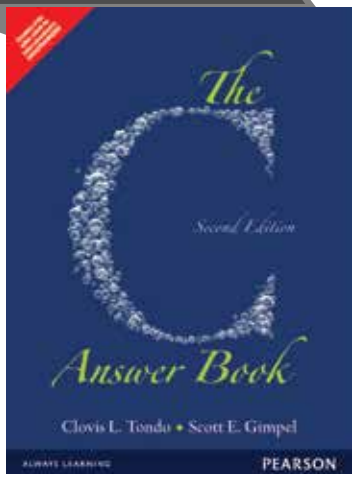
- All examples have been tested, which is in machine-readable form.
- It discusses various aspects of C in more detail, although the emphasis is on examples of complete programs, rather than isolated fragments.
- It deals with basic data types, operators and expressions.
- Covers functions and program structure, external variables, scope rules, multiple source files, and also touches on the preprocessor.
- It also describes an interface between C programs and the UNIX operating system, concentrating on input/output, the file system, and storage allocation.
- It also provides a language reference manual. The official statement of the syntax and semantics of C is the ANSI standard.

Contents

About the Authors

Brian W. Kernighan received his BASc from the University of Toronto in 1964 and a PhD in electrical engineering from Princeton in 1969. He was a member of the Computing Science Research center at Bell Labs until 2000, and is now a professor in the Computer Science Department at Princeton. He was a co-creator of several programming languages, including AWK, AMPL, and a number of tools for document preparation. He is the co-author of 10 books and some technical papers, and holds 4patents. He was elected to the National Academy of Engineering in 2002. His research areas include programming languages, tools and interfaces that make computers easier to use, often for non-specialist users. He is also interested in technology education for non-technical audiences.
Dennis Ritchie was a computer scientist notable for his influence on **ALTRAN, B, BCPL, C, Multics, and Unix**.

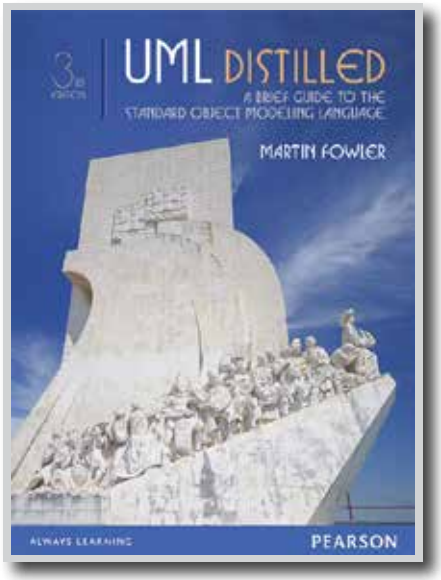
Also Available



THE C ANSWER BOOK, 2/e

Clovis L. Tondo | Scott E. Gimpel

ISBN : 9789332549739
Copyright Year : 2015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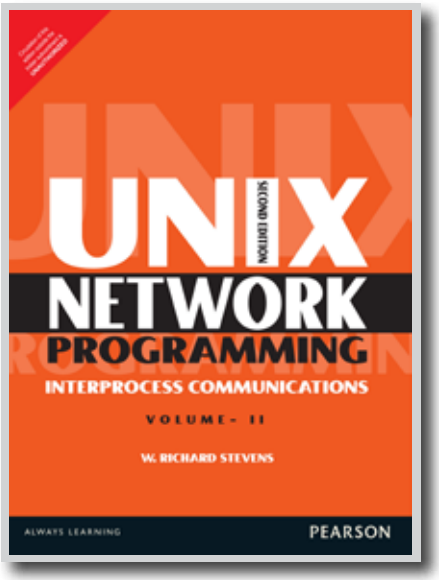
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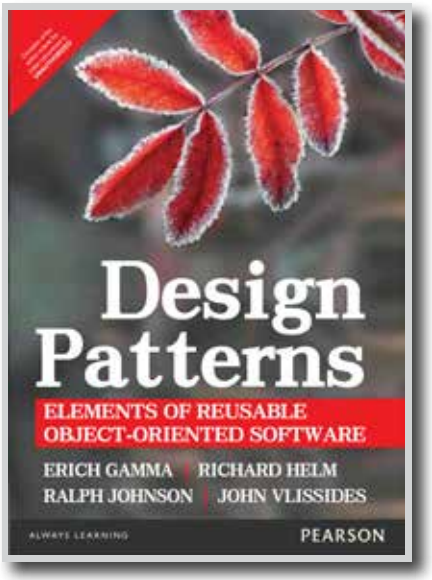
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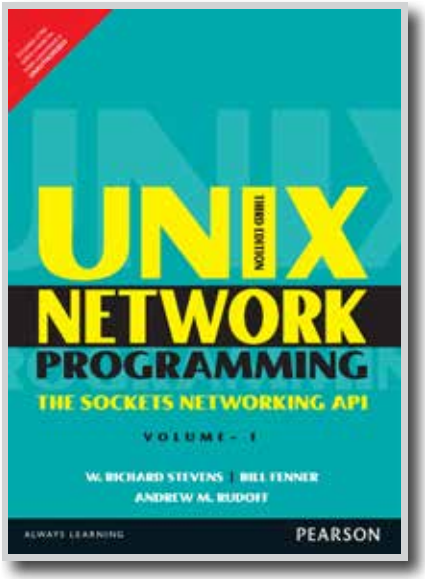
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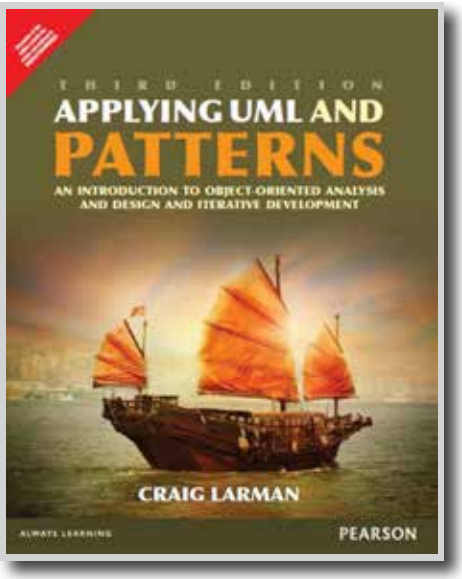
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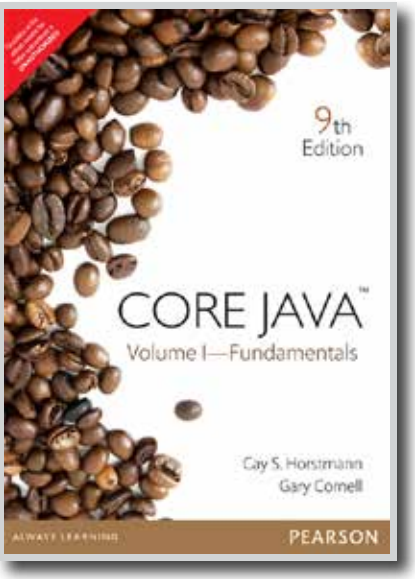
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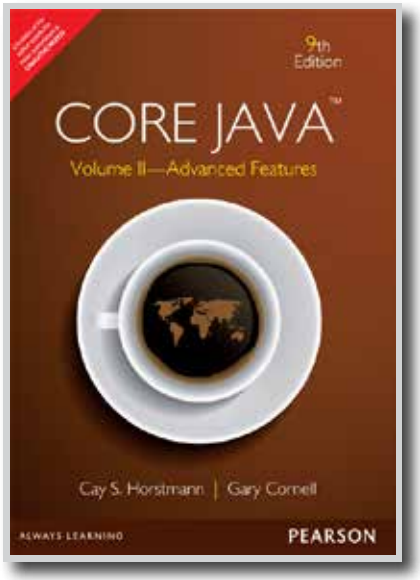
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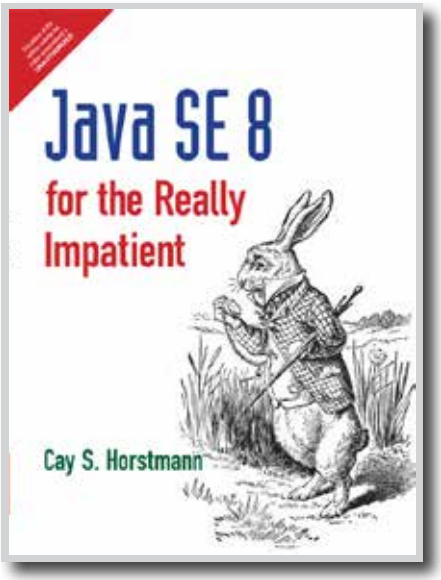
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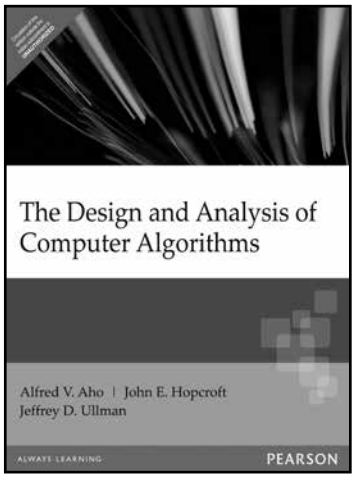


The Design & Analysis of Computer Algorithms

Alfred V. Aho • John E. Hopcroft • Jeffrey D. Ullman

ISBN : 9788131702055
Copyright : 1974

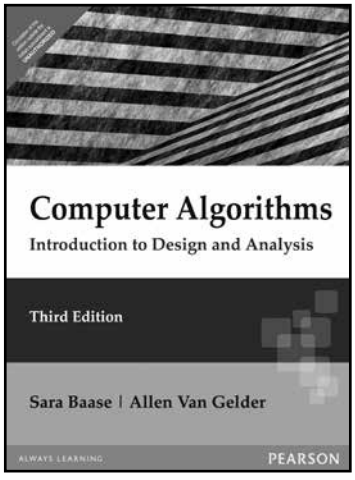
About the Book

The **Design and Analysis of Computer Algorithms** introduces the basic data structures and programming techniques often used in efficient algorithms. It covers the use of lists, push-down stacks, queues, trees, and graphs. With this text, you gain an understanding of the fundamental concepts of algorithms, the very heart of computer science. It introduces the basic data structures and programming techniques often used in efficient algorithms. Covers use of lists, push-down stacks, queues, trees, and graphs. Later chapters go into sorting, searching and graphing algorithms, the string-matching algorithms, and the Schonhage-Strassen integer-multiplication algorithm. Provides numerous graded exercises at the end of each chapter.

Contents

About the Authors

Alfred V. Aho is head of the Computing Principles Research Department at AT&T Bell Laboratories in Murray Hill, New Hersey.
Jeffrey D. Ullman is currently Professor of Computer Science at Stanford University.



Computer Algorithms : Introduction to Design & Analysis, 3/e

Sara Baase • Allen Van Gelder

ISBN : 9788131702444
Copyright : 2000

About the Book

Drawing upon combined decades experience, Professors Sara Baasse and Allen Van Gelder have extensively revised this best seller on algorithm design and analysis to make it the most current and accessible book available. This edition features an increased emphasis on algorithm design techniques such as divide-and-conquer and greedy algorithms, along with the addition of new topics and exercises. It continues the tradition of solid mathematical analysis and clear writing style that made this book so popular in previous editions.

- Emphasizes the development of algorithms through a step-by-step process rather than by merely presenting the end result
- Stresses the importance of the algorithm analysis process—continuously re-evaluating, modifying and perhaps rejecting algorithms until a satisfactory solution is attained
- Provides extensive treatment of recursion with a clear, student-friendly review of how it works and why it is a valuable programming technique
- Uses a Java-like pseudo code; includes an appendix with Java examples

Features

- Material on accelerated version of Heapsort, section on computing with DNA, chapter on Dynamic Sets.
- Expanded treatment of recursion with a clear, student-friendly review of how it works, and why it is a valuable programming technique.
- Expanded mathematical background emphasizes practical techniques, including solutions to recurrence equations.
- Review of abstract data types, with Java class definitions for several commonly used ADTs such as list, tree, stack, and priority queue.
- Pseudocode updated from Pascal-like to Java-like; includes an appendix with Java examples.
- More than 100 new exercises.

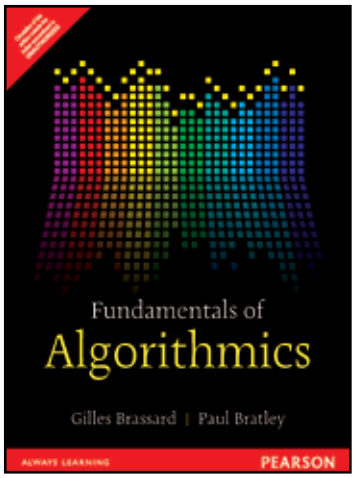
Contents

- Analyzing Algorithms and Problems: Principles and Examples
- Data Abstraction and Basic Data Structures
- Recursion and Induction
- Sorting
- Selection and Adversary Arguments
- Dynamic Sets and Searching
- Graphs and Graph Traversals
- Graph Optimization Problems and Greedy Algorithms
- Transitive Closure, All-Pairs Shortest Paths
- Dynamic Programming
- String Matching
- Polynomials and Matrices
- NP-Complete Problems
- Parallel Algorithms
- Java Examples and Techniques

About the Authors

Sara Baase is a Professor of Computer Science at San Diego State University and has been teaching CS for 25 years. Dr. Baase is a three-time recipient of the San Diego State University Alumni Association's Outstanding Faculty Award, and she has written a number of text books in the areas of algorithms, assembly language, and social and ethical issues related to computing. She earned her doctorate at the University of California, Berkeley.

Allen Van Gelder is a Professor of Computer Science at the University of California at Santa Cruz,where he has been teaching CS for 12 years. He received his Ph.D. in Computer Science at Stanford University and is a past recipient of the Presidential Young Investigator Award.



Fundamentals of Algorithmics, 3/e

Gilles Brassard • Paul Bratley

ISBN : 9789332549999
Pages : 524

About the Book

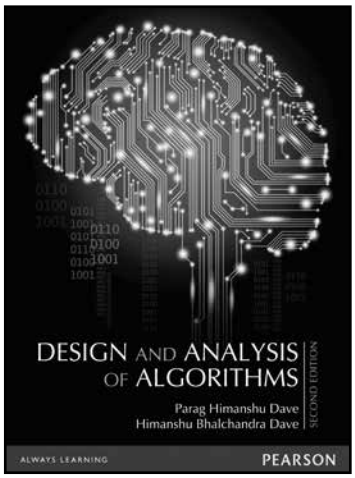
This is an introductory-level algorithm text. It includes worked-out examples and detailed proofs. Presents Algorithms by type rather than application.

Features

- structures material by techniques employed, not by the application area, so students can progress from the underlying abstract concepts to the concrete application essentials.
- begins with a compact, but complete introduction to some necessary math, and also includes a long introduction to proofs by contradiction and mathematical induction. This serves to fill the gaps that many undergraduates have in their mathematical knowledge.
- gives a paced, thorough introduction to the analysis of algorithms, and uses coherent notation and unusually detailed treatment of solving recurrences.
- includes a chapter on probabilistic algorithms, and an introduction to parallel algorithms, both of which are becoming increasingly important.
- approaches the analysis and design of algorithms by type rather than by application.

Contents

1. Preliminaries.
2. Elementary Algorithmicss.
3. Asymptotic Notation.
4. Analysis of Algorithms.
5. Some Data Structures.
6. Greedy Algorithms.
7. Divide-And-Conquer.
8. Dynamic Programming.
9. Exploring Graphs.
10. Probabilistic Algorithms.
11. Parallel Algorithms.
12. Computational Complexity.
13. Heuristic and Approximate Algorithms.



Design and Analysis of Algorithms, 2/e

Parag H. Dave • Himanshu B. Dave

ISBN : 9788131799437
Copyright : 2013
Pages : 900

About the Book

The revised 2nd edition has been updated with topics on branch and bound, backtracking and greedy method. All aspects of algorithm design and analysis have been discussed in 22 chapters which are divided into two parts. The first part chapters, explains the problem-solving techniques, algorithm design and data structures. The second part explains the concepts of algorithm analysis.

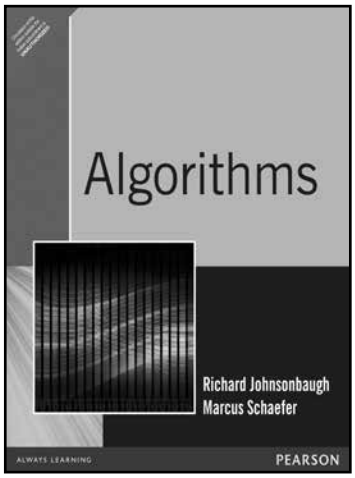
Features

- The basic concepts such as problem solving, statements, functions and loops are covered in detail
- Includes design issues, computation models and proof rules
- A total of 218 examples/algorithms
- A total of 350 exercises

Contents

About the Authors

Dr. Parag H. Dave, Senior Lecturer in Computer Engineering of Dharmsinh Desai University, Gujarat.
Himanshu B. Dave, Ex-Professor and Head of Department in Department of Computer Engineering of Dharmsinh Desai University, Gujarat.



Algorithms

Richard Johnsonbaugh • Marcus Schaefer

ISBN : 9788131708682
Copyright : 2004
Pages : 766

About the Book

For upper-level undergraduate and graduate courses in algorithms.
Filling the void left by other algorithms books, Algorithms and Data Structures provides an approach that emphasizes design techniques. The text includes application of algorithms, examples, end-of-section exercises, end-of-chapter exercises, hints and solutions to selected exercises, figures and notes to help the reader master the design and analysis of algorithms.

Features

- Numerous algorithm traces throughout the book.
- Over 1,000 end-of-section exercises—With answers to 1/3 of them in the back of the book.
- More applications than other algorithms texts.
- Elaborate world wide web site—With up-to-date support for book. An icon occurs throughout the book to indicate more explanations and examples available on the web.
- Upper bounds for worst-case times proven sharp.
- Lower bounds integrated into sections that discuss problems—e.g. after presentation of several sorting algorithms, text discusses lower bound for comparison-based sorting.
- Methods used to solve NP-complete problems—Including approximation, brute force, parameterized complexity, and heuristics.
- Recent results—Such as Pearson's polynomial-time algorithm for the coin-changing problem and parameterized complexity.
- Figures and tables illustrate concepts—Figure captions provide additional explanations and insight.

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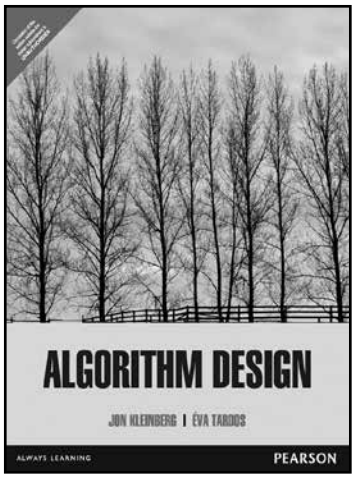


Algorithm Design

Jon Kleinberg • Éva Tardos

ISBN : 9789332518643
Copyright : 2013
Pages : 827

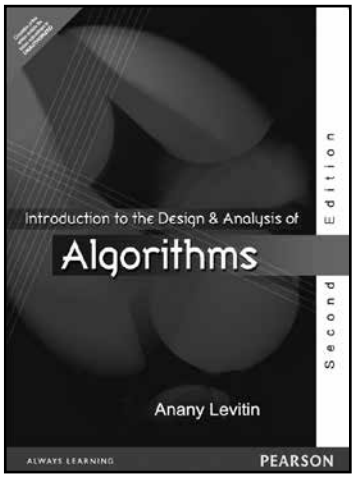
About the Book

Algorithm Design introduces algorithms by looking at the real-world problems that motivate them. The book teaches students a range of design and analysis techniques for problems that arise in computing applications. The text encourages an understanding of the algorithm design process and an appreciation of the role of algorithms in the broader field of computer science.

Features

- Focus on problem analysis and design techniques.
- Discussion is grounded in concrete problems and examples rather than abstract presentation of principles, with representative problems woven throughout the text.
- Over 200 well crafted problems with several coming from companies such as Yahoo!® and Oracle®. Each problem has been class tested for usefulness and accuracy in the authors' own undergraduate algorithms courses.
- Broad coverage of algorithms for dealing with NP-hard problems and the application of randomization, increasingly important topics in algorithms

Contents



An Introduction to the Design and Analysis of Algorithms, 2/e

Anany Levitin

ISBN : 9788131718377
Copyright : 2013
Pages : 592

About the Book

Based on a new classification of algorithm design techniques and a clear delineation of analysis methods, Introduction to the Design and Analysis of Algorithms presents the subject in a coherent and innovative manner. Written in a student-friendly style, the book emphasizes the understanding of ideas over excessively formal treatment while thoroughly covering the material required in an introductory algorithms course. Popular puzzles are used to motivate students' interest and strengthen their skills in algorithmic problem solving. Other learning-enhancement features include chapter summaries, hints to the exercises, and a detailed solution manual.

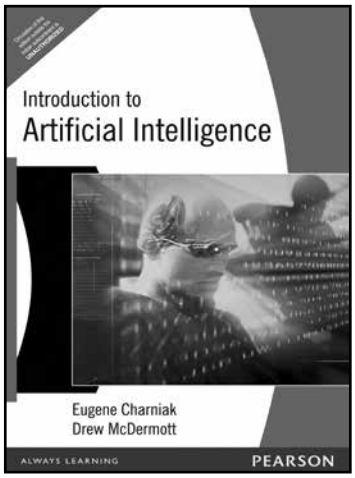
Features

- Employs an innovative and more comprehensive taxonomy of algorithm design techniques
- Covers mathematical analysis of both nonrecursive and recursive algorithms, as well as empirical analysis and algorithm visualization
- Discusses limitations of algorithms and ways to overcome them
- Treats algorithms as problem-solving tools and develops algorithmic thinking by using puzzles and games
- Contains over 600 exercises with hints for students and detailed solutions for instructors
- New exercises and engaging puzzles

Contents

About the Author

Anany Levitin, Villanova University

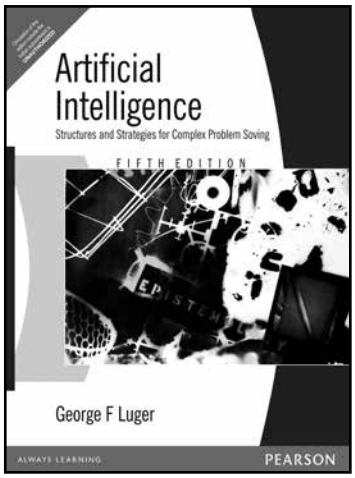


Introduction to Artificial Intelligence

Eugene Charniak • Drew McDermott

ISBN : 9788131703069
Copyright : 1985
Pages : 720

Contents



Artificial Intelligence, 5/e

George F. Luger

ISBN : 9788131723272
Copyright : 2008
Pages : 928

About the Book

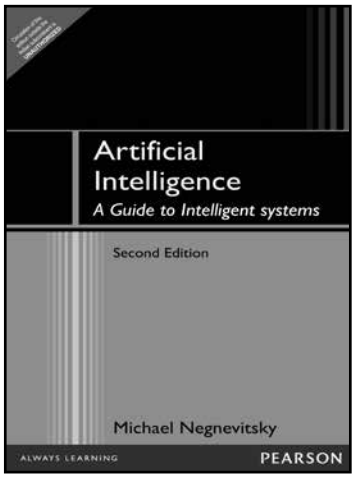
Much has changed since the early editions of **Artificial Intelligence** were published. To reflect this the introductory material of this fifth edition has been substantially revised and rewritten to capture the excitement of the latest developments in AI work.

Artificial intelligence is a diverse field. To ask the question "what is intelligence?" is to invite as many answers as there are approaches to the subject of artificial intelligence. These could be intelligent agents, logical reasoning, neural networks, expert systems, evolutionary computing and so on. This fifth edition covers all the main strategies used for creating computer systems that will behave in "intelligent" ways. It combines the broadest approach of any text in the marketplace with the practical information necessary to implement the strategies discussed, showing how to do this through Prolog or LISP programming.

Features

- A thorough and balanced treatment of the foundations of AI.
- Contains a combination of theoretical foundations of intelligent problem solving with the data structures and algorithms needed for implementation.
- Example programs written in LISP and PROLOG.
- Puts practical applications of AI into context.
- A unique discussion of the social and philosophical issues of AI.
- Model-based reasoning and planning examples from the NASA space program. Comments on the AI endeavor from the perspectives of philosophy, psychology and neuro-physiology.

Contents



Artificial Intelligence: A Guide to Intelligent, 2/e

Michael Negnevitsky

ISBN : 9788131720493
Copyright : 2008
Pages : 440

About the Book

Artificial Intelligence is one of the most rapidly evolving subjects within the computing/engineering curriculum, with an emphasis on creating practical applications from hybrid techniques. Despite this, the traditional textbooks continue to expect mathematical and programming expertise beyond the scope of current undergraduates and focus on areas not relevant to many of today's courses. Negnevitsky shows students how to build intelligent systems drawing on techniques from knowledge-based systems, neural networks, fuzzy systems, evolutionary computation and now also intelligent agents. The principles behind these techniques are explained without resorting to complex mathematics, showing how the various techniques are implemented, when they are useful and when they are not. No particular programming language is assumed and the book does not tie itself to any of the software tools available. However, available tools and their uses will be described and program examples will be given in Java. The lack of assumed prior knowledge makes this book ideal for any introductory courses in artificial intelligence or intelligent systems design, while the contemporary coverage means more advanced students will benefit by discovering the latest state-of-the-art techniques.

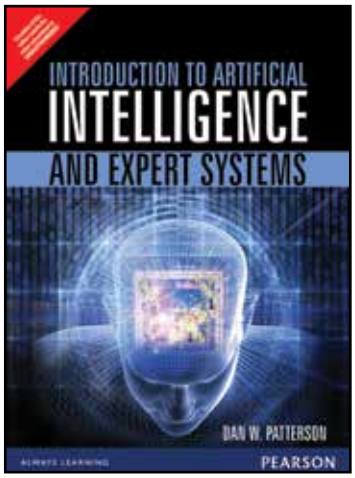
Features

- No mathematical or programming prerequisites.
- Linked coverage of all the latest artificial intelligence topics.
- Question and answer format.
- An emphasis on creating practical applications from hybrid techniques.
- Negnevitsky shows students how to build intelligent systems drawing on techniques from knowledge-based systems, neural networks, fuzzy systems and evolutionary computation and now also intelligent agents.
- No mathematical or programming prerequisites. Linked coverage of all the latest artificial intelligence topics.

Contents

About the Author

Dr Michael Negnevitsky is a Professor in Electrical Engineering and Computer Science at the University of Tasmania, Australia. The book has developed from lectures to undergraduates. Its material has also been extensively tested through short courses introduced at Otto-von-Guericke-University Magdeburg, Institute Elektroantriebstechnik, Magdeburg, Germany, Hiroshima University, Japan and Boston University and Rochester Institute of Technology, USA



Introduction to Artificial Intelligence and Expert Systems

Dan W. Patterson

ISBN : 9789332551947
Copyright : 1990
Pages : 464

NEW

About the Book

Dan W. Patterson's Introduction to Artificial Intelligence and Expert Systems, is a comprehensive book for Computer Science graduation and post-graduation students. It comprises of various concepts of knowledge-system approach and stresses on the relevant use of its knowledge in particular expert systems. The book discusses topics such as Introduction and Overview of Artificial Intelligence; Knowledge Representation and Formalized Symbolic Logics; Knowledge Organization and Manipulation and Search and Control Strategies; Perception, Communication and Expert Systems and Natural Language Processing; and Knowledge Acquisition and General Concepts in Knowledge Acquisition.

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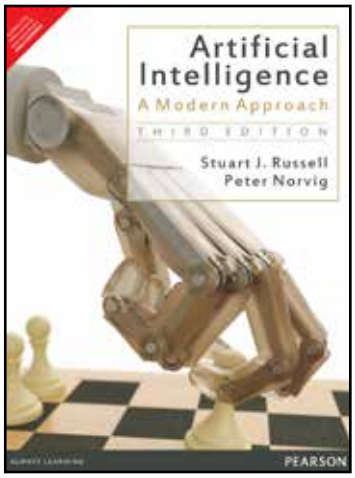


Artificial Intelligence: A Modern Approach, 3/e

Stuart Russell • Peter Norvig

ISBN : 9789332543515
Copyright : 2014
Pages : 1092

New Edition

About the Book

This edition captures the changes that have taken place in the field of artificial intelligence (AI) since the last edition in 2003.

There have been important applications of AI technology, such as the widespread deployment of practical speech recognition, machine translation, autonomous vehicles, and household robotics. There have been algorithmic landmarks, such as the solution of the game of checkers. There has also been a great deal of theoretical progress, particularly in areas such as probabilistic reasoning, machine learning, and computer vision.

Features

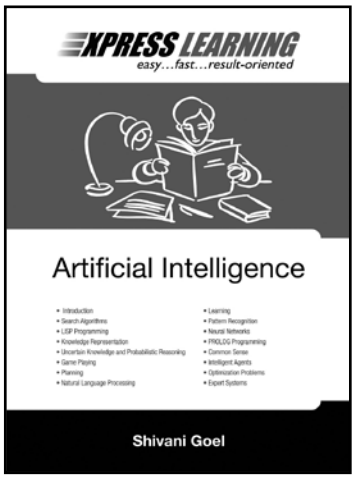
- Nontechnical learning material provides a simple overview of major concepts
- Expanded coverage of topics such as constraint satisfaction, local search planning methods, multi-agent systems, game theory, statistical natural language processing and uncertain reasoning over time
- More detailed descriptions of algorithms for probabilistic inference, fast propositional inference, probabilistic learning approaches including EM, and other topics
- Updated and expanded exercises
- A unified, agent-based approach to AI — Organizes the material around the task of building intelligent agents
- Comprehensive, up-to-date coverage — Includes a unified view of the field organized around the rational decision making paradigm
- In-depth coverage of basic and advanced topics which provides students with a basic understanding of the frontiers of AI without compromising complexity and depth.
- Pseudo-code versions of the major AI algorithms are presented in a uniform fashion, and Actual Common Lisp and Python implementations of the presented algorithms are available via the Internet

Contents

About the Author

Stuart Russell is a Fellow and former Executive Council member of the American Association for Artificial Intelligence. He has published over 100 papers on a wide range of topics in artificial intelligence.

Peter Norvig is currently Director of Research at Google, Inc., and was the director responsible for the core Web search algorithms from 2002 to 2005. He is a Fellow of the American Association for Artificial Intelligence and the Association for Computing Machinery.



Express Learning - Artificial Intelligence

Shivani Goel

ISBN : 9788131787472
Copyright : 2013
Pages : 296

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

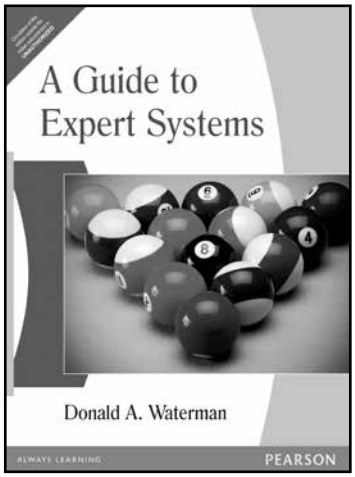
Features

- Presented in a question and answer format following the examination pattern
- Covers all key topics in the syllabus
- Designed to make learning fast and effective
- Precise and up-to-date
- Helps students excel in their examinations

Contents

About the Author

Shivani Goel is Assistant Professor in Computer Science and Engineering Department at Thapar University, Patiala. She did her PhD from Thapar University, Patiala. Artificial Intelligence, Algorithms and Software Reuse are her areas of interest.



A Guide to Expert Systems

Donald A. Waterman

ISBN : 9788131713310
Copyright : 1986

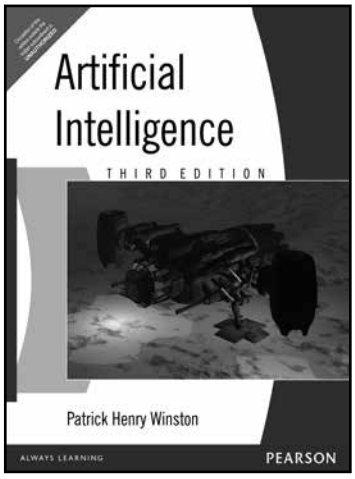
About the Book

A Guide to Expert Systems is the first book written specifically for the reader who does not have a background in artificial intelligence or expert systems. Students, business executives, data processing managers and system programmers will all find this book an useful introduction. In a very logical and understandable way, with the extensive use of case studies, Dr. Waterman shows how expert systems manipulate the knowledge of human experts to solve problems efficiently and effectively.

Contents

About the Author

Donald A. Waterman is a senior computer scientist at the Rand Corporation in Santa Monica, California. He received his B.S. in Electrical Engineering from Iowa State University, M.S. in Electrical Engineering from the University of California at Berkeley and his M.S. and Ph.D. in Computer Science from Stanford University.



Artificial Intelligence, 3/e

Patrick Henry Winston

ISBN : 9788131715055
Copyright : 1992

About the Book

This book explains how it is possible for computers to reason and perceive, thus introducing the field called artificial intelligence. This book would appeal to programmers, professionals and students. This completely rewritten and updated edition reflects the revolutionary progress made since the previous edition was published.

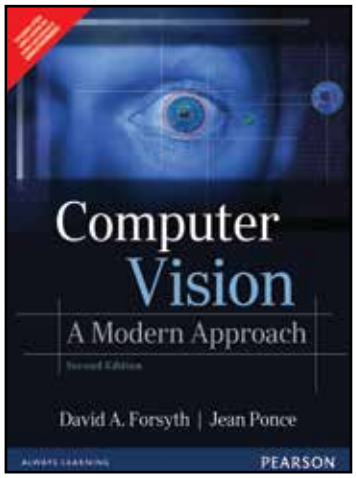
Features

- Semiformal representation and procedure specifications bring the ideas to within a step or two implementation and highlight unifying themes.
- Application examples provide a glimpse of the ideas at work in real-world systems.
- Powerful ideas and principles are identified ad emphasized.

Contents

About the Author

Patrick Henry Winston is Director of the Artificial Intelligence Laboratory at the Massachusetts Institute of Technology, and a past resident of the American Association for Artificial Intelligence. He is co-author of a related book, Lisp, which introduces the LISP programming language.



Computer Vision: A Modern Approach, 2/e

David A. Forsyth

NEW

ISBN : 97893325501l7
Pages : 792

About the Book

This textbook provides the most complete treatment of modern computer vision methods by two of the leading authorities in the field. This accessible presentation gives both a general view of the entire computer vision enterprise and also offers sufficient detail for students to be able to build useful applications. Students will learn techniques that have proven to be useful by first-hand experience and a wide range of mathematical methods.

Features

- Broad coverage—Coverage of a wide range of topics allows customization to fit instructor, student, and course needs.
- Most comprehensive and up-to-date text on computer vision—Includes essential topics that either reflect practical significance or are of theoretical importance.
- Depth of the material accessible to various levels of students—Topics are discussed in substantial and increasing depth.
- Application surveys—Describe numerous important application areas such as image based rendering and digital libraries.
- Many important algorithms broken down and illustrated in pseudo code.
- Excellent pedagogy throughout the text—Includes numerous worked examples, exercises, programming assignments, and extensive illustrations.

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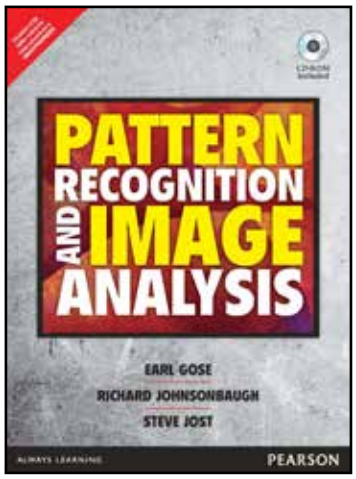
About the Author

David A. Forsyth, University of Illinois at Urbana-Champaign
Jean Ponce, Ecole Normale Superieure, Paris



Pattern Recognition and Image Analysis

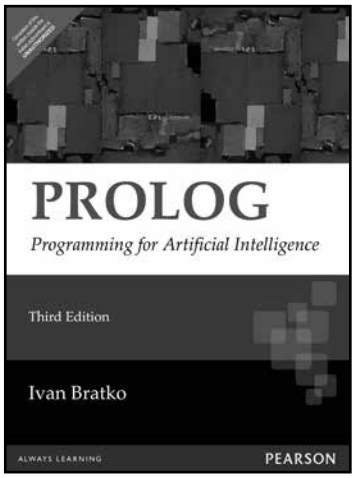
Earl Gose • Richard Johnsonbaugh • Steve Jost

NEW

ISBN : 9789332549791
Pages : 496

About the Book

Over the past 20 to 25 years, pattern recognition has become an important part of image processing applications where the input data is an image. This book is a complete introduction to pattern recognition and its increasing role in image processing. It covers the traditional issues of pattern recognition and also introduces two of the fastest growing areas: Image Processing and Artificial Neural Networks. Examples and digital images illustrate the techniques, while an appendix describes pattern recognition using the SAS statistical software system.



PROLOG: Programming for Artificial Intelligence, 3/e

Ivan Bratko

ISBN : 9788131711347
Copyright : 2001

About the Book

The third edition of this best-selling guide to Prolog and Artificial Intelligence has been updated to include key developments in the field while retaining its lucid approach to these topics. Prolog has its roots in logic, however the main aim of this book is to teach Prolog as a practical programming tool. This text therefore concentrates on the art of using the basic mechanisms of Prolog to solve interesting problems.

Features

- Combined approach to Prolog and AI allows flexibility for learning and teaching
- Provides a thorough representation of AI, emphasizing practical techniques and Prolog implementations
- Prolog programs for use in projects and research are available for download on the World Wide Web.

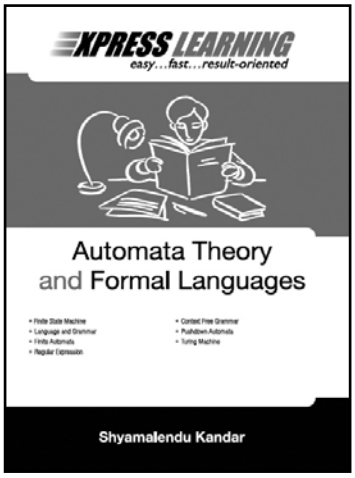
New and/or revised in this edition

- Constraint Logic Programming
- Qualitative Reasoning
- Inductive Logic Programming
- The addition of belief networks for handling uncertainty
- A major update on machine learning
- Additional techniques for improving Program efficiency
- Meta-programming is updated to show how Prolog can be used to implement other languages (including object-oriented programming)
- A new Companion Web site will contain further teaching materials and updates

Contents

About the Author

Professor Ivan Bratko leads the AI groups in the Faculty of Computer and Information Science at both Ljubljana University and the Jozef Stefan Institute in Slovenia.



Express Learning – Automata Theory and Formal Languages

Shyamalendu Kandar

ISBN : 9788131760772
Copyright Year : 2012
Pages : 376

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

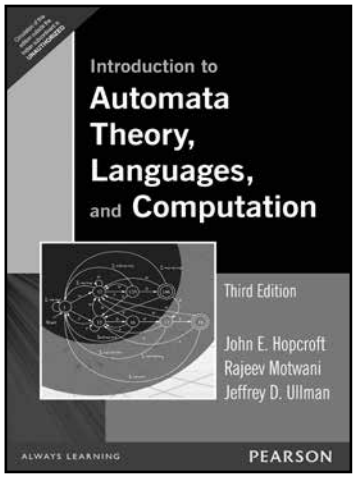
Features

- Presented in a question and answer format following the examination pattern
- Covers all key topics in the syllabus
- Designed to make learning fast and effective
- Precise and up-to-date
- Helps students excel in their examinations

Contents

About the Author

Shyamalendu Kandar is Assistant Professor of Computer Science and Engineering at Haldia Institute of Technology, Haldia



Introduction to Automata Theory, Languages, and Computation, 3/e

John E. Hopcroft • Rajeev Motwani • Jeffrey D. Ullman

ISBN : 9788131720479
Copyright : 2008
Pages : 554

About the Book

This classic book on formal languages, automata theory, and computational complexity has been updated to present theoretical concepts in a concise and straightforward manner with the increase of hands-on, practical applications. This new edition comes with Gradiance, an online assessment tool developed for computer science.

Gradiance is the most advanced online assessment tool developed for the computer science discipline. With its innovative underlying technology, Gradiance turns basic homework assignments and programming labs into an interactive learning experience for students. By using a series of "root questions" and hints, it not only tests a student's capability, but actually simulates a one-on-one teacher-student tutorial that allows for the student to more easily learn the material. Through the programming labs, instructors are capable of testing, tracking, and honing their students' skills, both in terms of syntax and semantics, with an unprecedented level of assessment never before offered.

Features

- Presents theoretical concepts in a concise and accessible style.
- Emphasizes modern applications of the theory
- Uses numerous figures to help convey ideas
- Provides more detail and intuition for definitions and proofs
- Challenges readers with extensive exercises at various levels of difficulty at the end of each chapter
- Includes additional practice and tests comprehension of important concepts withGradiance an online homework and tutorial system

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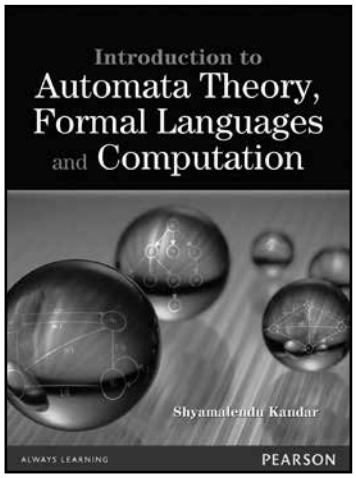


Introduction to Automata Theory, Formal Languages and Computation

Shyamalendu Kandar

ISBN : 9788131793510
Copyright : 2013
Pages : 656

About the Book

Formal languages and automata theory is the study of abstract machines and how these can be used for solving problems. The book has a simplistic approach to topics like automata theory, formal languages and theory of computation and explains them exhaustively. The difficult topics are described in a step-wise manner, which makes it easy for the students to comprehend them. These descriptions are followed by numerous relevant examples related to the topic. A brief introductory chapter on compilers explaining its relation to theory of computation is also given.

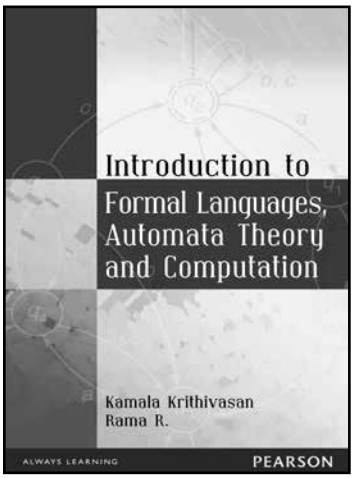
Features

- Exhaustive coverage on finite automata covering topics like Mealy and Moore machines, interconversion, two-way finite automata, application and limitation of finite automata
- Detailed and in-depth discussion on Turing machine and its variations
- Over 15 years of GATE question papers discussed in the book
- Discussion of previous years' questions (related to the subject) that appeared in different university examinations
- Excellent and exhaustive pedagogy:
  - 500+ figures
  - 500+ solved examples
  - 277+ objective-type questions with answers
  - 135+ unsolved questions
- Summary at the end of each chapter for fast recapitulation of concepts

Contents

About the Author

Shyamalendu Kandar is currently working as Assistant Professor of computer science and engineering at Haldia Institute of Technology, Haldia, West Bengal. He acted as a Coordinator of HIT centre for the course M.Tech (IT) distance mode conducted by Jadavpur University. He teaches subjects like formal language & automata theory, compiler design, analysis of algorithms, web technology, and object oriented programming. He has a number of research papers in different national & international conferences/ journals of repute. His research interests are secret sharing, visual cryptography etc.



Introduction to Formal Languages, Automata Theory and Computation

Kamala Krithivasan • Rama R.

ISBN : 9788131723562
Copyright : 2009
Pages : 436

About the Book

Introduction to Formal Languages, Automata Theory and Computation presents the theoretical concepts in a concise and clear manner, with an in-depth coverage of formal grammar and basic automata types. The book also examines the underlying theory and principles of computation and is highly suitable to the undergraduate courses in computer science and information technology. An overview of the recent trends in the field and applications are introduced at the appropriate places to stimulate the interest of active learners

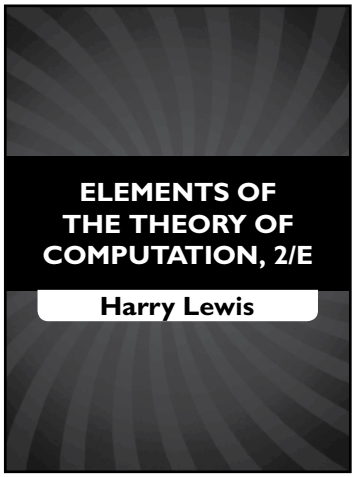
Features

- Numerous worked-out examples and problems to facilitate easier recapitulation of the concepts learnt
- Exhaustive coverage of computability and decidability through Turing machines
- Advanced topics on formal languages and new models of computation for the benefit of the students contemplating an in-depth research
- Multiple-choice questions designed in a way to help students understand the basics.

Contents

About the Authors

Kamala Krithivasan received her Ph.D. from the University of Madras,and she joined the Indian Institute of Technology Madras (IITM) in 1975. With more than 30 years of teaching and research experience at IITM, she is currently Professor at the Department of Computer Science and Engineering,in which she served as Chairperson during 1992–1995. Her research interests include formal language theory and unconventional models of computing like DNA computing, membrane computing and discrete tomography. A recipient of the Fulbright fellowship in 1986, Professor Kamala is also a fellow of the Indian National Academy of Engineering. **Rama R.** was awarded a doctoral degree by Anna University in 1989. She taught in the College of Engineering, Anna University, before joining the Department of Mathematics, Indian Institute of Technology Madras (IITM), as Assistant Professor in 1996. She was subsequently elevated as Professor in 2006 and has been in that position ever since. Professor Rama has 20 years of teaching and research experience, and has guided four research students in their PhD theses. Her domain of interest is in the area of formal languages and automata, and natural computing. She is also a life member of the Indian Society for Technical Education.



Elements of the Theory of Computation, 2/e

Harry Lewis • Christos H. Papadimitriou

ISBN : 9789332549890
Copyright : 1997
Pages : 361

NEW

About the Book

This is the long awaited Second Edition of Lewis and Papadimitriou's best-selling theory of computation text. In this substantially modified edition, the authors have enhanced the clarity of their presentation by making the material more accessible to a broader undergraduate audience with no special mathematical experience.

Features

- Offers a mathematically sound introduction to the classical and contemporary theory of computation, and provide deep insights into the fundamental paradigms of computer science.
- Would you like a theory of computation text that provides a solid, specialized introduction to algorithms?
- Informally introduces algorithms, complexity analysis, and algorithmic ideas in Ch. 1 (in connection to transitive and other closures), and explores them throughout the book.
- Introduces asymptotic analysis and O- notation.
- Features a more "student-friendly" approach.
- Truncates long proofs and presents them as exercises.
- Provides problems after each section to check student comprehension.
- Considers automata in the context of their applications.
- Includes extensive discussion of state minimization, the Myhill-Nerode Theorem, string matching, and parsing.
- Complexity starts with a proof that P = EXP.
- Many combinatorial problems are introduced and analyzed (including variants of satisfiability), and their apparent complexity contrasted.
- Would you like to teach NP—completeness, as well as ways of coping with it, in your course?
- Features a separate chapter on NP-completeness.
- Extensive section on coping with NP - completeness that covers special cases, approximation algorithms, backtracking, and local search heuristics.
- Covers NP - completeness including state minimization problem of nondeterministic finite automata.
- Logic coverage has been limited to propositional logic in relation to NP - completeness.
- Considers Cook's Theorem again via the tiling problem.
- Discusses approximation and its complexity.
- Introduces the Turing machine notation more informally.
- Uses the terms recursive and recursively innumerably.
- Quantitatively analyzes simulations between machine models.
- Introduces and analyzes a model of random access Turing machines, similar to RAMs.
- Offers a more succinct treatment of general grammars and …¿¿-recursive functions.
- Uses random access Turing machines to bridge the "credibility gap" between Turing machine model and the empirical concept of an algorithm.
- Includes some recursion theory (up to Rice's theorem).
- Provides an informal, concise development of A-recursive functions.
- Explores Chomsky normal form and the resulting dynamic programming algorithm.

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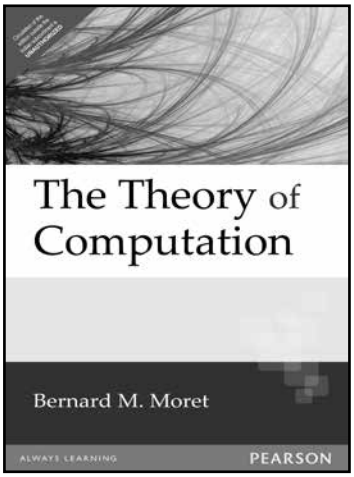


The Theory of Computation

Bernard M. Moret

ISBN : 9788131708705
Copyright : 1998

About the Book

Taking a practical approach, this modern introduction to the theory of computation focuses on the study of problem solving through computation in the presence of realistic resource constraints. **The Theory of Computation** explores questions and methods that characterize computing. The book establishes clear limits to computation, relates these limits to resource usage, and explores possible avenues of compromise through approximation and randomization. The book also provides an overview of current areas of research in theoretical computer science that are likely to have significant impact on the practice of computing within the next few years.

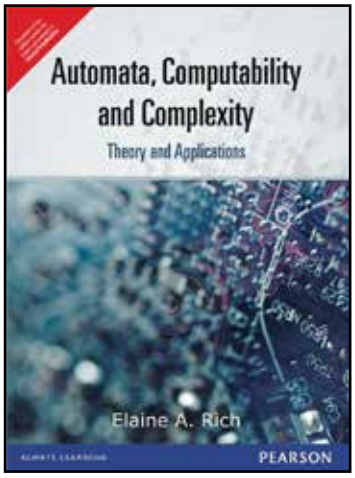
Features

- Motivates theoretical developments by connecting them to practical issues
- Introduces every result and proof with an informal overview to build intuition
- Introduces models through finite automata, then builds to universal models, including recursion theory
- Emphasizes complexity theory, beginning with a detailed discussion of resource use in computation
- Includes large numbers of examples and illustrates abstract ideas through diagrams
- Gives informal presentation of difficult recent results with profound implications for computing

Contents

About the Author

Bernard Moret is a Professor of Computer Science at the University of New Mexico. He received his Ph.D. in Electrical Engineering from the University of Tennessee. Dr. Moret received the University's Graduate Teacher of the Year award, the College of Engineering's Teaching Excellence award, and the Student's Faculty Recognition award. He is the Editor-in-Chief of the ACM Journal of Experimental Algorithms. In this capacity and through his research, he has worked to bridge the gap between theory and applications, emphasizing the need for grounding theoretical developments upon problems of practical importance. Dr. Moret also co-authored Algorithms from P to NP, Volume I: Design and Efficiency, published by Benjamin/Cummings in 1991.



Automata, Computability and Complexity : Theory and Applications

Elaine A. Rich

ISBN : 9788131788226
Copyright : 2012

About the Book

Combining classic theory with unique applications, this crisp narrative is supported by abundant examples and clarifies key concepts by introducing important uses of techniques in real systems. Broad-ranging coverage allows instructors to easily customize course material to fit their unique requirements.

Features

- Focus on applications - Demonstrates why studying theory will make them better system designers and builders
- Classic theory combined with new applications - Includes fresh discussion of applications such as computational biology
- Review of background mathematical concepts- Addresses students' varying backgrounds in discrete mathematics and logic
- Clear notation and naming conventions - Uses consistent, easily understandable formats to indicate definitions and name variables and objects
- Thorough coverage of automata theory:
  - Features topics such as use of the closure theorems for regular and context-free languages, ambiguity in context-free grammars, parsing, functions on languages, and decision procedures for regular and context-free languages
  - Also includes coverage of top-down and bottom-up parsers, stochastic automata, context-sensitive languages, the Chomsky hierarchy, and recursive functions

Contents

Appendices
A: Review of Mathematical Background: Logic, Sets, Relations, Functions, and Proof Techniques
B: The Theory: Working with Logical Formulas
C: The Theory: Finite State Machines and Regular Languages
D: The Theory: Context-Free Languages and PDAs
E: The Theory: Turing Machines and Undecidability
F: The Theory: Complexity
Appendices G-Q: Applications
G: Applications: Programming Languages and Compilers
H: Applications: Tools for Programming, database and Software Engineering
I: Applications: Networks
J: Applications: Security
K: Applications: Computational Biology
L: Applications: Natural Language Processing
M: Applications: Artificial Intelligence and Computational Reasoning
N: Applications: Art and Environment: Music and Games
O: Applications: Using Regular Expressions
P: Applications: Using Finite State Machines and Transducers
Q: Applications: Using Grammars

Languages and Machines : An Introduction to the Theory of Computer Science, 3/e

Thomas A. Sudkamp

ISBN : 9788131714751
Copyright : 2007

About the Book

The third edition of Languages and Machines: An Introduction to the Theory of Computer Science provides readers with a mathematically sound presentation of the theory of computer science at a level suitable for junior and senior level computer science majors. The theoretical concepts and associated mathematics are made accessible by a "learn as you go" approach that develops an intuitive understanding of the concepts through numerous examples and illustrations. In this edition the presentation has been enhanced by increasing the number of examples, expanding the selection of topics particularly in the area of computational complexity, and providing a flexible format giving instructors the ability to design their courses that concentrate on specific areas such as automata theory, computability theory, or computational complexity.

Features

- Expansion coverage of computational complexity.
- Over 100 new examples and exercises. Examples of programming syntax are given using the BNF description of the programming language Java.
- A new chapter following the definition of NP-completenss and Cook's Theorem presents strategies for demonstrating that a problem is NP-complete.
- Increased coverage of space complexity including Savitch's Theorem and P-space completeness.
- Organized to provide flexibility to design courses that concentrate in specific areas such as automata theory, computability theory, or computational complexity.
- Topics covered with greater emphasis include the use of diagonalization and self-reference in proofs by contradiction, the application of regular expressions in text searching using grep as an example, the CYK parsing algorithm, the motivation for and interpretation of nondeterministic computation, the role of the problem representation in the assessment of computational complexity, and the significance of problem reduction in decidability and undecidability.

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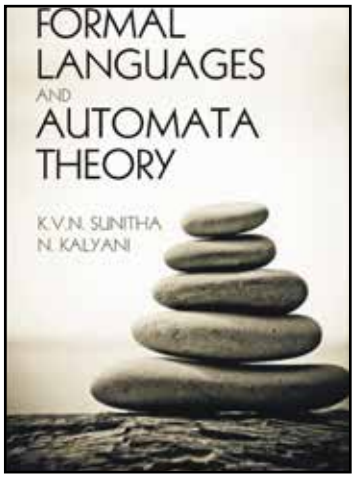


Formal Languages and Automata Theory, 1/e

K.V.N. Sunitha

ISBN : 9789332537286
Copyright : 2015
Pages : 350

NEW

About the Book

Formal Languages and Automata Theory deals with the mathematical abstraction model of computation and its relation to formal languages. This book is intended to expose students to the theoretical development of computer science. It also provides conceptual tools that practitioners use in computer engineering. An assortment of problems illustrative of each method is solved in all possible ways for the benefit of students. The book also presents challenging exercises designed to hone the analytical skills of students.

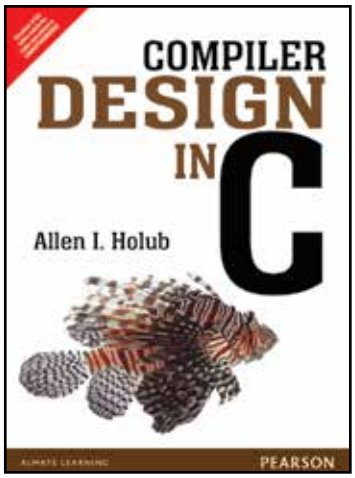
Features

- Probes the concepts methodically with an extensive use of definitions, proofs, solved examples, exercises and applications of the models
- Includes a summary, additional (progressively challenging) problems, multiple-choice and fill-in-the-blanks questions for each chapter
- Examines the importance of Turing machines as language recognizers, language generators and as computing models
- Explores regular languages, covering the mechanisms for representing languages, the closure properties of such languages, the existence of other languages and other structural properties
- Includes frequently asked university questions

Contents

About the Authors

Dr K. V. N. Sunitha, Principal, BVRIT Hyderabad College of Engineering for Women, Nizampet, Hyderabad, obtained her B.Tech in ECE from Nagarjuna University and M.Tech in Computer Science from REC Warangal. She is a JNTUH ratified professor with 23 years of teaching experience. She received ';Academic Excellence Award' from the management of G. Narayanamma Institute of Technology & Science in 2005.
Dr N. Kalyani obtained B.Tech in Civil from Osmania University in 1994, M.Tech in Computer Science from JNTUH in 2001 and Ph.D. from JNTUH in 2012. She has working experience of 5 years as Design Engineer in R. K. Engineers, Hyderabad and 14 years of teaching for both UG and PG students



Compiler Design in C

Allen I. Holub

ISBN : 9789332549500
Pages : 768

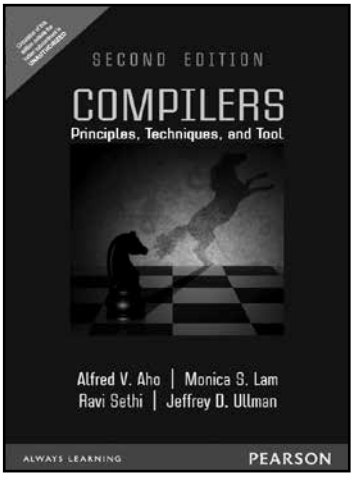
About the Book

This book is highly accessible to both computer science students and programmers. The approach is similar to that taken by Tanenbaum for operating systems in the C-language code that implements all algorithms.

Contents

About the Authors

Dan W. Patterson's Introduction to Artificial Intelligence and Expert Systems, is a comprehensive book for Computer Science graduation and post-graduation students. It comprises of various concepts of knowledge-system approach and stresses on the relevant use of its knowledge in particular expert systems. The book discusses topics such as Introduction and Overview of Artificial Intelligence; Knowledge Representation and Formalized Symbolic Logics; Knowledge Organization and Manipulation and Search and Control Strategies; Perception, Communication and Expert Systems and Natural Language Processing; and Knowledge Acquisition and General Concepts in Knowledge Acquisition.



Compilers: Principles, Techniques, & Tools, 2/e

Alfred V. Aho • Ravi Sethi • Jeffrey D. Ullman

ISBN : 9789332518667
Copyright : 2013
Pages : 966

About the Book

Compilers: Principles, Techniques and Tools, known to professors, students, and developers worldwide as the "Dragon Book," is available in a new edition. Every chapter has been completely revised to reflect developments in software engineering, programming languages, and computer architecture that have occurred since 1986, when the last edition published. The authors, recognizing that few readers will ever go on to construct a compiler, retain their focus on the broader set of problems faced in software design and software development.

Features

- Introduces the theory and practice of compiler design.
- Covers topics like context-free grammars, fine state machines, and syntax-directed translation.

Contents

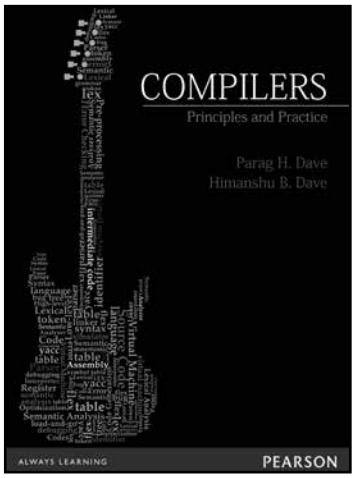
About the Authors

Alfred V. Aho is Lawrence Gussman Professor of Computer Science at Columbia University. Professor Aho has won several awards including the Great Teacher Award for 2003 from the Society of Columbia Graduates and the IEEE John von Neumann Medal. He is a member of the National Academy of Engineering and a fellow of the ACM and IEEE.

Monica S. Lam is a Professor of Computer Science at Stanford University, was the Chief Scientist at Tensilica and the founding CEO of moka5. She led the SUIF project which produced one of the most popular research compilers, and pioneered numerous compiler techniques used in industry.

Ravi Sethi launched the research organization in Avaya and is president of Avaya Labs. Previously, he was a senior vice president at Bell Labs in Murray Hill and chief technical officer for communications software at Lucent Technologies. He has held teaching positions at the Pennsylvania State University and the University of Arizona, and has taught at Princeton University and Rutgers. He is a fellow of the ACM.

Jeffrey Ullman is CEO of Gradiance and a Stanford W. Ascherman Professor of Computer Science at Stanford University. His research interests include database theory, database integration, data mining, and education using the information infrastructure. He is a member of the National Academy of Engineering, a fellow of the ACM, and winner of the Karlstrom Award and Knuth Prize.



Compilers: Principles and Practice

Parag H. Dave • Himanshu B. Dave

ISBN : 9788131764916
Copyright : 2012
Pages : 504

About the Book

The book explains the implementation of real-world language compilers and interpreters using a large of number of real-life examples from modern software practices like Linux, GNU Compiler Collection (GCC) and Perl, as well as packages. The principles discussed are illustrated with reference to where they are applied in actual practice. Fully class-tested, this book is tuned to the requirements of undergraduate computer engineering courses across universities in India.

Features

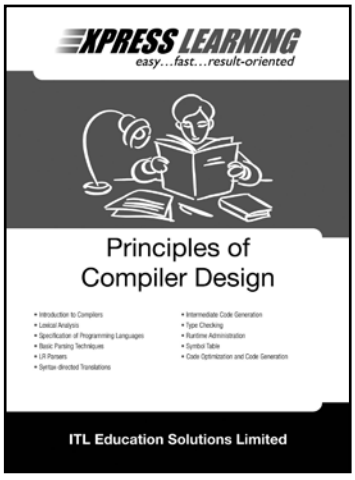
- A separate chapter depicting the design of a mini-C language compiler up to code generation
- Implementation issues for several modern popular programming languages—Java, Perl, PROLOG and FORTH.
- Discussions of development tools like YACC, Bison, LEX and Flex
- GNU Compiler Collection, which is especially useful for embedded system developers.

Contents

About the Authors

Parag H. Dave is Associate Professor of Computer Engineering at Dharmsinh Desai University, Nadiad, Gujarat. He is recipient of Aryabhatt awards in Mathematics and Science.

Himanshu B. Dave is Senior Consultant in charge of Training at e-Infochips Ltd, Ahmedabad. He has served as Professor and Head of Department as well as Coordinator for Institutional Development, DDIT Nadiad.



Express Learning - Principles of Compiler Design

ITL ESL

ISBN : 9788131761267
Copyright : 2012
Pages : 184

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

Features

- Presented in a question and answer format following the examination pattern
- Covers all key topics in the syllabus
- Designed to make learning fast and effective
- Precise and up-to-date
- Helps students excel in their examinations

Contents

1. Introduction to Compilers
2. Lexical Analysis
3. Specification of Programming Languages
4. Basic Parsing Techniques
5. LR Parsers
6. Syntax-directed Translations
7. Intermediate Code Generation
8. Type Checking
9. Runtime Administration
10. Symbol Table
11. Code Optimization and Code Generation

About the Author

ITL Education Solutions Limited (ITL ESL) is a part of the ITL group, which has operations all over the world with a significant presence in education and IT-enabled services. It specializes in handling educational projects in IT domains with a dedicated R&D wing of industry experts that helps in designing and developing content.

Compiler Construction

Dr. KVN Sunitha

ISBN : 9789332500297
Copyright : 2014
Pages : 600

NEW

About the Book

Designed for introductory course on compilers, the book provides the balanced coverage of both theoretical and the practical aspects. Spread across 12 chapters, the book introduces the readers to the process of compilation and then proceeds in explaining the design and construction of compilers in detail. Supported by good number of examples and exercises this text will meet the ideal requirement of the students.

Features

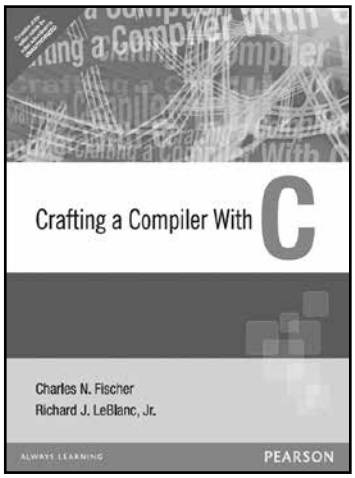
- In-depth coverage of compiler tools, left recursion and factoring.
- Detailed explanation on operator precedence.
- Includes conceptual tools like YACC, LEX that practitioners use in design.
- Includes examples from gate examination.
- Over 300 examples.
- Over 550 end of chapter exercises.

Contents

1. Compilers: An Introduction
2. Lexical Analyzer
3. Syntax Definition -Grammars
4. Syntax Analysis-Top down parsers
5. Bottom up Parsers
6. Syntax-Directed Translation
7. Semantic Analysis
8. Intermediate Code Generation
9. Symbol Tables
10. Code Optimization
11. Target Code Generation

About the Author

Dr. KVN Sunitha is Principal in Dr.B.V.Raju Institute of Technology, Hyderabad. She has over 17 years of teaching experience.



Crafting a Compiler With C

Charles Fischer • Richard LeBlanc

ISBN : 9788131708132
Copyright : 2007
Pages : 832

About the Book

This extremely practical, hands-on approach to building compilers using the C programming language includes numerous examples of working code from a real compiler and covers such advanced topics as code generation, optimization, and real-world parsing. It is an ideal reference and tutorial

Features

- Based on the best-selling Crafting a Compiler.
- Balances on excellent, readable introduction to compiler theory with a wealth of realistic compiler design examples and exercises
- Emphasizes the use of compiler tools that generate parsers and scanners
- Discusses LR parsing and reduction techniques thoroughly
- Introduces Flex and ScanGen early
- Includes optional advanced topics at the end of each chapter

Contents

Advanced Digital Design with the Verilog HDL: International Edition, 2/e

Michael D. Ciletti

ISBN : TBA
Pages : 984

Coming Soon

About the Book

This book builds on the student's background from a first course in logic design and focuses on developing, verifying, and synthesizing designs of digital circuits. The Verilog language is introduced in an integrated, but selective manner, only as needed to support design examples (includes appendices for additional language details). It addresses the design of several important circuits used in computer systems, digital signal processing, image processing, and other applications.

Features

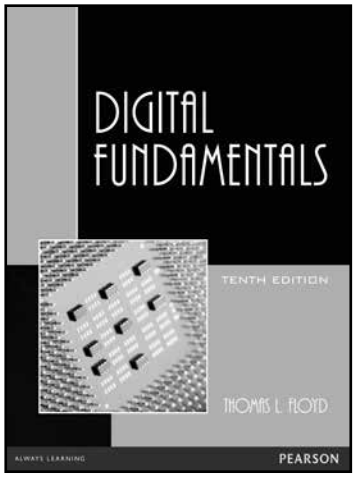
- Provides a brief review of basic principles in combinational and sequential logic
- Focuses on modern digital design methodology
- Demonstrates the utility of ASM and ASMD charts for behavioral modeling
- Clearly distinguishes between synthesizable and nonsynthesizable loops
- Provides practical treatment of timing analysis, fault simulation, testing, and design for testability, with examples
- Provides several problems with a wide range of difficulty after each chapter
- Combines a solution manual with an on-line repository of additional worked exercises

- Lists an index of all models developed in the examples
- Includes a set of FPGA-based, lab-ready exercises linked to the book (e.g. arithmetic and logic unit (ALU), programmable lock, a keypad scanner with a FIFO, a serial communications link with error correction, an SRAM controller, and first in, first out (FIFO) memory, RISC CPU, and FIFO)
- Supported by an ongoing Companion Web site http://www.eas.uccs.edu/ciletti/ containing:
- Source files of all models developed in the examples
- Source files of testbenches for simulating all of the examples
- An Instructor's Classroom Kit containing transparency files for a complete course based on the subject matter is available for instructors only
- Solutions to selected problems is available for instructors only
- Additional worked problems
- Jump-start tutorials helping students get immediate results with selected software tools (e.g. simulator)
- Answers to frequently asked questions (FAQs)

Contents

About the Authors

Michael Ciletti is Professor Emeritus in the Department of Electrical and Computer Engineering at the University of Colorado, Colorado Springs. His areas of interest include Modeling, synthesis and verification of digital systems with hardware description languages, system-level design languages, and embedded systems with FPGAs. He is the author of Advanced Digital Design with the Verilog HDL and the co-author of Digital Design, 4e.



Digital Fundamentals, 10/e

Thomas L. Floyd

ISBN : 9788131734483
Copyright : 2011
Pages : 668

About the Book

This best-selling text, recognized as the authority on digital fundamentals for over 30 years, provides thorough, current coverage from basic concepts to advanced topics. Coverage includes programmable logic, digital signal processing, and integrated circuit theories. Celebrated for its clear writing style and numerous examples, exercises, and problems, this text emphasizes applications and troubleshooting to assist readers in developing the practical skills that will be needed in their professional careers.

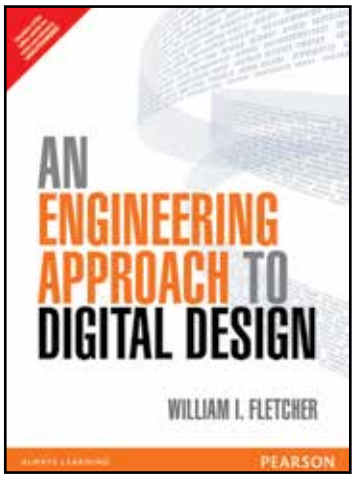
Features

- Core Fundamentals are presented without being intermingled with advanced or peripheral topics
- Chapter 12 provides optional coverage of IC technology (inside-the-chip circuitry)
- Introduction and objectives are at the beginning of each section within a chapter
- Check up exercises conclude each section of a chapter
- Each worked example has a Related Problem
- Summaries at the end of each chapter aid in recapitulation.
- Multiple-choice self-test at the end of each chapter
- Coverage of CMOS and bipolar IC technologies

New features for this edition

- The System Application Activities (formerly Digital System Applications) have been thoroughly revised.
- More end-of-chapter problems
- A true/false quiz at the end of every chapter
- Boolean simplification coverage now includes the Quine-McClusky method in an appendix
- Coverage of the cyclic redundancy code (CRC)
- Introduction to multi-core processors

Contents



An Engineering Approach to Digital Design

W. Fletcher

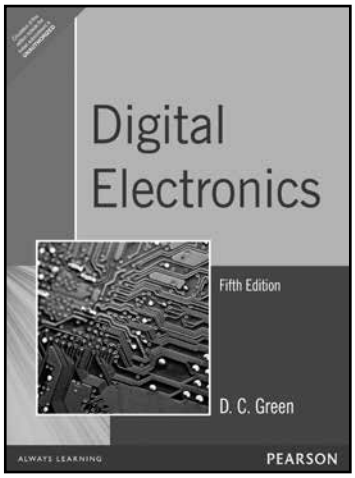
ISBN : 9789332555228
Pages : 768

NEW

About the Book

Providing an engineering-based approach to digital design, this book develops general design methodology (stressing documentation) that is useful for a wide range of diverse applications. The text builds up conceptual understanding through a survey of selected theories and examples. Besides, it also considers the 'how-to' of practical time- efficient design methods (for well-documented reliable and debug-gable hardware) for simple combinational systems, traditional sequential machines, high speed system controllers and programmable finite state machines.

Contents



Digital Electronics, 5/e

D.C. Green

ISBN : 9788177580686
Copyright : 1999
Pages : 408

About the Book

Digital Electronics provides a comprehensive introduction to the principles of modern digital electronic from basic logic elements to analogue—digital converters. This new edition of Digital Electronics for Technicians has been revised to bring it up-to-date with current devices and includes many practical exercises.

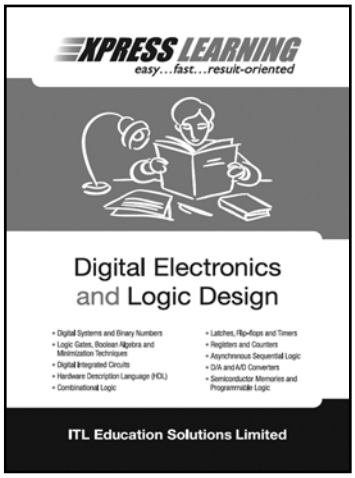
Features

- Comprehensive introduction to digital electronics
- Fully-worked examples
- Refers to practical devices throughout
- Exercises with worked answers to numerical questions
- Includes practical exercises for the student to carry out
- Latest IEC symbols are used and explained

Contents:

About the Authors

D.C. Green worked for many years as an engineer for British Telecom and the Ministry of Defence, and a Senior Lecturer in Telecommunication Engineering at Willesden College of Technology. He is also author of Higher Electrical Principles, Electronics 2, Electronics 3, Electronics 4, Data Communication, Transmission Principles for Technicians and Radio Systems for Technicians.



Express Learning – Digital Electronics and Logic Design

ITL ESL

ISBN : 9788131787045
Copyright : 2013
Pages : 352

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

Features

- Presented in a question and answer format following the examination pattern
- Covers all key topics in the syllabus

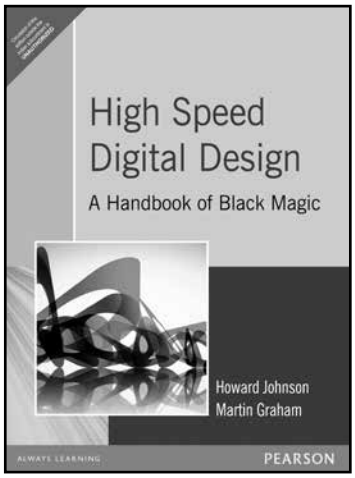
- Designed to make learning fast and effective
- Precise and up-to-date
- Helps students excel in their examinations

Contents:

1. Digital Systems and Binary Numbers
2. Logic Gates, Boolean Algebra and Minimization Techniques
3. Digital Integrated Circuits
4. Combinational Logic
5. Latches, Flip – Flops and Timers
6. Registers and Counters
7. DA and AD Converters
8. Semiconductor Memories and Programmable Logic

About the Authors

ITL Education Solutions Limited (ITL ESL) is a part of the ITL group, which has operations all over the world with a significant presence in education and IT-enabled services. It specializes in handling educational projects in IT domains with a dedicated R&D wing of industry experts that helps in designing and developing content.



High Speed Digital Design: A Handbook of Black Magic

Howard Johnson
Martin Graham

ISBN : 9788131714126
Copyright : 1993
Pages : 464

About the Book

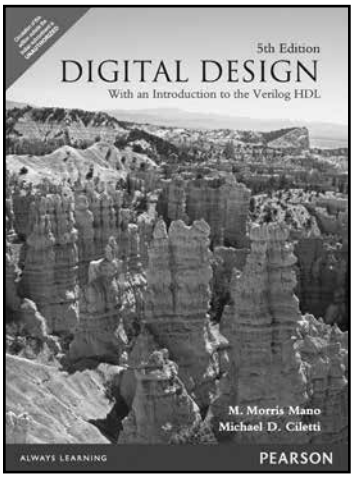
Focusing on a combination of digital and analog circuit theory, this comprehensive volume will help engineers who work with digital systems, shorten their product development cycles, and fix their latest high-speed design problems.

Features

- Covers signal reflection, crosstalk, and noise problems that occur in high-speed digtal machines (above 10 megahertz).
- Includes checklists that ask the questions an experienced designer would about a new system.
- Offers useful formulas for inductance, capacitance, resistance, rise time, and Q.
- Explains the trade-offs between signal cross talk, mechanical fabrication of tolerances, and trace routing density.
- Presents a methodology for determining how many layrs will be required to route a printed circuit board.

Contents

1. Fundamentals
2. High-Speed Properties of Logic Gates
3. Measurement Techniques
4. Transmission Lines
5. Ground Planes and Layer Stacking
6. Terminations
7. Vias
8. Power Systems
9. Connectors
10. Ribbon Cables
11. Clock Distribution
12. Clock Oscillators



Digital Design, With an Introduction to Verilog HDL 5/e

M. Morris Mano
Michael D. Ciletti

ISBN : 9788131794746
Copyright : 2013
Pages : 696

About the Book

Digital Design, fifth edition is a modern update of the classic authoritative text on digital design. This book teaches the basic concepts of digital design in a clear, accessible manner. The book presents the basic tools for the design of digital circuits and provides procedures suitable for a variety of digital applications.

Features

- This edition of Digital Design builds on the previous four editions, and the feedback of the team of reviewers who helped set a direction for the presentation.
- The focus of the text has been sharpened to more closely reflect the content of a foundation course in digital design and the mainstream technology of today's digital systems: CMOS circuits. The intended audience is broad, embracing students of electronics and communication engineering, and electrical engineering.
- The key elements that the book focuses include (1) Boolean logic, (2) logic gates used by designers, (3) synchronous finite state machines, and (4) datapath controller design—all from a perspective of designing digital systems.
- The widespread availability of web-based ancillary material prompted a limitation of the discussion of field programmable gate arrays (FPGAs) to an introduction of devices offered by only one manufacturer, rather than two.
- Today's designers rely heavily on hardware description languages (HDLs), and this edition of the book gives greater attention to their use and presents a clear development of a design methodology using the Verilog HDL.
- Digital Design supports a multimodal approach to learning, following the VARK characterization of learning modalities identifying the four major modes by which humans learn: (V) visual, (A) aural, (R) reading, and (K) kinesthetic.
- The sequence of topics in the text can accommodate courses that adhere to traditional, manual-based, treatments of digital design, courses that treat design using an HDL, and courses that are in transition between or blend the two approaches.

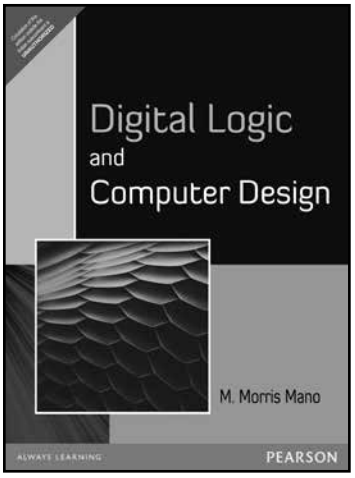
New To This Edition

- This edition of Digital Design uses the latest features of IEEE Standard 1364, but only insofar as they support the authors' pedagogical objectives. The revisions and updates to the text include:
- Addition of "Web Search Topics" at the end of each chapter to point students to additional subject matter available on the web
- Revision of approximately one-third of the problems at end of the chapters
- Streamlining of the discussion of Karnaugh-maps
- Integration of treatment of basic CMOS technology with treatment of logic gates
- Inclusion of an appendix introducing semiconductor technology

Contents

About the Authors

M. Morris Mano, California State University, Los Angeles.
Micheal D. Ciletti, University of Colorado, Colorado Springs.



Digital Logic & Computer Design

M. Morris Mano

ISBN : 9788177584097
Copyright : 1979
Pages : 624

About the Book

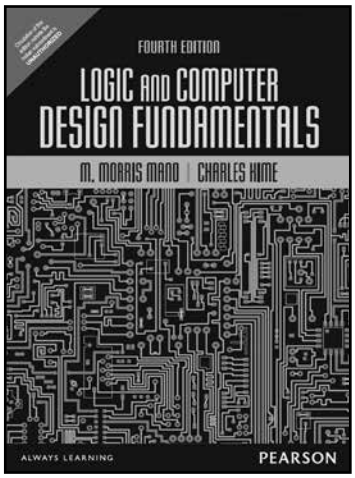
The book presents the basic concepts used in the design and analysis of digital systems and introduces the principles of digital computer organization and design. It provides various methods and techniques suitable for a variety of digital system design applications and covers all aspects of digital systems from the electronic gate circuits to the complex structure of a microcomputer system. It also includes applications of the read only memory (ROM) and programmable logic array (PLA).

The flexible organization of the book permits it to be used in a variety of ways to suit the needs of courses in digital systems taught in electrical, electronics, computer science and engineering departments.

Features

- It covers all aspects of digital systems from the electronic gate circuits to the complex structure of microprocessor systems
- Presents the classical techniques for the logic design of combination and sequential circuits
- It also facilitates a thorough understanding of the register-transfermethod used for the analysis and design of processor units and control units

Contents



Logic & Computer Design Fundamentals

M. Morris Mano

ISBN : 9789332518728
Copyright : 2009
Pages : 624

About the Book

Providing solid digital system design fundamentals while accomplishing a gradual, bottom-up development of these fundamentals, this book focuses on the ever-evolving applications of basic computer design concepts. Treatment of logic design, digital system design, and computer design. Ideal for self-study by engineers and computer scientists.

Features

- NEW—Many new sections on VHDL and Verilog—Includes separate discussions dedicated to VHDL or Verilog on: combinational design; sequential circuits; registers; datapaths; multipliers; and more.
- NEW—125 additional pages on book's website on VHDL and Verilog— Includes additional explanatory material, VHDL and Verilog-based problems, and all source files for VHDL and Verilog examples.
- NEW—40% changed or new problems.
- Exceptionally readable.
- A gradual development of logic, design, digital systems, and computer architecture concepts.

Contents

Digital Integrated Circuits, 2/e

Jan M. Rabaey • Anantha Chandrakasan • Borivoje Nikolic

ISBN : TBA
Pages : 761

Coming Soon

About the Book

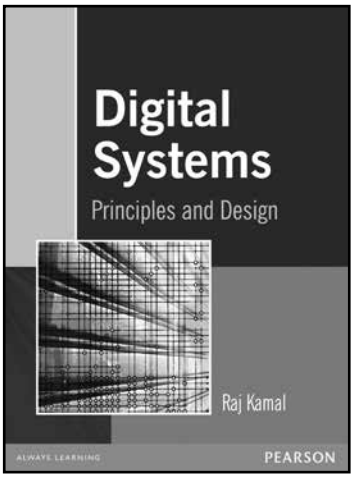
Intended for use in undergraduate senior-level digital circuit design courses with advanced material sufficient for graduate-level courses.

Progressive in content and form, this text successfully bridges the gap between the circuit perspective and system perspective of digital integrated circuit design. Beginning with solid discussions on the operation of electronic devices and in-depth analysis of the nucleus of digital design, the text maintains a consistent, logical flow of subject matter throughout. The revision addresses today's most significant and compelling industry topics, including: the impact of interconnect, design for low power, issues in timing and clocking, design methodologies, and the tremendous effect of design automation on the digital design perspective. The revision reflects the ongoing evolution in digital integrated circuit design, especially with respect to the impact of moving into the deep-submicron realm.

Features

- NEW - Updating of technology of the deep-submicron realm—The piece makes sure that updates to most of the numeric values with respect to advancing processes can be accomplished easily, by making extensive use of the web page.
- Interconnect material takes a more predominant position and is moved forward in the presentation.
- Bipolar and non-silicon circuits have been removed—The sections on these approaches will be kept available to the occasional user through the web page.
- A number of the circuit techniques have been removed or updated or newer approaches have been introduced—Reflects the changes in design approaches over the last decade.
- A chapter on manufacturing technology has been introduced (Chapter 2)—Design methodologies are introduced throughout the text in synchronicity with the circuit content.
- Design methodology inserts—Discuss design automation.

Contents



Digital Systems: Principles and Design

Raj Kamal

ISBN : 9788177585704
Copyright : 2007
Pages : 544

About the Book

Digital Systems is designed as an essential textbook for students of electronics and communication engineering, electrical engineering, instrumentation engineering, information technology and computer engineering. It provides students with a solid foundation of digital fundamentals through worked-out examples and facilitates a firm understanding of the subject.

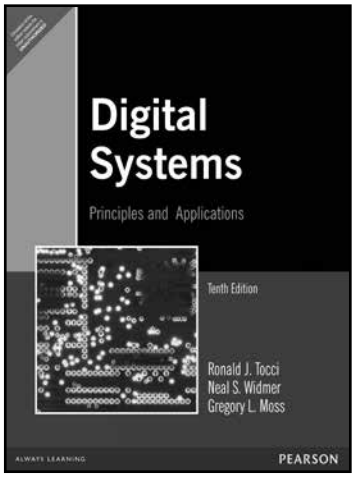
Features

- Illustrates the functioning of circuits using truth tables, state tables, timing diagrams and state diagrams
- Includes advanced topics like the Quine–McCluskey method, computer-based minimization techniques, synchronous and asynchronous mode circuits, fundamental-mode circuit analysis, pulse-mode sequential circuits, and FPGAs
- Each chapter focuses on a single aspect of digital systems and highlights areas for the student to keep in mind
- Contains over 200 diagrams, 250 worked-out examples, and a large number of problems for practice

Contents

About the Author

Raj Kamal received his M.Sc. at the age of 17, published his first research paper in an international journal at 18 and completed his Ph.D. at 22. With over 34 years of teaching and research experience, he has guided nine Ph.D.s, published eight books, and written over 80 research papers for international and national journals. He is the best-selling author of Microcontrollers, also published by Pearson Education.



Digital Systems, 10/e

Ronald J. Tocci
Neal S. Widmer
Gregory L. Moss

ISBN : 9788131727249
Copyright : 2009
Pages : 599

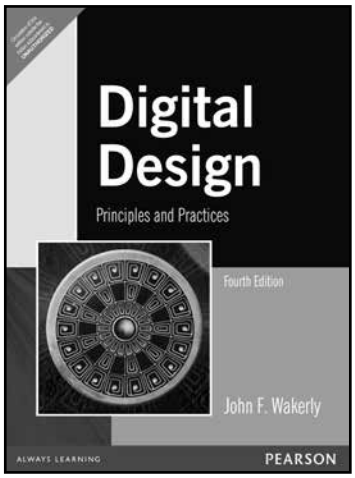
About the Book

For this new edition, the authors have meticulously worked to provide the right balance between existing and new material while keeping the size of the book within reason. This is a growing challenge due to revolutionary digital technology. Industry's movement from using schematics to using hardware description language (HDLs) to describe complex digital systems has rendered obsolete many topics previously considered to be foundational. In addition, new technology demands the expansion and emphasis of other traditional concepts as it introduces many new tools and techniques for developing and analyzing digital systems.

Features

- Improved analysis of combinational circuits
- Expanded coverage of the 555 timer in Chapter 5
- Improved coverage of signed number in Chapter 6
- Greater emphasis on the synchronous counters in Chapter 7
- More thorough coverage of state machines, with a practical example of a functional system
- Description of recent IC technology in Chapter 8
- Revised and improved VHDL coverage

Contents



Digital Design: Principles and Practices, 4/e

John F. Wakerly

ISBN : 9788131713662
Copyright : 2008
Pages : 599

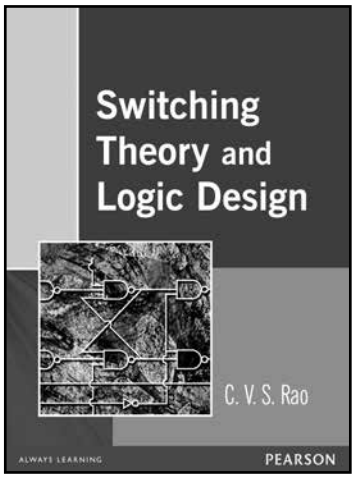
About the Book

Blends academic precision and practical experience in an authoritative introduction to basic principles of digital design and practical requirements. With over 30 years of experience in both industrial and university settings, the author covers the most widespread logic design practices while building a solid foundation of theoretical and engineering principles for students to use as they go forward in this fast moving field.

Features

- Now covers all popular HDLs (hardware descrioption languages) Verilog as well as ABEL and VHDL.
- Multi-chip design examples are redone in terms of VHDL and Verilog programs, instead of interconnected MSI chips and glue logic.
- 50% new exercises

Contents



Switching Theory and Logic Design

C.V.S. Rao

ISBN : 9788131701836
Copyright : 2005
Pages : 336

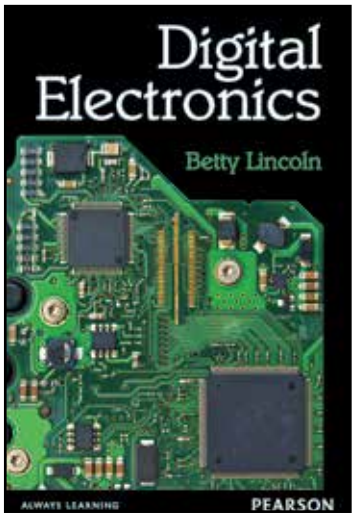
About the Book

Switching Theory and Logic Design is for a first level introductory course on digital logic design. This book illustrates the usefulness of switching theory and its applications, with examples to acquaint the student with necessary background. This book has designed as a prerequisite to many other courses like Digital Integrated Circuits, Computer Organisation, Digital Instrumentation, Digital Control, Digital Communications, Hardware Description Languages and so on.

Features

- Combinational logic circuit design covered in detail.
- Different types of flip-flops and their conversion from one to the other is explained.
- Utility of the ASM charts in designing the control unit of digit system is emphasized.
- Chapter Objectives, Summary, and Key Terms are provided in each chapter.
- Simple and lucid style of writing.
- Rich in pedagogy with large number of illustrations.

Contents



Digital Electronics

Betty Lincoln

ISBN : 9789332522299
Copyright : 2014
Pages : 460

About the Book

Digital Electronics is a course offered for undergraduate computer science students during the first or second semesters. This textbook provides a fundamental insight to the basic concepts of electronics with adequate examples and illustrations. Spread across sixteen chapters, the book provides a solid introduction to digital systems, number systems, logic gates, Boolean algebra and Karnaugh mapping and then dwells into key topics of logic implementation, integrated circuits interfacing, logic circuits, registers, counters, convertors and display devices. A separate chapter is allotted for electronic experiments. Supported with numerous examples and exercises this textbook is an ideal classroom companion for students.

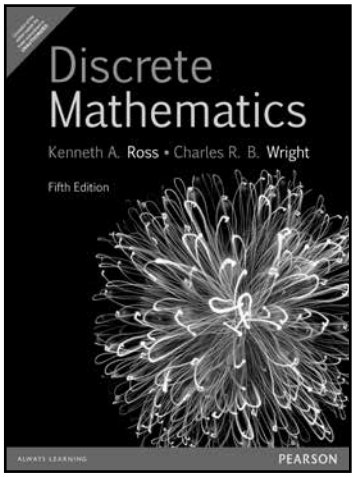
Features

- Indepth coverage of logic gates and Boolean algebra.
- Includes topics under display devices, memory storage devices and flip flops.
- Over 150 solved examples
- Over 200 multiple choice questions
- Over 300 end of chapter exercises

Contents

About the Author

Betty Lincoln, Sri Ramachandra University, Chennai



Discrete Mathematics, 5/e

Kenneth A Ross • Charles R. Wright

ISBN : 9788131790618
Copyright : 2012

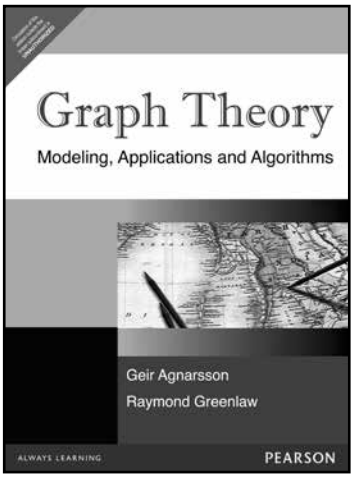
About the Book

Revised for extra clarity, the distinguishing characteristic of Ross and Wright is a sound mathematical treatment that increases smoothly in sophistication. The text presents utility-grade discrete math tools so students can understand them, use them, and move on to more advanced mathematical topics

Features

- NEW - Over 270 supplementary exercises—All with answers
- NEW - Full chapter on discrete probability
- NEW - Chapter on algebraic structures
- Comprehensive coverage of logic and proofs
- Full chapter on recursion

Contents



Graph Theory: Modeling, Applications and Algorithms

Geir Agnarsson • Raymond Greenlaw

ISBN : 9788131717288
Copyright : 2008
Pages : 464

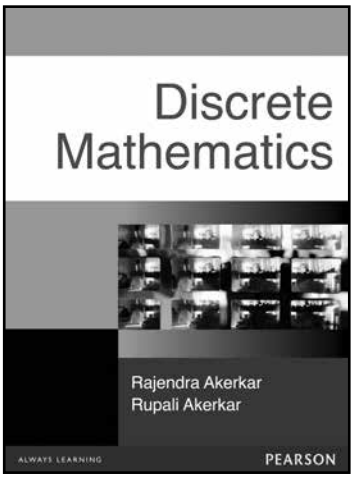
About the Book

Once considered an "unimportant" branch of topology, graph theory has come into its own through many important contributions to a wide range of fields — and is now one of the fastest-growing areas in discrete mathematics and computer science. This new text introduces basic concepts, definitions, theorems, and examples from graph theory. The authors present a collection of interesting results from mathematics that involve key concepts and proof techniques; covers design and analysis of computer algorithms for solving problems in graph theory; and discuss applications of graph theory to the sciences. It is mathematically rigorous, but also practical, intuitive, and algorithmic.

Features:

- **Self-contained format** - Almost all proofs of some exceptionally technical theorems (such as the Four Color Theorem and a Minor Theorem) are contained in the text.
  - Does not assume any special mathematical background beyond the standard undergraduate mathematics courses.
- **Explanatory notes** – Includesnumerous notes and remarks to explain the "commonsense" point of view, the motivation, and many "hand-waving" arguments, so that the reader gets the best of both worlds–the rigor and the intuition.
- **Wealth of examples** – Explain both the idea of technical definitions and theorems and the applications in graph theory itself, computer science, and other sciences.
- **Hints and clues** – Providesnumerous suggestions for many of the more involved exercises, especially those that are important to the development of the field of graph theory itself, keeping gaps in the overall treatment to an absolute minimum.

Contents



Discrete Mathematics

Rajendra Akerkar • Rupali Akerkar

ISBN : 9788131717943
Copyright : 2004
Pages : 332

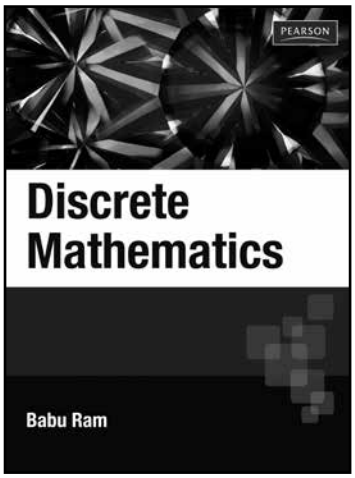
About the Book

Discrete Mathematics provides an introduction to some of the fundamental concepts in modern mathematics. Abundant examples help explain the principles and practices of Discrete Mathematics. The book intends to cover material required by readers for whom mathematics is just a tool, as well as provide a strong foundation for mathematics majors. The vital role that Discrete Mathematics plays in computer science is strongly emphasized as well. The book is useful for students and instructors, and also software professionals.

Features

- User-friendly, conversational style of writing
- Covers topics such as combinatorics, proof methods, induction, sets, theory of automata
- Examples in each chapter bring clarity to the most complex concepts

Contents



Discrete Mathematics

Babu Ram

ISBN : 9788131733103
Copyright : 2011
Pages : 584

About the Book

Discrete Mathematics is an integral part of any undergraduate as well as post graduate courses in Computer Science and Mathematics. The syllabi of all these courses have been studied in depth and utmost care has been taken to ensure that all the essential topics in discrete structures are adequately emphasized. The book will enable the students to develop the requisite computational skills needed in software engineering.

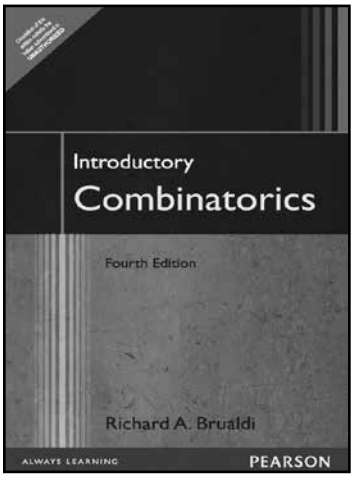
Features

- C Programs of important algorithms
- Extensive coverage of Boolean Algebra, Algebraic Structures and Graph Theory
- 550 Solved examples and 170 practice problems with hints/answers

Contents

About the Author

Babu Ram received his Ph.D. degree in mathematics in 1973 from Kurukshetra University, Kurukshetra, India. He was formerly Professor of Mathematics and Dean, Faculty of Physical Sciences at Maharshi Dayanand University, Rohtak and has been teaching mathematics for the past 36 years. A member of Indian Mathematical Society and the American Mathematical Society, Professor Babu Ram has published 42 research papers in Real and Functional Analysis in international journals of repute. He is on the board of reviewers of both American Mathematical Reviews and Zentralblatt fur Mathematik und ihre Grengebiete, Berlin. Presently, he is working as Director MCA at Manav Rachna International University, Faridabad.



Introductory Combinatorics, 4/e

Richard A. Brualdi

ISBN : 9788131718827
Copyright : 2008
Pages : 640

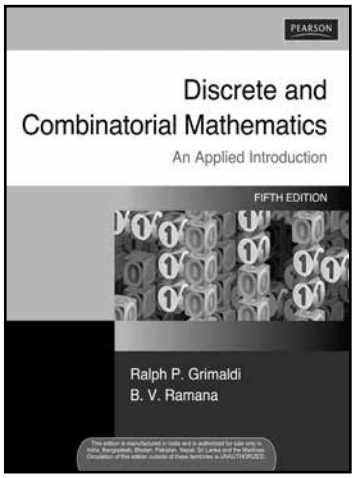
About the Book

This, the best selling book in its market, emphasizes combinatorial ideas including the pigeon-hole principle, counting techniques, permutations and combinations, Pólya counting, binomial coefficients, inclusion-exclusion principle, generating functions and recurrence relations, and combinatortial structures (matchings, designs, graphs), flows in networks.

Features

- NEW - New problems in each chapter-Many more challenging problem sets have been added.
- Presents an excellent treatment of Polya's Counting Theoremthat doesn't assume students have seen group theory.
- Many worked examples.

Contents



Discrete and Combinatorial Mathematics, 5/e

Ralph P. Grimaldi • B. V. Ramana

ISBN : 9788177584240
Copyright : 2006
Pages : 1056

About the Book

This fifth edition continues to improve on the features that have made it the market leader. The text offers a flexible organization, enabling instructors to adapt the book to their particular courses. The book is both complete and careful, and it continues to maintain its emphasis on algorithms and applications. Excellent exercise sets allow students to perfect skills as they practice. This new edition continues to feature numerous computer science applications-making this the ideal text for preparing students for advanced study.

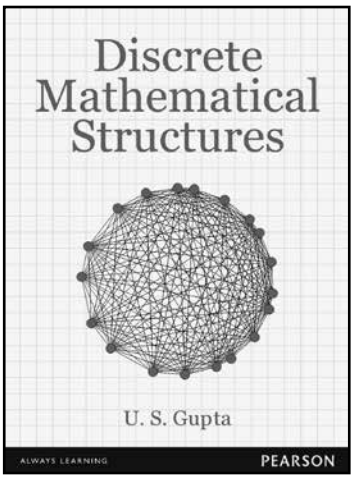
Features

- Historical reviews and biographies bring a human element to their assignments.
- Chapter summaries allow students to review what they have learned.
- Expanded treatment of discrete probability in Chapter 3.
- New material on cryptology, private-key cryptosystems in Chapter 13, public-key RSA cryptosystems in Chapter 15.

Contents

About the Authors

Ralph P. Grimaldi, Rose-Hulman Institute of Technology
B.V. Ramana, Professor of Mathematics, JNTU College of Engineering, Kakinada, India & Professor of Mathematics, Eritrean Institute of Technology, Eritrea (N. E. Africa) (0n Special duty)



Discrete Mathematical Structures

U. S. Gupta

ISBN : 9789332521391
Copyright : 2014
Pages : 576

About the Book

Discrete Mathematical Structures provides comprehensive, reasonably rigorous and simple explanation of the concepts with the help of numerous applications from computer science and engineering.
Every chapter is equipped with a good number of solved examples that elucidates the definitions and theorems discussed. Chapter-end exercises are graded, with the easier ones in the beginning and then the complex ones, to help students for easy solving.

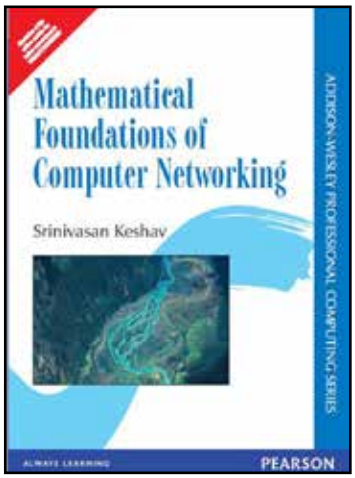
Features

- Rigorous topics are explained in a very easy-to-understand manner
- Over 250 unsolved questions
- Around 400 solved examples

Contents

About the Author

Uma Shanker Gupta joined the department of mathematics, the University of Roorkee (presently IIT-Roorkee), in 1967, after teaching for five years at Ewing Christian Degree College, Allahabad. He was awarded PhD (Mathematics) by the University of Roorkee in 1971.
He has been a reviewer of many International journals like Journal of Applied Mechanics, Journal of Sound and Vibration to name a few. He became EMERITUS FELLOW in 2004 and held this position till 2006.



Mathematical Foundations of Computer Networking

Srinivasan Keshav

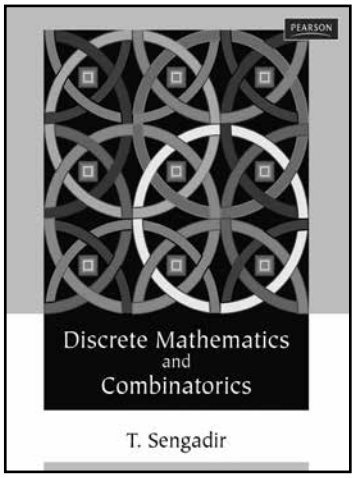
ISBN : 9788131791462
Copyright : 2012

Features

Brings together the math background needed to understand the latest networking research, and design or evaluate real networking systems

- Includes modular, easy-to-understand introductions to probability, statistics, linear algebra, optimization, signals, systems, and transforms
- Demystifies modern queuing, game, control, and information theories
- There will also be a set of homework exercises, in addition to those in the text, available to instructors, with separate solutions, for five chapters.
- Roughly 40 hours of video are already on YouTube in the University of Waterloo channel with an additional 45 hours available at the end of 2011 at: http://www.youtube.com/playlist?list=PL5216DFFFAEB1A6BB

Contents



Discrete Mathematics and Combinatorics

T. Sengadir

ISBN : 9788131714058
Copyright : 2009
Pages : 568

About the Book

Discrete Mathematics and Combinatorics provides a concise and practical introduction to the core components of discrete mathematics, featuring a balanced mix of basic theories and applications. The book covers both fundamental concepts such as sets and logic, as well as advanced topics such as graph theory and Turing machines. The example-driven approach will help readers in understanding and applying the concepts. Other pedagogical tools—illustrations, practice questions, and suggested reading—facilitate learning and mastering the subject.

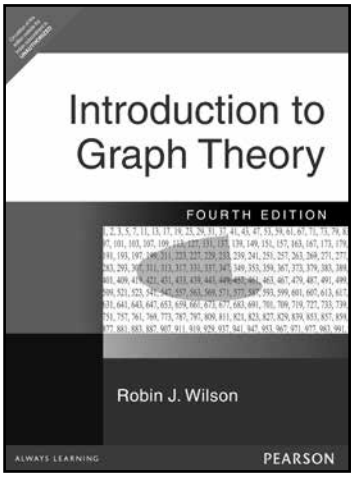
Features

- Mathematical concepts explained in a simple and understandable form.
- Well-structured organization of chapters, moving from simple to complex.
- Numerous worked examples and illustrations to introduce concepts
- A rich and varied set of practice questions to reinforce the concepts.
- Appendices on mathematical prerequisites— trigonometry, matrices and basic algebra.

Contents

About the Author

T. Sengadir is an Associate Professor in the Department of Mathematics at SSN College of Engineering, Chennai.



Introduction to Graph Theory, 4/e

Robin J. Wilson

ISBN : 9788131706985
Copyright : 1996
Pages : 184

About the Book

Graph Theory has recently emerged as a subject in its own right, as well as being an important mathematical tool in such diverse subjects as operational research, chemistry, sociology, and genetics. This book provides a comprehensive introduction to the subject.

Features

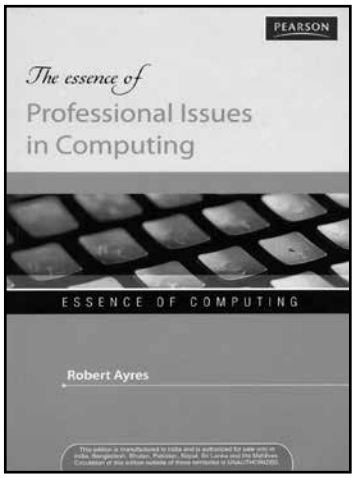
- Provides a basic foundation for the course.
- Text has been completely revised.
- Includes full range of exercises of varying difficulty.
- Incorporates new material on algorithms, tree-searches, and graph-theoretical puzzles.
- Full solutions are provided for many of the exercises.
- Includes a chapter on matroid theory, which is used to consolidate some of the material from earlier chapters.

Contents

About the Author

Robin J. Wilson is Dean and Director of Studies in the Faculty of Mathematics and Computing at the Open University.

Essence Series



The Essence of Professional Issues in Computing

Robert Ayres

ISBN : 9788131756737
Copyright : 2011
Pages : 228

About the Book

The Essence of Professional Issues in Computing is a unique introduction to the social, legal and ethical issues which are raised by the development of software. The book has been designed to cover the most important aspects of the topic specified by the British Computer Society (BCS) syllabus. It assumes no prior knowledge of computing and contains a short insight into the British legal system to make the discussion of computer law easier to understand.

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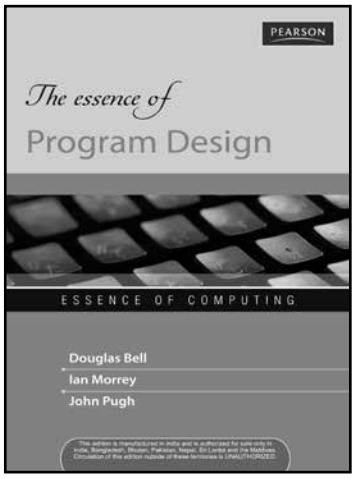


The Essence of Program Design

Stephen P. Bell • Ian Morrey • John Pugh

ISBN : 9788131756812
Copyright : 2011
Pages : 208

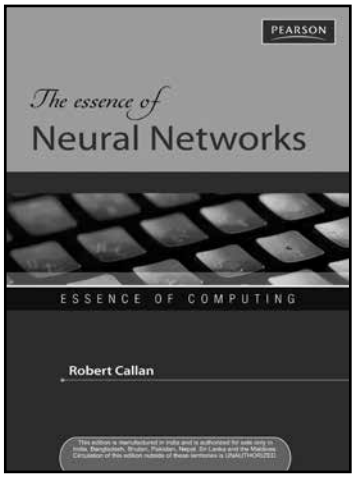
About the Book

Aimed at those who have written several small-to-medium-sized programs, **The Essence of Program Design** provides a complete introduction to the varied range of design methods that are available. Each method is analysed and assessed, and comparisons are drawn to allow the programmer to ascertain which method is most suitable for the task in hand.

Features

- Covers a range of methods including OO and structured methods.
- Compares, contrasts and assesses most popular and widely used design methods.
- Independent of any programming language.
- Packed with exercises, examples and self-test questions to assist student learning.

Table of Contents



The Essence of Neural Networks

Robert Callan

ISBN : 9788131756782
Copyright : 1999
Pages : 248

About the Book

The Essence of Neural Networks is designed to be a first course on neural networks for undergraduate students, with the mathematics contained to a minimum. The book's main aim is to cover the basic concepts, with the key neural network models explored sufficiently deeply to allow a competent programmer to implement the networks in a language of their choice.

Features

- Self-test questions and exercises for the students at the end of most chapters.
- A glossary of terms.
- The book is supported by a website (see below for link).

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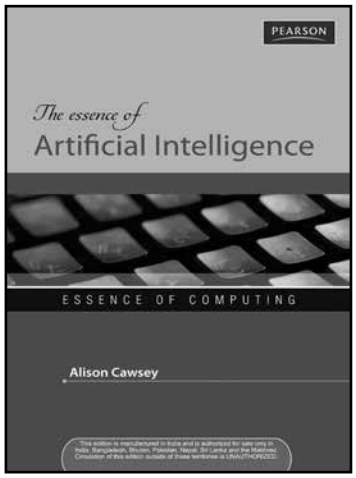


The Essence of Artificial Intelligence

Alison Cawsey

ISBN : 9788131756720
Copyright : 2011
Pages : 200

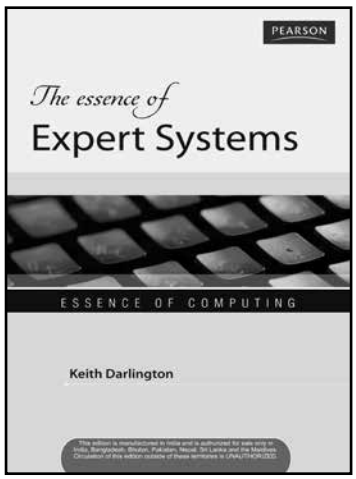
About the Book

The Essence of Artificial Intelligence provides a concise and accessible introduction to the topic for students with no prior knowledge of AI. Taking a pragmatic approach to the subject, this book de-mystifies and makes AI concrete and transparent. Examples and algorithms are given throughout and can be sensibly implemented in a range of different languages. Offering a less formal/ mathematical treatment of the subject than many of its competitors, The Essence of Artificial Intelligence provides an overview of all the key subjects covered in one semester.

Features

- Concise coverage of the major topics in AI.
- Simple clear descriptions of key techniques and algorithms.
- Chapter 3 (Expert Systems) contains 3 case studies which look at the medical expert systems MYCIN, Internist and Pathfinder.

Table of Content:



The Essence of Expert Systems

Keith Darlington

ISBN : 9788131756744
Copyright : 2011
Pages : 184

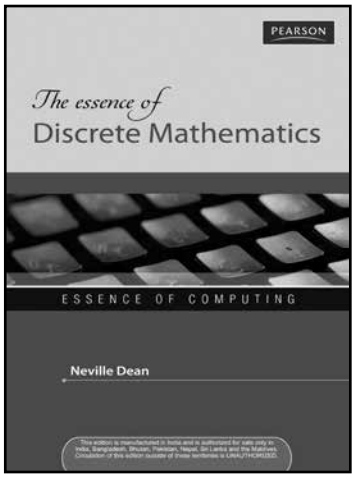
About the Book

This concise text combines an understanding of the theoretical principles and techniques with the development of practical skills needed to build expert systems. The most commonly used software tools for building expert systems-expert system shells-are used to give students practical experience.

Features

- Techniques illustrated with a range of shells.
- Chapters devoted to design and implementation using VP-Expert.
- Extensive use of tables for summarising information.
- Sharp focus on key concepts, backed up by end-of-chapter exercises and extensive further reading.

Table of Contents



The Essence of Discrete Mathematics

Joseph Dean

ISBN : 9788131756775
Copyright : 2011
Pages : 208

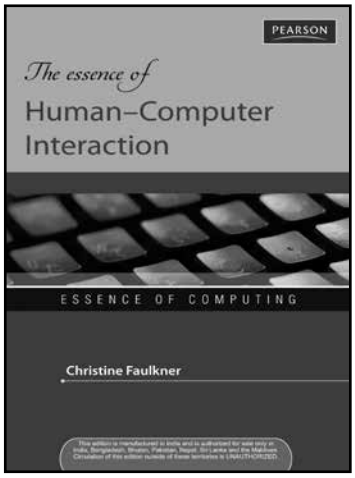
About the Book

This book is appropriate for a first course in Discrete Mathematics. The fundamentals of sets and logic supply the foundations for learning and provide clear instructions on how to calculate values for mathematical expressions for small finite sets.

Features

- Offers a gentle introduction to discrete mathematics for those of a non-mathematical disposition.
- Running case study throughout the book to help students develop and understanding of the subject.
- Covers the essential components of a first level course in discrete mathematics.

Table of Contents



The Essence of Human Computer Interaction

Christine Faulkner

ISBN : 9788131756751
Copyright : 2011
Pages : 212

About the Book

The Prentice Hall Essence of Computer Science Series provides a concise, practical and uniform introduction to the core components of an undergraduate Computer Science degree. Acknowledging recent changes within higher education, this approach uses a variety of pedagogical tools - case-studies, worked examples and self-test questions - to underpin the student's learning.**The Essence of Human-Computer Interaction** provides a concise, no-nonsense introduction to studying HCI. It covers all of the essential elements of a standard Human-Computer Interaction course, including Artificial Intelligence, Psychology and Cognitive Science, and suggests ways in which to further develop areas of interest in the subject. It provides examples from everyday life as well as computer systems, such as "real" interfacing problems and solutions. It also includes practical "experiments" for the reader to try, through an examination of subjects such as ergonomics and other HCI issues.

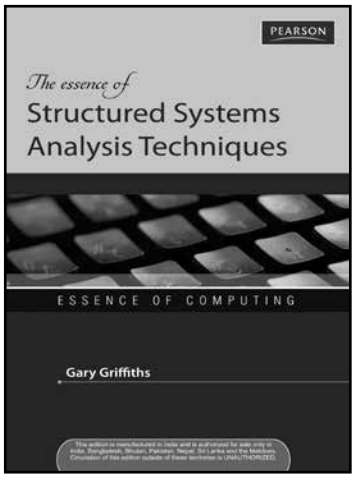
Features

- Provides a concise introduction to the core components of a course in Human-Computer Interaction.
- Contains experiments and examples from everyday life as well as computer systems, e.g. memory tests.
- Packed with learning aids, including exercises, examples and a wide further-reading list, and a glossary.
- Provides a list of electronic resources at the end of each chapter.

Table of Contents

1. An Overview of Human-Computer Interaction.
2. The User's Physical Capabilities.
3. The User's Mental Capabilities.
4. The Interface.
5. Designing Systems for People.
6. Evaluating and Testing.
7. Making Systems that People Can Use.
8. Economics, Health and Safety.
9. Social Implications and the Future of HCI.

Essence Series



The Essence of Structured Systems Analysis Techniques

Gary Griffiths

ISBN : 9788131756805
Copyright : 2011
Pages : 256

About the Book

The Essence of Structured Systems Analysis is an introduction to the concepts and development of structured systems analysis. It assumes no prior knowledge of the subject, and aims to give students the necessary information, examples and exercises to allow them to develop practical skills in structured techniques.

The book is divided into three parts: the introduction, the techniques and the methods. The introduction gives a history of the subject and identifies central techniques and how these may be supported with software tools. The techniques section identifies conventions and gives worked examples to illustrate the principles. Finally, the methods part looks at two of the most popular structured methods: SSADM and Yourdon. A life cycle is set out for each, and the role of the various techniques in each method is described. There are also brief descriptions of other techniques in the methods.

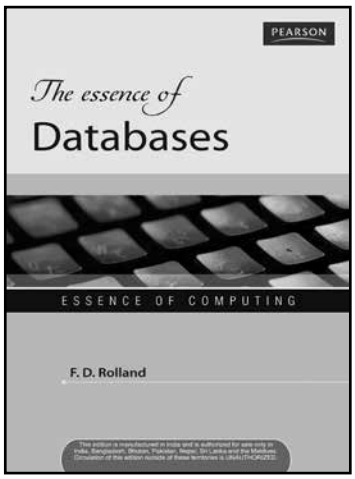
Features

- Concise and clear coverage of the major aspects of Structured Systems
- Analysis and design methods.
- Conventions are identified and worked examples are given to illustrate the principles.
- Packed with pedagogical aids, including worked examples and exercises.
- Detailed bibliography.

Table of Contents

1. Introduction.
2. Introduction to Data Flow Diagrams.
3. Progressing Data Flow Diagrams.
4. Exploding Data Flow Diagrams.
5. Recording Data in the Data Dictionary.
6. Recording Processes in the Data Dictionary.
7. Data Modeling.
8. Entity Life Histories.
9. Structure Charts.
10. Structured Methods.

Essence Series



The Essence of Databases

F. D. Rolland

ISBN : 9788131756768
Copyright : 2011
Pages : 240

About the Book

The Essence of Databases offers a text for those students with no prior knowledge of the subject. In simple, straightforward terms the book describes the basic concepts that underpin the technology of database systems.

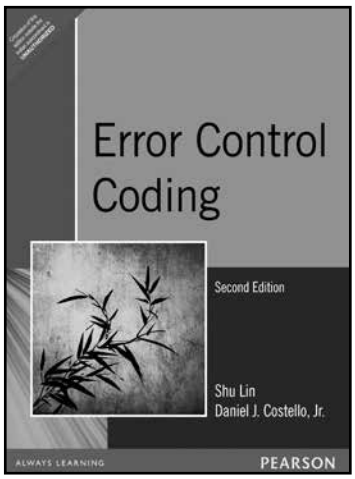
Features

- Examples taken from a variety of mainstream products such as ORACLE, DB2, Ontos and Informix.
- Use of realistic small-scale studies that are used repeatedly throughout the book to highlight different facets of database technology.

- Explicit link between the theory and practice of database systems in-depth treatment of SQL.
- Covers design and implementation
- Detailed bibliography.

Contents

1. The Basics
2. Database design
3. Relational Databases 1 -- Basic concepts
4. Relational Databases 2 -- Design
5. Relational Databases 3 -- SQL
6. Traditional Database Models
7. Object-Oriented Databases
8. Internal Management (1)
9. Internal Management (2)
10. Distributed Database Systems



Error Control Coding, 2/e

Shu Lin • Daniel J. Costello

ISBN : 9788131734407
Copyright : 2005

About the Book

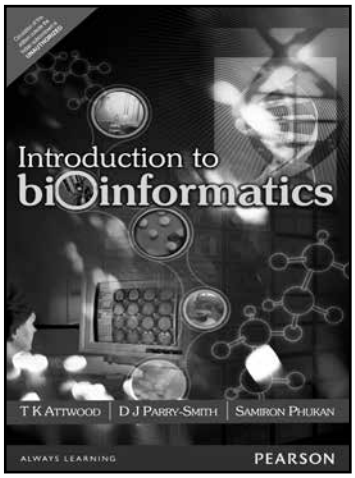
A reorganized and comprehensive major revision of a classic textbook. This text provides a bridge between introductory courses in digital communications and more advanced courses in information theory. Completely updated to cover the latest developments. It presents state-of-the-art error control techniques.

Features

- Mathematical background required is kept to a minimum.
- Fundamental ideas from modern algebra necessary to understand algebraic coding techniques are covered in one chapter.
- Fundamentals and philosophy of the first edition remain unchanged.
- Coverage of the fundamentals of coding and the applications of codes to the design of real error control systems.
- Coverage of all developments in coding since the first edition was published-Contains the most recent developments of coded modulation, trellises for codes, soft-decision decoding algorithms, turbo coding for reliable data transmission and other areas.
- New and revised problems-Most problems are direct applications of material covered in the text. Some more challenging problems are included for advanced students.
- Hundreds of new and revised examples-And more than 200 illustrations of code structures, encoding and decoding circuits and error performance of many important codes and error control coding systems.

Contents

1. Coding for Reliable Digital Transmission and Storage
2. Introduction to Algebra
3. Linear Block Codes
4. Important Linear Block Codes
5. Cyclic Codes
6. Binary BCH Codes
7. Nonbinary BCH Codes, Reed-Solomon Codes, and Decoding Algorithms
8. Majority-Logic Decodable Codes
9. Trellises for Linear Block Codes
10. Reliability-Based Soft-Decision Decoding Algorithms for Linear Block Codes
11. Convolutional Codes
12. Trellis-Based Decoding Algorithms for Convolutional Codes
13. Sequential and Threshold Decoding of Convolutional Codes
14. Trellis-Based Soft-Decision Algorithms for Linear Block Codes
15. Concatenated Coding, Code Decomposition ad Multistage Decoding
16. Turbo Coding
17. Low Density Parity Check Codes
18. Trellis Coded Modulation
19. Block Coded Modulation
20. Burst-Error-Correcting Codes
21. Automatic-Repeat-Request Strategies



Introduction to Bioinformatics

Teresa Attwood • David J. Parry-Smith • Dr Samiron Phukan

ISBN : 9788177586411
Copyright : 2007
Pages : 256

About the Book

Bioinformatics, the application of computers in the biological sciences, especially analysis of biological sequence data, is becoming an essential tool in molecular biology as genome projects generate vast quantities of data. With new sequences being added to DNA databases on an average of once a minute, there is a pressing need to convert this information into biochemical and biophysical knowledge by deciphering the structural, functional and evolutionary clues encoded in the language of biological sequences.

Features

- Unique guide to bioinformatics linked to an interactive practical on the World Wide Web
- Introduces key databases, tools and resources, and outlines pitfalls of methods
- The Web link integrates conventional and Web-based publishing, allowing interactive exploration of concepts discussed in the book
- Includes numerous Further Reading suggestions, Web references and a useful Glossary

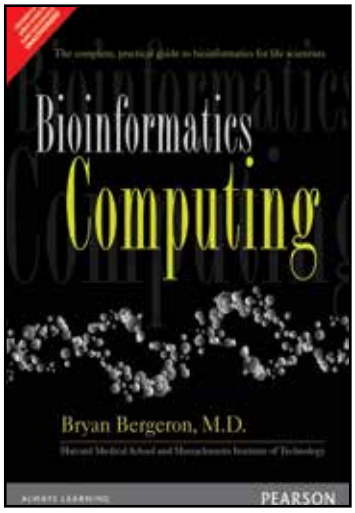
Contents

About the Authors

Dr Teresa K. Attwood is a Royal Society University Research fellow and Senior Lecturer in the School of Biological Sciences, University of Manchester, UK, Visiting Fellow at the European Bioinformatics Institute, and author and curator of the PRINTS protein fingerprint database.

Dr David J. Parry-Smith is Informatics Director at Cambridge Drug Discovery Limited, Cambridge, UK, and works mainly with algorithm development.

Dr Samiron Phukan is Senior Scientist, SDMD Drug Discovery at Jubilant Biosys Limited, Bangalore, India.



Bioinformatics Computing

Teresa Attwood • David J. Parry-Smith • Dr Samiron Phukan

ISBN : 9789332549418
Pages : 462

NEW

About the Book

The field of bioinformatics is growing at an unprecedented rate, as molecular biologists discover the extraordinary range of computational techniques and applications that apply directly to their work. Now, Harvard Medical School and MIT faculty member Bryan Bergeron has written a comprehensive, practical guide to bioinformatics for biology students at every level. Bergeron illuminates key advances in computer visualization, large database design, advanced pattern matching, machine learning, statistical methods, and distributed computing—and demonstrates exactly how these advances can be used to advance research into biological systems. Bergeron also identifies technologies and approaches on the near horizon that will have a significant impact on bioinformatics, and introduces the key global and societal issues most likely to shape bioinformatics in the coming years.

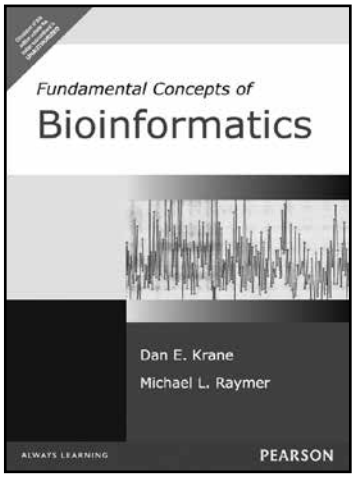
Features

- comprehensive introduction to computing techniques for Molecular Biologists
- ° Bioinformatics is an IT growth sector ($10.4 Billion in 2000, forecasted to $38 Billion by 2006)
- ° Chapters on computing visualization, large database designs, advanced pattern matching and other key bioinformatics techniques
- ° Bryan Bergeron is on the faculty at both Harvard Medical School and MIT

Contents

About the Authors

Bryan Bergeron is a faculty member at both Harvard Medical School and MIT, Editor-in-Chief of e.MD, editorial board member of Healthcare Informatics, and Fellow of the American College of Medical Informatics. He has authored more than 300 publications on topics ranging from AI to computers in medicine.



Fundamental Concepts of Bioinformatics

Dan E. Krane • Michael L. Raymer

ISBN : 9788177587579
Copyright : 2003
Pages : 328

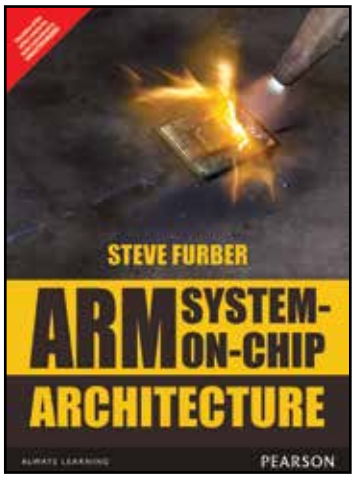
About the Book

Fundamental Concepts of Bioinformatics is the first textbook co-authored by a biologist and computer scientist that is specifically designed to make bioinformatics accessible to undergraduates and prepare them for more advanced work.

Features

- Focus on fundamentally important algorithms at the core of bioinformatics.
- Easy-to-do "paper and pencil" calculations make fundamental algorithms unintimidating for biology students and accessible to students with limited experience in computer programming.
- Combined expertise (biology and computer science) of author team ensures an integrated approach and an appreciation for the biology and computer science tools and perspectives.
- Detailed solutions to selected text questions are provided in the back of the text so students can check their answers.

Contents



ARM System-on-Chip Architecture, 2e

Steve Furber

ISBN : 9789332555570
Copyright : 2015
Pages : 432

New Edition

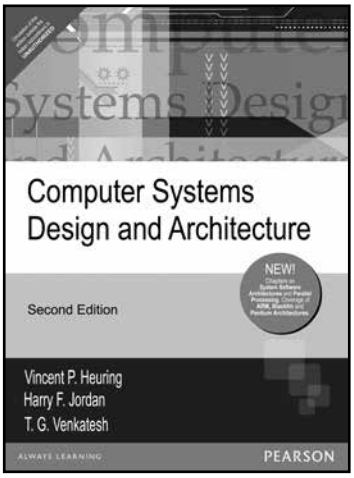
About the Book

ARM System-on-Chip Architecture presents and discusses the major issues of system-on-chip design, including memory hierarchy, caches, memory management, on-chip buses, on-chip debug and production tests. It provides an overview of the ARM processor family, enabling the reader to decide which ARM is best for the job in hand, describes the ARM and Thumb programming models enabling the designer to begin to develop applications. It also covers all the latest ARM products and developments, including StrongARM, the ARM9 and ARM10 series of cores, and the ARM-based SoC components at the heart of Ericsson's Bluetooth technology, the Psion Series 5 PDA and Samsung's SGH2400 GSM handset. It includes details on the AMULET asynchronous ARM cores and the AMULET3H asynchronous SoC subsystem. ARM System-on-Chip Architecture is an essential handbook for system-on-chip designers using ARM processor cores and engineers working with the ARM. It can also be used as a course text for undergraduate and masters students of computer science, computer engineering and electrical engineering.

Features

- ARM system-on-chip architecture:
- presents and discusses the major issues of system-on-chip design, including memory hierarchy, caches, memory management, on-chip buses, on-chip debug and production tests
- provides an overview of the ARM processor family, enabling the reader to decide which ARM is best for the job in hand
- describes the ARM and Thumb programming models, enabling the designer to begin to develop applications
- covers all the latest ARM products and developments, including StrongARM, the ARM9 and ARM10 series of cores, and the ARM-based SoC components at the heart of Ericssons Bluetooth technology, the Psion Series 5 PDA and Samsungs SGH2400 GSM handset
- includes details on the AMULET asynchronous ARM cores and the AMULET3H asynchronous SoC subsystem

Contents



Computer Systems Design and Architecture, 2/e

Vincent P. Heuring • Harry F. Jordan • T.G Venkatesh

ISBN : 9788177584837
Copyright : 2008
Pages : 744

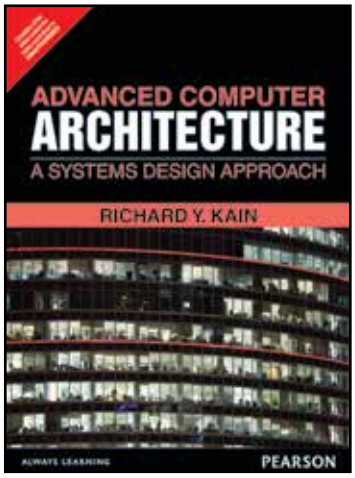
About the Book

Computer Systems Design and Architecture 2e places emphasis on issues related to both architecture as well as organization of the computer. It interrelates three different viewpoints to provide unique understanding of the subject: the perspectives of the logic designer, the assembly language programmer and the computer architect. The text describes both CISC and RISC models at the ISA level using the formal description language of RTN (Register Transfer Notation), allowing for an in-depth appreciation of different machine structures and functions.

Features

- In-depth coverage of architectural trends such as pipelining, superscalar technique, and VLIW
- Discusses the OSI layer model and its relationship to TCP/IP Internet Protocol
- Detailed discussion on design of datapath and pipeline of 1, 2 and 3 bus processors
- Concepts are supplemented with practical design issues in modern processors such as Pentium, SPARC, ARM and Power PC

Contents



Advanced Computer Architecture: A Systems Design Approach

Richard Y. Kain

ISBN : 9789332551923
Pages : 907

NEW

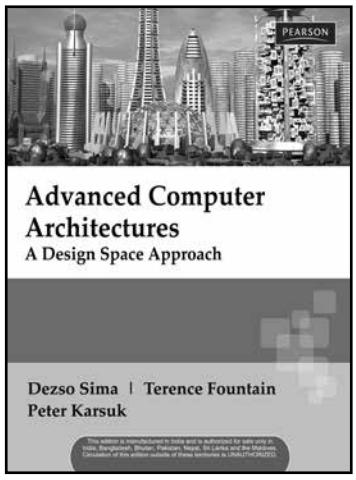
About the Book

his is an advanced level text on computer architecture presenting a coherent approach to computer system design and encompasses most of the design problems and solution options_starting from the structures of contemporary programming languages and operating systems, extending inward to the processor's architecture and its implementation. It provides basic techniques covering the relationships between software and hardware levels of system implementation and operation.

Features

- Shows examples of historically important processor designs.
- Lists important concepts and design options at the end of each chapter.
- Many examples written in C++.
- Draws examples from contemporary microprocessors such as PowerPC601, SPARC-Version 9, MIPs, and DEC's Alpha AXP.
- Helps to understand the choices in designing a complete computer system.

Contents



Advanced Computer Architectures: A Design Space Approach

Dezso Sima • Terence Fountain • Peter Kacsuk

ISBN : 9788131702086
Copyright : 1997

About the Book

This timely book provides an unconventional and up-to-date overview of all the important computer architectures and is one of the first texts to present all the relevant concepts of advance architecture classes by exploring their design spaces. Advanced Computer Architectures will prove an indispensable guide for anyone who needs to be acquainted with the relevant concepts and solutions introduced in recent years to the dramatically changing world of computer architecture. For the student of advance level courses in computer architecture, this book will provide a comprehensive and accessible overview of the subject whilst its strong orientation will make it an invaluable reference for the practitioner.

Features

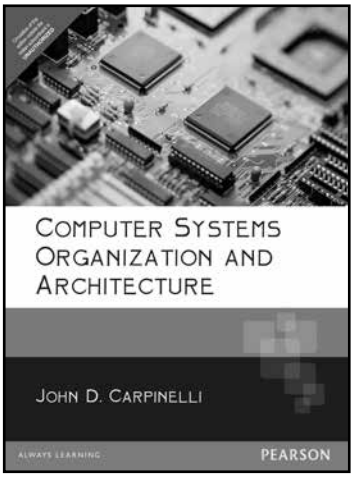
- explores design spaces for each architecture class and exposes evolution of concepts and design issues
- provides an up-to-date overview of significant architecture classes, including unique in-depth coverage of superscalar architectures as well as multithreaded, shared and distributed memory MIMDs, and associative and neural architectures
- identifies which concepts and design choices have been made use of in important processors and illustrates significant trends and surpasses and viable concepts
- case Studies and tables show micro architectural details of relevant processors, including the Pentium Pro, Power PC 604, Power PC 620 and R10000, allowing comparisons between them

Contents

- Computational Models
- The Concept of Computer Architecture
- Introduction to Parallel Processing
- Introduction to ILP-Processors
- Pipelined Processors
- VLIW Architectures
- Superscalar Processors
- Processing of Control Transfer Instructions
- Code Scheduling for ILP-Processors
- Introduction to Data-Parallel Architectures
- SIMD Architectures
- Introduction to MMID Architectures
- Data-Parallel Pipelined and Systolic Architectures
- Vector Architectures
- Introduction to MIMD Architectures
- Multi-threaded Architectures
- Distributed Memory MIMD Architectures
- Shared Memory MIMD Architectures
- Outlook

About the Authors

Professor Dezos Sima is Director of the Department of Informatics at the Kando Polytechnic in Budapest where he has specialized in computer architecture since 1972. He has published two books and over thirty papers. **Prof Peter Kacsuk** is Head of the Laboratory of Parallel and Distributed System at the MTA SZTAKI research institute of the Hungarian Academy of Sciences. **Terry Fountain** is reader in Applied Physics at University College London. He has published four previous books on computer architecture.



Computer Systems Organization & Architecture

John D. Carpinelli

ISBN : 9788177587678
Copyright : 2001

About the Book

Computer Systems Organization and Architecture provides up-to-date coverage of fundamental concepts for the design of computer and their subsystems. Professor John Carpinelli presents material in this book in the same way he does in his classroom—by using simple examples to help readers understand concepts without getting bogged down in details. To make the material accessible to all readers, he has included two examples of increasing complexity: the Very Simple CPU which contains four instructions to illustrate very simple CPU design, and the somewhat more complex Relatively Simple CPU that builds upon the same design techniques and introduces some more advanced techniques.

Features

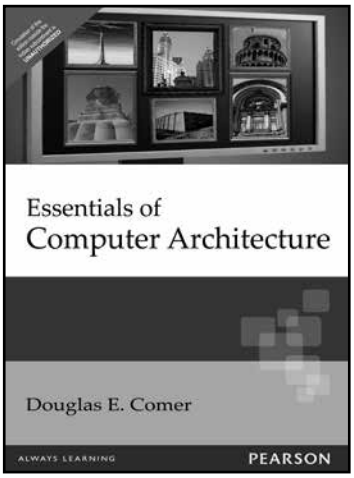
- Uses a finite state machine approach to provide a clear understanding of how the CPU performs a sequence of operations to fetch, decode, and execute instructions
- Covers completely the design of computer systems, including memory hierarchies, input/output processing, interrupts and direct memory access, as well as advanced architectural aspects of parallel processing.
- Integrates open-ended design problems throughout the book to encourage readers to think through the design process
- Contains extensive examples of real-world components and systems such as the Itanium microprocessor and cache and virtual memory management in Windows computer, and commodity used standards like the IEEE 754 Floating Point Standard and the Universal Serial Bus Standard
- Provides "Practical Perspective" sidebars to help readers understand why systems are designed the way they are by applying them to real systems
- Includes access to a CPU Simulator which animates the flow of data within the CPU to give readers unique insight into how the CPU works

Contents

1. Digital logic fundamentals
2. Introduction to finite state machines
3. Instruction set architectures
4. Introduction to computer organization
5. Register transfer languages
6. CPU design
7. Microsequencer control unit design
8. Computer arithmetic
9. Memory organization
10. Input/output organization
11. Advanced Topics
12. Introduction to parallel processing

About the Author

John D. Carpinelli is an Associate Professor at New Jersey Institute of Technology, where he holds appointments in both the Department of Electrical and Computer Engineering and the Department of Computer and Information Sciences.



Essentials of Computer Architecture

Douglas E. Comer

ISBN : 9788177584431
Copyright : 2008
Pages : 352

About the Book

Douglas Comer takes a clear and concise approach to computer architecture that students love. By exploring the fundamental concepts from a programmer's perspective and explaining programming consequences, this unique text covers exactly the material students need to understand and construct efficient and correct programs for modern hardware.

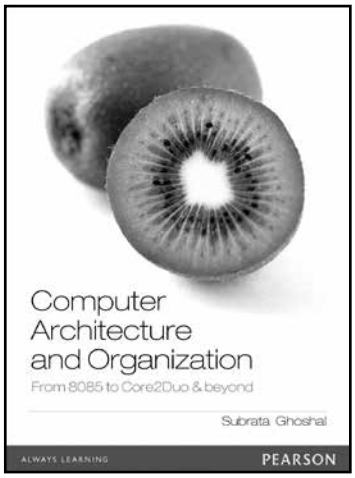
Features

- Comprehensive presentation of the basics Educates programmers on the three essential areas of architecture (processors, memories, and I/O systems), and helps them improve program efficiency by understanding the consequences of programming choices and allowing them to pinpoint sources of bugs.
- Conceptual focus Approaches the material from a programmer's point of view.
- Comprehensive coverage of data representation Emphasizes essential programming concepts such as twos-compliment arithmetic and ranges of integer values.
- Advanced material Includes high-level topics like parallelism, pipelining, and performance.
- Lab exercises Provides exercises appropriate for a hands-on lab, including using a solderless breadboard, clocks and demultiplexing, and hex dump programs in both C and assembly language.
- Accompanying website Features class presentation materials, text and lab exercises, and submissions from fellow instructors.

Contents

About the Author

Douglas E. Comer is a distinguished Professor of Computer Science at Purdue University and a Fellow of the ACM. Comer has experience with both hardware and software. He has created many low-level software systems including TCP/IP protocol software, compilers, device drivers, and an operating system. At Bell Labs, he built a VLSI chip. As a member of the IAB, he participated in the formation of the Internet, and he is considered a leading authority on computer-related topics. A pioneer in the development of curriculum and laboratories for research and education, his popular books has been translated into 16 languages. Comer consults for industry, and has lectured to thousands of professional engineers and students around the world. He is editor-in-chief of the journal Software: Practice and Experience.



Computer Architecture and Organization: From 8085 to core2Duo & beyond

Subrata Ghoshal

ISBN : 9788131761557
Copyright : 2011
Pages : 576

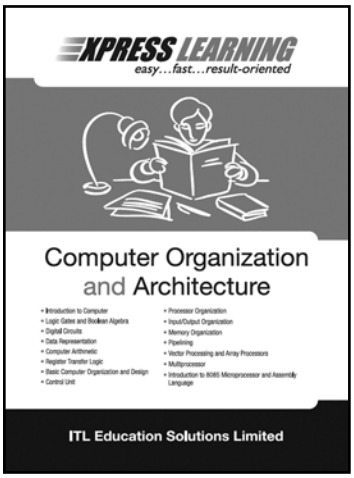
About the Book

The book uses microprocessors 8085 and above to explain the various concepts. It not only covers the syllabi of most Indian universities but also provides additional information about the latest developments like Intel Core – II Duo, making it one of the most updated textbook in the market. The book has an excellent pedagogy; sections like food for thought and quicksand corner make for an interesting read.

Features

- Proper segregation of chapters between Architecture and Organization
- Description of processors like Intel Core – II Duo processor and R4400
- Includes an project bank having more than 70 projects for readers to work upon with hints available online
- An exclusive Chapter on Computer Peripherals
- Each chapter has several Food For Thought sections giving additional information that makes reading interesting
- 'Quicksand Corner' section in each chapter lists out the common pit-falls, the author from his own experience think troubles most students.

Contents



Express Learning - Computer Organization and Architecture

ITL Education Solutions Limited

ISBN : 9788131773390
Copyright : 2013
Pages : 312

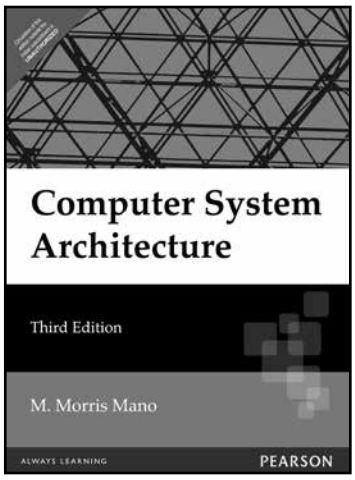
About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

Features

- Presented in a question and answer format following the examination pattern
- Covers all key topics in the syllabus
- Designed to make learning fast and effective
- Precise and up-to-date
- Helps students excel in their examinations

Contents



Computer System Architecture, 3/e

M. Morris Mano

ISBN : 9788131700709
Copyright : 2007
Pages : 542

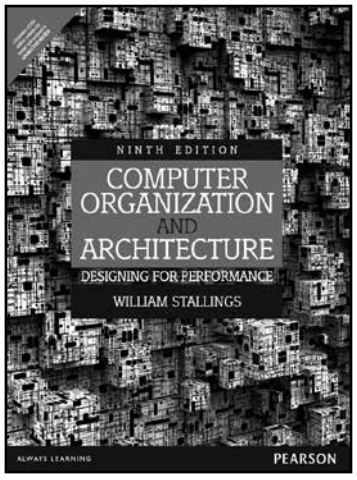
About the Book

Focused primarily on hardware design and organization — and the impact of software on the architecture — this volume first covers the basic organization, design, and programming of a simple digital computer, then explores the separate functional units in detail.

Features

- Develops an elementary computer to demonstrate by example the organization and design of digital computers.
- Uses a simple register transfer language to specify various computer operations.

Contents



Computer Organization and Architecture: Designing for Performance, 9/e

William Stallings

ISBN : 9789332518704
Copyright : 2014
Pages : 682

About the Book

Four-time winner of the best Computer Science and Engineering textbook of the year award from the Textbook and Academic Authors Association, Computer Organization and Architecture: Designing for Performance provides a thorough discussion of the fundamentals of computer organization and architecture, covering not just processor design, but memory, I/O, and parallel systems. Coverage is supported by a wealth of concrete examples emphasizing modern systems.

Features

- Multiple Perspectives: Systems are viewed from both the architectural (attributes of a system visible to a machine language programmer) and organizational (operational units and their interconnections that realize the architecture) perspectives to give students context.
- Unified Treatment of I/O: Provides full understanding of I/O functions and structures, including two important external interface examples: FireWire and InfiniBand.
- Focus on RISC: Students gain a broad understanding of this technology, found in virtually all contemporary machines.
- Parallel Processors: Exceptionally clear, well-organized treatment of symmetric multiprocessors (SMP), clusters, and NUMA systems.
- Running Case Studies: Case studies of Intel x86 and embedded ARM architectures supplement and explain material.
- Microprogrammed Implementation: This technology is given a full treatment, so students gain a complete understanding of processor organization.
- Interactive Simulations: Over 20 online web simulations are keyed to major portions of the text to illustrate computer architecture design issues.
- Multicore Processor Coverage: Explain this standard in processor design.
- Embedded Processor Coverage: Includes coverage of embedded processors and the unique design issues they present. The ARM architecture is used as a case study.

Contents

About the Author

Dr. William Stallings has authored 17 titles, and counting revised editions, over 40 books on computer security, computer networking, and computer architecture. In over 20 years in the field, he has been a technical contributor, technical manager, and an executive with several high-technology firms. Currently he is an independent consultant whose clients include computer and networking manufacturers and customers, software development firms, and leading-edge government research institutions. He has nine times received the award for the best Computer Science textbook of the year from the Text and Academic Authors Association.

Structured Computer Organization

Tenenbaum, Austin

ISBN : TBA
Copyright : 2016
Pages : 796 (T)

Coming Soon

About the Book

Structured Computer Organization, specifically written for undergraduate students, is a best-selling guide that provides an accessible introduction to computer hardware and architecture. This text will also serve as a useful resource for all computer professionals and engineers who need an overview or introduction to computer architecture.
This book takes a modern structured, layered approach to understanding computer systems. It's highly accessible - and it's been thoroughly updated to reflect today's most critical new technologies and the latest developments in computer organization and architecture. Tanenbaum's renowned writing style and painstaking research make this one of the most accessible and accurate books available, maintaining the author's popular method of presenting a computer as a series of layers, each one built upon the ones below it, and understandable as a separate entity.

Features

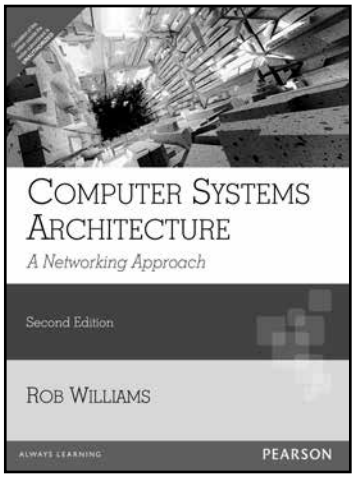
- Comprehensive coverage of computer hardware and architecture basics — Uses a clear, approachable writing style to introduce students to multilevel machines, CPU organization, gates and Boolean algebra, microarchitecture, ISA level, flow of controls, virtual memory, and assembly language.
- Accessible to all students — Covers common devices in a practical manner rather than with an abstract discussion of theory and concepts.
- Designed for undergraduate students — Not simply a watered-down adaptation of a graduate-level text.

Contents

About the Author

Andrew S. Tanenbaum has a B.S. Degree from M.I.T. and a Ph.D. from the University of California at Berkeley. He is currently a Professor of Computer Science at the Vrije Universiteit in Amsterdam, The Netherlands, where he heads the Computer Systems Group. Until 2005, he was the Dean of the Advanced School for Computing and Imaging, an inter-university graduate school doing research on advanced parallel, distributed, and imaging systems.

Todd Austinis a Professor of Electrical Engineering and Computer Science at the University of Michigan in Ann Arbor. His research interests include computer architecture, reliable system design, hardware and software verification, and performance analysis tools and techniques.



Computer Systems Architecture: A Networking Approach, 2/e

Rob Williams

ISBN : 9788131763476
Copyright : 2011
Pages : 752

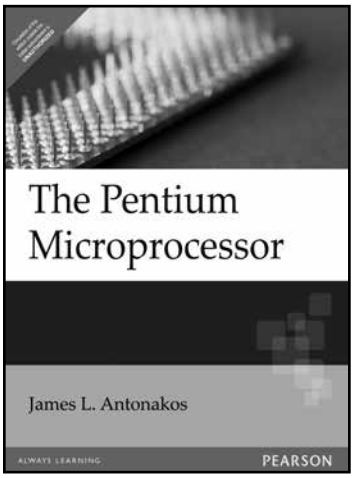
About the Book

Computer Systems Architecture presents the subject in a progressive, incremental manner, bottom-upwards. Starting with digital logic and computer hardware, moving through the layers of software and leading on to an introduction to the field of networking and operating systems. It adopts a practical, hand-on approach, drawing upon areas of student interest and experience (the Internet, Pentium processors, GUIs, mobile communications) to stimulate the reader's enthusiasm for the subject. Throughout, system performance is analysed as jointly dependent on hardware and software features. Practical exercises demonstrate this fundamental aspect of hardware/software interaction. The first Computer Architecture text to recognize that computers are now predinantly used in a networking environment, fully updated to include new technologies.

Features

- Uses a real processor (Pentium) – this allows most of the practical work to be carried out at home on the student's own equipment.
- Academically friendly in structure and contents. Built around the author's own weekly need for material to use in lab sessions as well as lectures. Well tested coursework assignments, examination/test papers, worksheets and OHPs available through the web site.
- Introduces very relevant ideas and concepts regarding data transmission and communication, in preparation for subsequent modules on networking and web communications – popular with students, who enthusiastically greet any mention of mobile telephony or broadband networking!
- Good selection of chapter-end exercises, with answer commentaries at the end of the book.
- Many modern, commercial examples to stimulate the reader and show the subject in action

Contents



The Pentium Microprocessor

James L. Antonakos

ISBN : 9788177582765
Copyright : 1997

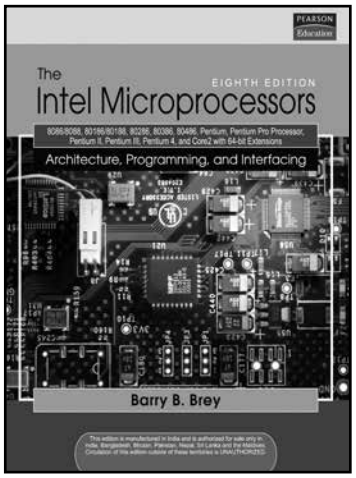
About The Book

Focusing on Advanced Programming Applications, Assembly Language Programming, and Computer Architecture, this text details every aspect of the Pentium microprocessor. Equally appropriate for beginners, advanced students, and professionals, this text instructs and informs. This book helps remove the Mystery surrounding the Pentium Microprocessor by detailing every face of its hardware and software and providing examples of many different applications.

Features

- Programming examples demonstrating a variety of applications.
- Hardware and software aspects of the Pentium microprocessor.
- Companion diskette designed for real-mode operation promotes learning.
- Detailed analysis of the Pentium architecture, illustrating the stat-of-the-art microprocessor design.
- Appendix covering binary numbers and arithmetic for students who would like a quick review.

Contents



The Intel Microprocessors: 8086/8088, 80186/80188, 80286, 80386, 80486, Pentium, Pentium Pro Processor, Pentium II, Pentium III, Pentium 4, and Core2 with 64-bit Extensions, 8/e

Barry B. Brey

ISBN : 9788131726228
Copyright : 2008
Pages : 944

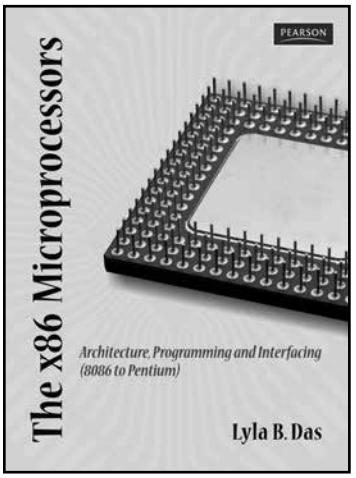
About The Book

The Intel Microprocessors: 8086/8088, 80186/80188, 80286, 80386, 80486, Pentium, Pentium Pro Processor, Pentium II, Pentium III, Pentium 4, and Core2 with 64-bit Extensions, 8e, provides a comprehensive view of programming and interfacing of the Intel family of Microprocessors from the 8088 through the latest Pentium 4 and Core2 microprocessors. The text is written for students who need to learn about the programming and interfacing of Intel microprocessors, which have gained wide and at times exclusive application in many areas of electronics, communications, and control systems, particularly in desktop computer systems. Many applications include Visual C++ as a basis for learning assembly language using the inline assembler. Organized in an orderly and manageable format, this text offers more than 200 programming examples using the Microsoft Macro Assembler program and provides a thorough description of each of the Intel family members, memory systems, and various I/O systems.

Features

- Illustrated concepts for students with relevant programming examples, many written in Visual C++ with embedded assembly language code.
- Coverage of how to develop software to control application interfaces to the microprocessor.
- Coverage of how to program the microprocessor using the popular Microsoft Visual C programming environment with embedded assembly language to control personal computers.
- Descriptions of how to use real mode (DOS) and protected mode (Windows) of the microprocessor.
- Explanation of the operation of a real-time operating system (RTOS) in an embedded environment.

Contents



The x86 Microprocessors: 8086 to Pentium, Multicores, Atom and the 8051 Microcontroller: Architecture, Programming and Interfacing, 2/e

Lyla B Das

ISBN : 9789332536821
Copyright : 2010
Pages : 664

About The Book

The book is designed for an undergraduate course on 16-bit microprocessor and Pentium. The text comprehensively covers both the hardware and software aspects of the subject with equal emphasis on architecture, programming and interfacing.

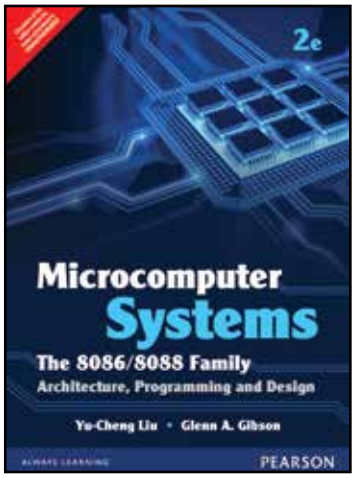
Features

- A thorough description of the binary math required for proficiency in assembly programming
- Comprehensive analysis of programming and interfacing, with practical examples.
- Discusses the features and enhancements of the 80386, 80486 and Pentium processors.
- All concepts are presented with worked-out examples and programs.
- A chapter devoted to the internal details of PCs, and the current trends in computer design.

Contents

About the Author

Lyla B. Das is Associate Professor, Department of Electronics and Communication Engineering, National Institute of Technology Calicut, Kozhikode, Kerala



Microcomputer Systems: The 8086/8088 Family Architecture Programming and Design, 2/e

Yu-Cheng Liu • Glenn A. Gibson

ISBN : 9789332550087
Pages : 640

NEW

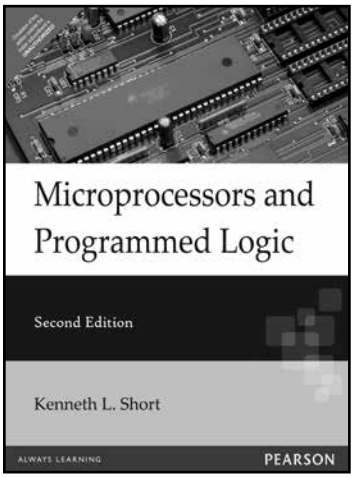
About The Book

A comprehensive exploration of both the software and hardware for 6-bit microprocessors using the Intel 8086/8088 family — and their supporting devices.

Features

- gives readers a working knowledge of programming and designing 8086/8088-based microcomputer systems through an abundance of examples.
- covers the 8089 I/O processor, the 8087 numeric data processor, and how they can be integrated into an 8086/8088 based system.
- introduces the special features of 80130, 80186, and 80286.
- includes more than 390 flowcharts, programming examples, logic diagrams, tables, and other illustrations.

Contents



Microprocessors and Programmed Logic, 2/e

Kenneth L. Short

ISBN : 9788131709160
Copyright : 1987

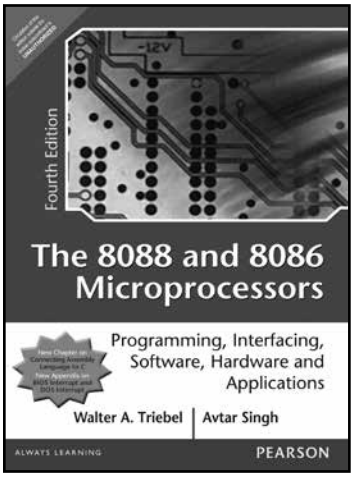
About The Book

This book provides a comprehensive examination of the fundamental hardware and software concepts necessary for the design of microprocessor-based systems, and specific devices and the practical considerations and design techniques necessary to effectively design systems using them.

Features

- Uses a single popular microprocessor — the 8085A — as the primary instructional example.
- Provides numerous examples of hardware interfaces — and the software to drive them.
- Emphasizes the hardware/software tradeoffs which exist for implementation of most functions in microprocessor-based systems.

Contents



The 8088 and 8086 Microprocessors: Programming, Interfacing, Software, Hardware and Applications, 4/e

Walter A. Triebel • Avtar Singh • N.K. Srinath

ISBN : 9788177584813
Copyright : 2007

About The Book

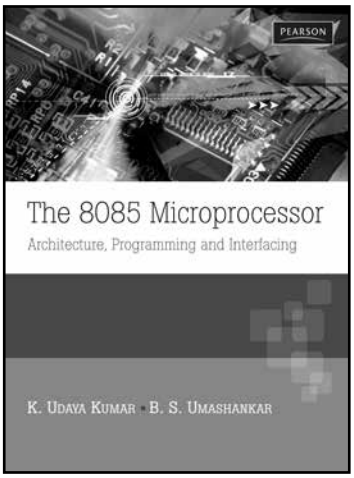
Future designers of microprocessor-based electronic equipment require a systems-level understanding of the 80x86 microcomputer. This widely acclaimed edition provides balanced and comprehensive coverage of both the software and hardware of the 8088 and 8086 microprocessors. The book examines how to assemble, run, and debug programs, and how to build, test, and troubleshoot interface circuits. New material has been added on number-system conversations, binary arithmetic, and combinational logic operations.

Features

- Part I explores the software architecture and how to write, execute, and debug assembly language programs.
- Part II examines the hardware architecture of microcomputers built with the 8088 and 8086 microprocessors.
- Part III provides detailed coverage of the other microprocessors in the 80x86 family: the 80286, 80486, and Pentium® processors. The newest Pentium ® family – Pentium® III and Pentium® IV – are also examined.

Contents

Output Interfaces
9. Memory Devices, Circuits, and Subsystem Design
10. Input/Output Interface Circuits and LSI Peripheral Devices
11. Interrupt Interface of the 8088 and 8086 Microprocessors
12. Real-Mode Software and Hardware Architecture of the 80286 Microprocessor
13. The 80386, 80486, and Pentium® Processor Families: Software Architecture
14. The 80386, 80486, and Pentium® Processor Families: Hardware Architecture
15. Connecting Assembly Language To C



The 8085 Microprocessor: Architecture, Programming and Interfacing

K. Udaya Kumar • B.S. Umashankar

ISBN : 9788177584554
Copyright : 2008

About The Book

Designed for an undergraduate course on the 8085 microprocessor, this text provides comprehensive coverage of the programming and interfacing of the 8-bit microprocessor. Written in a simple and easy-to-understand manner, this book introduces the reader to the basics and the architecture of the 8085 microprocessor. It presents balanced coverage of both hardware and software concepts related to the microprocessor.

Features

- Instruction sets described in a very concise form
- Exclusive chapters that focus on assembly language programs
- Detailed coverage of the Z-80 and Motorolla 6800, as well as the 8751 microcontroller
- Comprehensive coverage of peripheral chips

Contents

About the Authors

K. Udaya Kumar is Principal, B.N.M. Institute of Technology, Bangalore. He completed his M.Tech. from the Indian Institute of Science, Bangalore and received his Ph.D. from the University of Ljubljana, Yugoslavia. He was a deputy engineer with Bharath Electronics Limited (BHEL) for about four years before entering teaching—his calling for the past thirty years.

B.S. Umashankar is Professor, Department of Computer Science Engineering, B.N.M. Institute of Technology, Bangalore. An engineering graduate from Bangalore University, he proceeded to complete his master's degree from Gulbarga University. He has about 20 years of teaching experience.

80x86 Family, The: Design, Programming, and Interfacing, 3/e

John Uffenbeck

ISBN : TBA
Pages : 678

Coming Soon

About The Book

Much praised for its clearly written, easy-to-read/understand style, this text provides thorough, current, single-volume coverage of all Intel 80x86 microprocessors relative to their application in the PC, and is as much an introduction to the PC itself as to Intel chips. Coverage ranges from chip architecture to programming and memory and I/O interfacing—i.e., microprocessor chips, memory chips, I/O devices, and the logic circuits needed to "glue" these parts together.

Contents

Microcomputers and Microprocessors: The 8080, 8085, and Z-80 Programming, Interfacing, and Troubleshooting, 3/e

John Uffenbeck

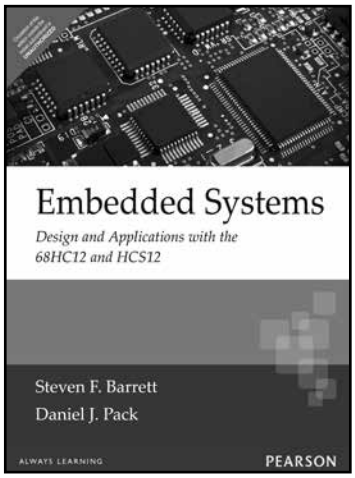
ISBN : TBA
Pages : 729

Coming Soon

About The Book

Providing a solid foundation in the technology of microcomputers, this "hands-on" text helps students develop an understanding of the hardware components of a microcomputer system and the role of the software to control that hardware. Full of valuable troubleshooting tips, it focuses on three compatible 8-bit microprocessor chips—the Intel 8080 and 8085, and the Zilog Z-80—and uses them as models to help students learn the differences between RAM and ROM and how these two types of memory are interfaced to the microprocessor; to understand how an input or output port works; and to explore the construction of a serial interface.

Contents



Embedded Systems: Design and Applications

Steven F. Barrett • Daniel J. Pack

ISBN : 9788131720233
Copyright : 2008

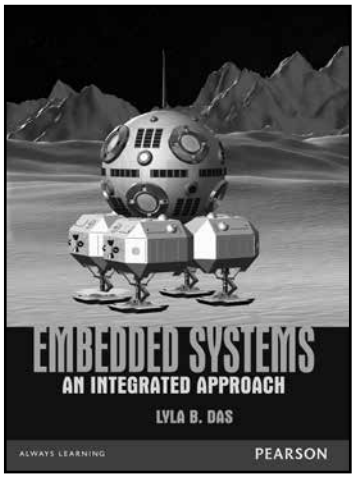
About The Book

Designed for a senior- or graduate-level embedded systems design course, Embedded Systems Design and Applications with the 68HC12 introduces readers to unique issues associated with designing, testing, integrating, and implementing microcontroller/microprocessor-based embedded systems.

Features

- This guide helps readers acquire fundamental microcontroller-associated programming skills using both the C programming language and assembly language.
- Explains the functional hardware components of a microcontroller and helps readers gain the skills needed to interface various external devices with microcontrollers.
- Examples based on real-world applications-Address concerns such as microcontroller top-down/bottom-up implementation system design skills, noise and timing considerations, and troubleshooting techniques.
- A variety of complete embedded system project examples.
- Thorough review of C, structured programming techniques, and the 68HC12/HCS12 microprocessor.

Contents



Embedded Systems: An Integrated Approach

Lyla B Das

ISBN : 9788131787663
Copyright : 2012
Pages : 784

About The Book

Embedded Systems—An Integrated Approach is exclusively designed for the undergraduate courses in electronics and communication engineering as well as computer science engineering. This book is well-structured and covers all the important processors and their applications in a sequential manner. It begins with a highlight on the building blocks of the embedded systems, moves on to discuss the software aspects and new processors and finally concludes with an insightful study of important applications. This book also contains an entire part dedicated to the ARM processor, its software requirements and the programming languages. Relevant case studies and examples supplement the main discussions in the text.

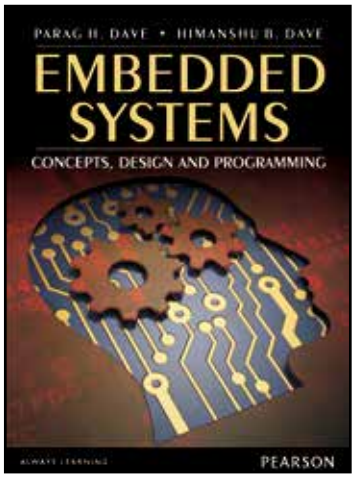
Features

- Extensive coverage on the embedded hardware including details of processors, sensors, actuators, buses and system development
- Comprehensive discussion on the architecture and programming of the ARM, 8051 and PSoC microcontrollers
- Analysis on the concepts of operating systems with a special emphasis on the real time operating systems
- Step-by-step solutions provided for programming examples in Assembly and C
- Detailed coverage on DSP processors, ASIC design, product life-cycle management and software development tools
- An entire chapter on the important applications of the embedded systems

Contents

About the Author

Lyla B. Das is Associate Professor, Department of Electronics and Communication Engineering, National Institute of Technology-Calicut, Kozhikode, Kerala.



Embedded Systems: Concepts, Design and Programming

Himanshu B. Dave
Parag H. Dave

NEW

ISBN : 9789332543522
Copyright : 2015
Pages : 568

About The Book

This introductory textbook on Embedded Systems focuses on the design and development of hardware and software for embedded systems. The full spectrum of topics related to the embedded system development cycle such as CPU, Memory, Transducers, Operating System, Issues in RTOS, Legacy Microcontrollers and Processors are discussed in detail. Pedagogical features such as real-world case studies and live examples of embedded systems make learning and teaching from this book a pleasure.

Features

- Extensive coverage on
  ADC & DAC Converters
  Noise & EMI in Embedded Systems
  Operating Systems
  Digital Signal Processing
- Large number of live examples and case studies
- Exclusive chapter on Issues in Real Time Operating Systems
- In-depth discussion on embedded system debugging
- Excellent Pedagogy
  350+ Figures and Illustrations
  150+ Solved Questions
  400+ Unsolved Questions
  300+ MCQs
  50+ Lab assignments
  15+ Case Studies

Contents

8051 Microcontroller: Internals, Instructions, Programming & Interfacing

Subrata Ghoshal

ISBN : 9789332535756
Copyright : 2010

About The Book

For every PC there are at least 20 embedded systems, and the number is increasing. 8051 is one of the most widely used microcontrollers in embedded system design, and its internal architecture, instruction set and interfacing techniques are presented in this book through simple language, excellent graphical annotations and a large variety of solved examples. Spread across 26 chapters, this book starts with the internal architecture of 8051, and then explains all instructions with examples of applications. In-depth discussions on interrupt-handling features are followed by the techniques of interfacing 8051 with the external world through different types of motors, relays, sensors, ADC/DACs, memory devices, keyboards, displays, etc. As most of the embedded systems are battery-powered, power-saving schemes play a major role in considerations of these system designs. Hence, an entire chapter is devoted to explaining power management using 8051. One full-length design example explaining both hardware as well as software aspects of a home protection system using 8051 is presented as a case study. Discussions are concluded by a chapter on advanced microcontrollers such as the AVR.

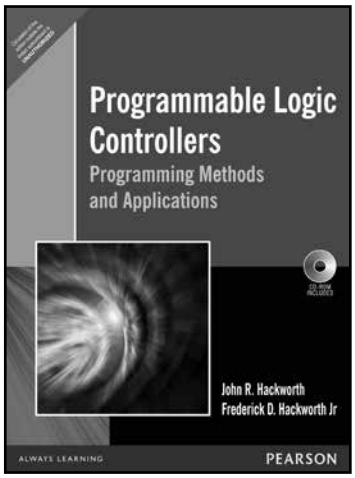
Features

- Three chapters devoted exclusively to solved examples
- Simpler modules with graphical explanations for complex concepts like I/O port structure or interrupt handling for easier understanding
- Pictorial representation of most 8051 instructions
- Extensive comment statements in example programs for better understanding of the program-logic.
- Separate chapters on servo motor interfacing with laboratory experiments
- Checklists for software developers to ensure zero-error subroutines
- Examples of programming 8051 in C language.
- A total of 780 questions spread evenly over 26 chapters, with 30 questions at the end of every chapter

Contents

About the Author

Subrata Ghoshal was a professor of the Department of Embedded System Design, IIIT Pune. He obtained his Ph.D from IIT Bombay. He was Professor and Head of the IT department at the Sikkim Manipal Institute of Technology, and Professor of Computer Science department of St Thomas' College of Engineering and Technology, Kolkata. He has also served as an associate professor at BITS, Pilani, Rajasthan.



Programmable Logic Controllers: Programming Methods and Applications

John R. Hackworth • Frederick D. Hackworth Jr.

ISBN : 9788177587715
Copyright : 2003

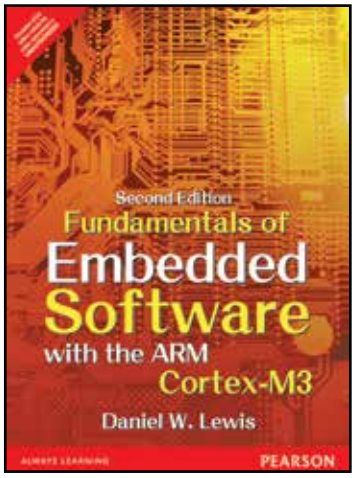
About The Book

For courses in PLC Fundamentals, Advanced PLC Programming and Automation. This volume is designed to help readers develop a good general working knowledge of programmable controllers with concentration on relay ladder logic techniques and how a PLC is connected to external components in an operating control system. The text uses real world programming problems that students can solve on any available programmable controller or PLC simulator. Later chapters relate to more advanced subjects in machine controls, which makes this a welcome addition to a personal technical reference library.

Features

- General coverage of PLC programming.
- Specific programming examples relating to Logic State Machines and Logic Gates.
- Broad coverage of off-the-shelf sensor technology.
- Interfacing external inputs and outputs to PLCs; techniques are simplified and easy-to-understand.
- System integrity and safety emphasis.

Contents



Fundamentals of Embedded Software with the ARM Cortex-M3

Daniel W. Lewis

NEW

ISBN : 9789332549937
Copyright : 2015
Pages : 256

About The Book

This book is intended to provide a highly motivating context in which to learn procedural programming languages. The ultimate goal of this text is to lay a foundation that supports the multi-threaded style of programming and high-reliability requirements of embedded software. It presents assembly the way it is most commonly used in practice - to implement small, fast, or special-purpose routines called from a main program written in a high-level language such as C. Students not only learn that assembly still has an important role to play, but their discovery of multi-threaded programming, preemptive and non-preemptive systems, shared resources, and scheduling helps sustain their interest, feeds their curiosity, and strengthens their preparation for subsequent courses on operating systems, real-time systems, networking, and microprocessor-based design.

Features

- An alternative to a more traditional course on assembly language programming. This text is intended to serve as the basis for a sophomore level course in a computer science, computer engineering, or electrical engineering curriculum. This course is envisioned as a replacement for the traditional course on computer organization and assembly language programming.
- Presents assembly the way it is most commonly used in practice - to implement small, fast, or special-purpose routines called from a main program written in a high-level language such as C. This approach affords time within both the text and the course to cover assembly in the context of embedded software.
- Allows instructors to easily introduce embedded systems into an already packed curriculum, and provides a way to cover the procedural style still necessary in

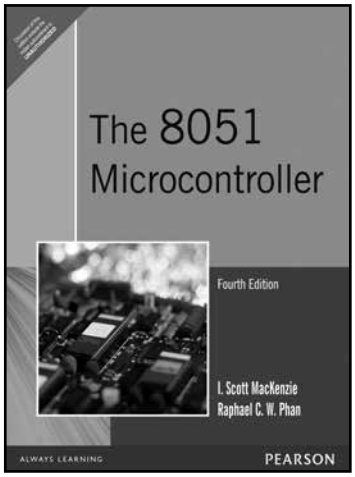
some upper-division courses.

- Emphasizes those features of C that are employed more frequently in embedded applications, and introduces the procedural style through examples and programming assignments that include large amounts of pre-written source code.
- Programming Assignments and the Companion Web Site. The text is complemented by a collection of programming assignments described in the appendices. Most of the source code for each assignment is provided on the Web Site.

Contents

About the Author

Dr. Daniel W. Lewis' efforts led to the creation of Santa Clara University's Computer Engineering department in 1988, providing its leadership for the first 18 years. During his tenure, Lewis established unique co-op and study abroad options that fit within the normal undergraduate four-year plan, the first graduate-level academic certificate programs for working professionals, a new interdisciplinary major in Web Design and Engineering, and a interdisciplinary minor in Information Technology and Society. Since 2004, Lewis has focused on K-12 outreach in engineering and computing, raising more than $1.7M from NSF and private sources, and providing professional development for more than 200 K-12 teachers and summer camps for more than 2,000 K-12 students.



The 8051 Microcontroller, 4/e

I Scott MacKenzie • Raphael Chung • Wei Phan

ISBN : 9788131720189
Copyright : 2008

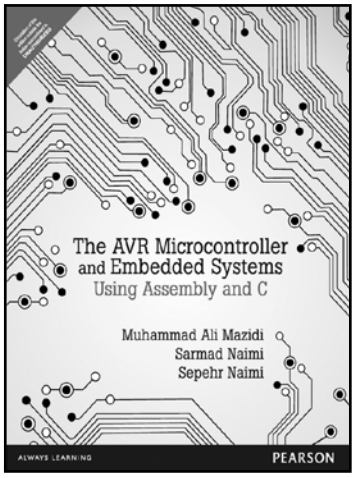
About The Book

MacKenzie's 8051 Microcontroller text emphasizes the programming of the 8051 by illustrating the two most widely used programming methods; Assembly Language and C programming. This text assumes no prior knowledge of the subject and progressively introduces 8051 Microcontroller concepts while reinforcing those concepts with plenty of examples and exercise.

Features

- Treatment of smart cards and data security.
- It covers timer operation, serial port operation, interrupt operation, assembly language programming, 8051 C programming, program structure and design, and tools and techniques for program development.
- Concise treatment of all features of the 8051 microcontroller.
- Comprehensive coding and design examples.

Contents



The AVR Microcontroller and Embedded Systems: Using Assembly and C

Muhammad Ali Mazidi • Sarmad Naimi • Sepehr Naimi

ISBN : 9789332518407
Copyright : 2014
Pages: : 700

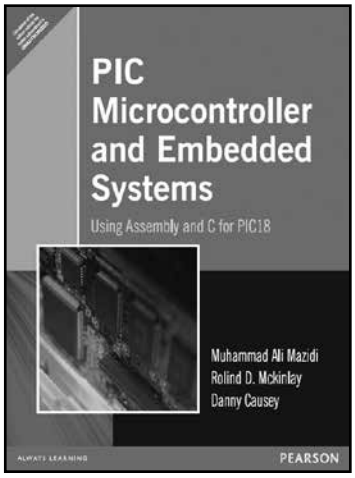
About The Book

The AVR Microcontroller and Embedded Systems: Using Assembly and C features a step-by-step approach in covering both Assembly and C language programming of the AVR family of Microcontrollers. It offers a systematic approach in programming and interfacing of the AVR with LCD, keyboard, ADC, DAC, Sensors, Serial Ports, Timers, DC and Stepper Motors, Opto-isolators, and RTC. Both Assembly and C languages are used in all the peripherals programming. In the first 6 chapters, Assembly language is used to cover the AVR architecture and starting with chapter 7, both Assembly and C languages are used to show the peripherals programming and interfacing.

Features

- Uses a step-by-step approach in covering the Architecture, Registers, and Assembly language programming of the AVR and emphasizes the use of I/O ports programming in Assembly language throughout
- It covers The AVR C Programming with many examples and emphasizes the use of I/O ports programming in C language
- There is a chapter for each of the Peripherals of Timer, LCD, ADC, Motors, and RTC
- Appendix dedicated to the detail description of the AVR instructions with many examples

Contents



PIC Microcontroller and Embedded Systems: Using assembly and C for PIC 18

Muhammad Ali Mazidi • Rolin McKinlay • Danny Causey

ISBN : 9788131716755
Copyright : 2008

About The Book

PIC Microcontroller and Embedded Systems offers a systematic approach to PIC programming and interfacing using the Assembly and C languages. Offering numerous examples and a step-by-step approach, it covers both the Assembly and C programming languages and devotes separate chapters to interfacing with peripherals such as timers, LCDs, serial ports, interrupts, motors and more. A unique chapter on the hardware design of the PIC system and the PIC trainer round out coverage, while text appendices and online support make it easy to use in the lab and classroom.

Features

- Systematic coverage of the PIC18 family of microcontrollers
- Coverage of C language programming of the PIC18-starting from Chapter 7
- Chapters (9-17) on programming and interfacing the PIC with peripherals.
- An entire chapter (Chapter 8) dedicated to the design of the PIC Trainer

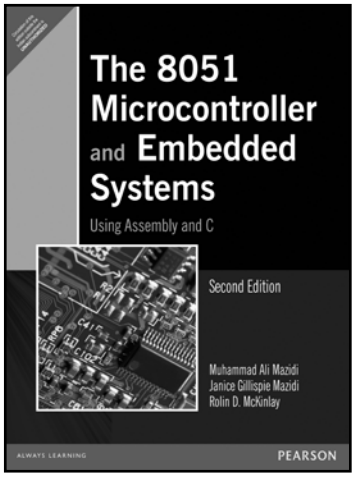
Contents

About the Authors

Muhammad Ali Mazidi holds Master's degrees from both Southern Methodist University and the University of Texas at Dallas. He is currently a.b.d. on his Ph.D. in the Electrical Engineering Department of Southern Methodist University. He teaches microprocessor-based system design at DeVry University in Dallas, Texas.

Rolin McKinlay has a BSEET from DeVry University. He is currently working on his Master's degree and PE license in the state of Texas. He is currently self-employed as a programmer and circuit board designer, and is a partner in MicroDigitalEd.com

Danny Causey graduated from CET department of De Vry University.His areas of interest include networking, game development, microcontroller and embedded system design.



The 8051 Microcontroller and Embedded Systems Using Assembly and C, 2/e

Muhammad Ali Mazidi • Janice Gillispie Mazidi • Rolin McKinlay

ISBN : 9788131710265
Copyright : 2007

About The Book

This textbook covers the hardware and software features of the 8051 in a systematic manner.Using Assembly language programming in the first six chapters, in Provides readers with an in-depth understanding of the 8051 architecture.From Chapter 7, this book uses both Assembly and C to Show the 8051 interfacing with real-world devices such as LCDs, keyboards, ADCs, sensors, real-time-clocks, and the DC and Stepper motors, The use of a large number of examples helps the reader to gain mastery of the topic rapidly and move on to the topic of embedded systems project design.

Features

- A new chapter on 8051 C programming.
- A new section on the 8051 C programming of timers.
- A new section on the second serial port of the DS89C4x0 chip.
- A new section on the 8051 C programming of the second serial port.
- A new section on the 8051 C programming of interrupts.
- Programming of the 1KB SRAM of the DS89C4x0 chip.
- A new section on the 8051 C programming of external memory.
- A new chapter on the DS12887 RTC (real-time clock) chip.
- A new chapter on motors, relays, and optoisolators

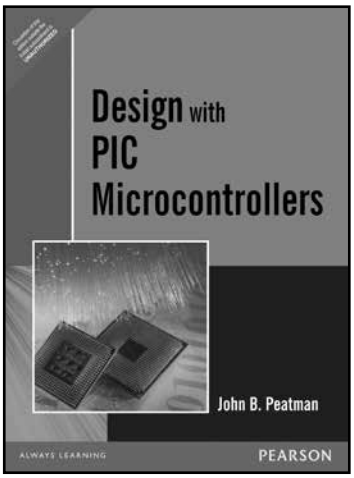
Contents

About the Authors

Muhammad Ali Mazidi went to Tabriz University and holds Master's degrees from both Southern Methodist University and the University of Texas at Dallas. He is currently a.b.d. on his Ph.D. in the Electrical Engineering Department of Southern Methodist University. He is co-author of a widely used textbook, The 80x86 IBM PC and Compatible Computers, also available from Prentice Hall. He teaches microprocessor-based system design at DeVry University in Dallas, Texas.

Janice Gillispie Mazidi has a Master of Science degree in Computer Science from the University of North Texas. She has several years of experience as a software engineer in Dallas. She has been chief technical writer and production manager, and was responsible for software development and testing of a widely used textbook, The 80x86 IBM PC and Compatible Computers, also available from Prentice Hall.

Rolin McKinlay has a BSEET from DeVry University. He is currently working on his Master's degree and PE license in the state of Texas. He is currently self-employed as a programmer and circuit board designer, and is a partner in MicroDigitalEd.com.



Design with PIC Microcontrollers

John B. Peatman

ISBN : 9788177585513
Copyright : 1998
Pages ; 280

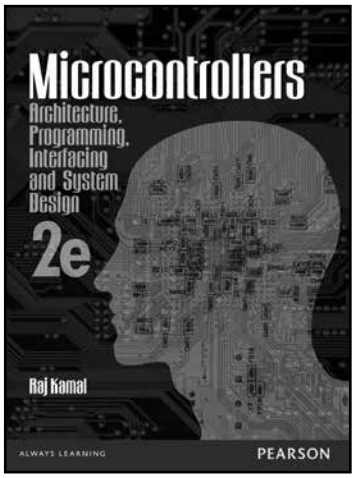
About The Book

This book is directed towards students of electrical engineering and computer engineering at the senior level and toward practicing engineers. The text develops design techniques for using microcontrollers (i.e., single-chip microcomputers). It emphasizes microcontroller versus microprocessor (e.g., Pentium and Power PC chip) issues.

Features

- Presents expansion with 12C devices.
- Presents the details of the PIC's unusually flexible analog-to-digital conversion facility.
- Discusses the master-slave interconnection of PICs.
- Presents low-power operation alternatives.
- Provides quick insight into the family member which will meet design requirements with block diagram comparisons of PIC family members. (Figure A-4)

Contents



Microcontrollers: Architecture, Programming, Interfacing and System Design, 2/e

Raj Kamal

ISBN : 9788131759905
Pages ; 888

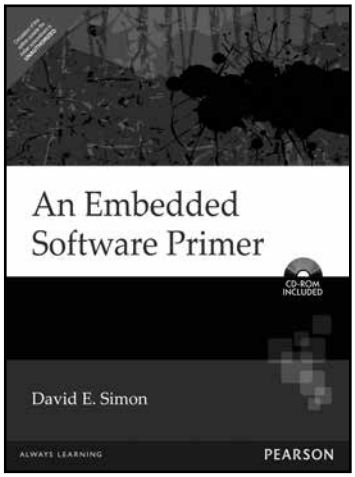
About The Book

This fully revised edition of Microcontrollers is based on the feedback received from users across the country. It prepares the students for system development using the 8051 as well as 68HC11, 80x96, ARM and PIC family microcontrollers. It provides a perfect blend of both hardware and software aspects of the subject. A key feature is the clear explanation of the use of the software building blocks, interrupt handling mechanism, timers, RTOS, IDE and interfacing circuits. It also covers aspects such as programming, interfacing and system design, and offers a large number of figures and tables, examples, end-chapter summaries, meanings of key terms, review questions, practice exercises, and multiple choice questions.

Features

- The architecture, instructions and internal resources in the 8051 microcontroller>
- The architecture, instructions and internal resources in the PIC, 80196, ARM and 68MC11/12 family microcontrollers
- The real-time operating system, IDE, interrupt handling mechanisms and timers for real control in systems
- Interfacing circuits for LED, LCD, keys, inductive coils, relays, motors, optical encoders, robots, input-output power control and DSP systems

Contents



An Embedded Software Primer

David E. Simon

ISBN : 9788177581546
Copyright : 2000
Pages ; 444

About The Book

An Embedded Software Primer is a clearly written, insightful manual for engineers interested in writing embedded-system software. The example-driven approach puts you on a fast track to understanding embedded-system programming and applying what you learn to your projects. This book will give you the necessary foundation to work confidently in this field. Building on a basic knowledge of computer programming concepts

Features

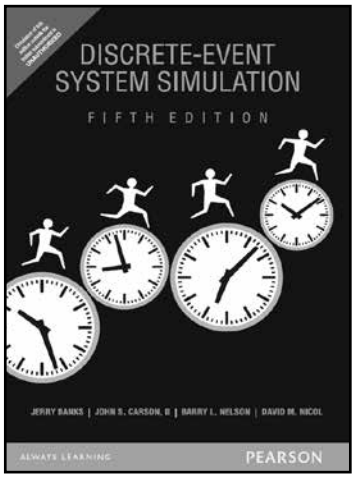
- Learn core principles and advanced techniques of embedded-system software
- Find out what a real-time operating system (RTOS) does and how to use one effectively
- Experiment with sample code and the uC/OS RTOS version 1.11 (on the accompanying CD)
- Apply what you learn, no matter which microprocessor or RTOS you use

Contents

About the Author

David E. Simon is a partner in Probitas Corporation, a software development consulting firm. Much of his Work at Probitas is in embedded systems for firms such as Apple, Adobe, Hewlett-Packard, and Symbol technologies. David has 20 years of experience in software development, and is the author of three previous books. He regularly teaches a class on embedded systems for the University of California at Berkeley Extension program.

Computer / System Simulation



Discrete-Event System Simulation, 5/e

Jerry Banks • John S. Carson, II • Barry L. Nelson • David M. Nicol

ISBN : 9789332518759
Copyright : 2013
Pages : 564

About the Book

While most books on simulation focus on particular software tools, Discrete Event System Simulation examines the principles of modeling and analysis that translate to all such tools. This language-independent text explains the basic aspects of the technology, including the proper collection and analysis of data, the use of analytic techniques, verification and validation of models, and designing simulation experiments. It offers an up-to-date treatment of simulation of manufacturing and material handling systems, computer systems, and computer networks.

Features

- Simulation of Communications Systems includes new material on simulation beta distribution, negative binomial distribution and non-stationary processes
- Subset selection methods used for output analysis of several alternatives are discussed
- Numerous solved examples enhance understanding of concepts.
- Abundant figures, tables and end-chapter exercises are provided
- Application topics promote understanding of real-world uses
- Interpretation of simulation software output explains how to use software tools correctly
- Discussion of simple tools for complex input modeling problems develops more realistic valid models

Contents

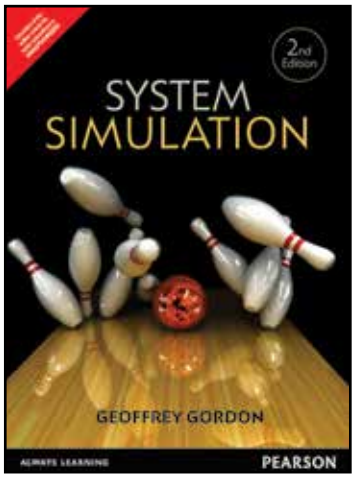
About the Authors

Jerry Banks retired in 1999 as a professor in the School of Industrial and Systems Engineering, Georgia Institute of Technology, after which he worked as senior simulation technology advisor for Brooks Automation; he is currently a professor at Techno´ogico de Monterrey, M´exico.

John S. Carson II is an independent simulation consultant. He has over 30 years experience in simulation in a wide range of application areas and has taught simulation and operations research at the Georgia Institute of Technology and the University of Florida.

Barry L. Nelson is the Charles Deering McCormick Professor and Chair of the Department of Industrial Engineering and Management Sciences at Northwestern University.

David M. Nicol is professor of electrical and computer engineering at the University of Illinois at Urbana-Champaign. He is a long-time contributor in the field of parallel and distributed discrete-event simulations.



System Simulation, 2/e

Geoffrey Gordon

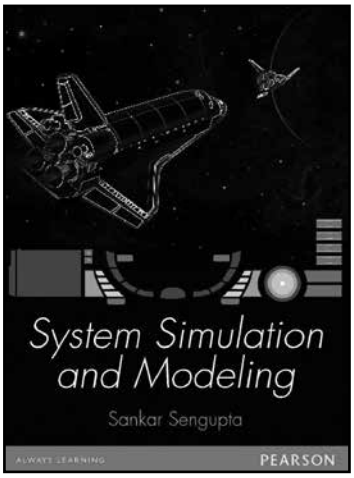
ISBN : 9789332550247
Copyright : 1978
Pages : 336

NEW

About the Book

Besides providing an excellent coverage of fundamental concepts and applications, the author uses simulation programming languages and covers also socio-economic problems. He introduces students to topics and techniques of system simulation and covers both continuous and discrete simulation. The book's illustrative problems come from a wide diversity of realistic situations in engineering, economics, business, medicine, biology, and socio-economics. Basic concepts of statistics and probability theory are reviewed in detail, and techniques for analyzing system simulation results are presented.

Contents



System Simulation and Modeling

Sankar Sengupta

ISBN : 9788131774472
Copyright Year : 2013
Page Count : 264

About the Book

Computer simulation is an attempt to model a real-life or hypothetical situation on a computer so that it can be studied to see how the system works. This book provides an excellent coverage on system modeling and simulation with the help of examples and applications taken from diverse areas like computer systems, statistics, manufacturing and insurance. The book presents valuable guidelines on the materials required to build a simulation model, explains the process of evaluating results and helps to take decisions based on the results. Apart from an in-depth discussion on Arena and its step-by-step approach to convert a problem statement into an Arena simulation model, the book also briefly discusses a number of commercially available software on simulation like GPSS, SIMSCRIPT and DYNAMO.

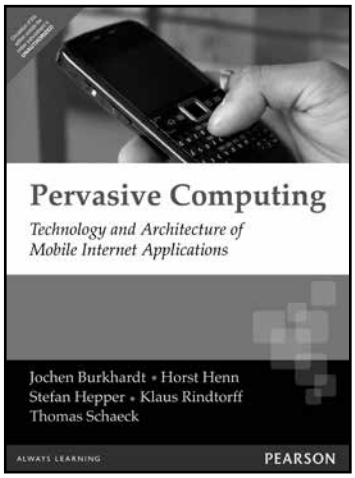
Features

- Exclusive coverage on agent-based simulation which can be applied to many applications outside the manufacturing and service sector
- A chapter on simulation-optimization to help students understand the design of a system for optimal performance using a simulation model
- 12 application problems from diverse areas discussed to facilitate a practical perspective of the subject
- Summary at the end of every chapter to enhance learning abilities of students

Contents

About the Author

Sankar Sengupta is currently working as Associate Professor at Oakland University, Michigan, USA. He completed his engineering from IIT Kharagpur, obtained an MS (in industrial engineering) from the University of Oklahoma, USA and was awarded his doctorate degree in industrial engineering from Clemson University, USA. He has over twenty years of teaching and research experience and a few years of industrial experience in India and the USA. His research areas include modeling and analysis of production and service systems including healthcare system, system simulation, quality control, supply chain behaviour and decision analysis.



Pervasive Computing

Jochen Burkhardt • Horst Henn • Stefan Hepper • Klaus Rindtorff Thomas Schaeck

ISBN : 9788177582802
Copyright : 2002
Pages : 432

About the Book

This book offers a complete introduction to **pervasive computing**, also known as mobile computing, ubiquitous computing and anywhere/anywhen computing. The book features case studies of applications and gives a broad overview of pervasive computing (devices, standards, protocols,architectures). The book also covers and includes analysis and categorisation of existing technologies and solid information to help integrate pervasive computing applications into existing e-business applications.

Features

- Introduction to pervasive devices and their applications
- Overview of the key technologies and protocols
- Web application concepts
- WAP and beyond
- Voice Technology
- Server-side programming in Java
- Pervasive web application architecture
- Device-independent example application
- Accessing the example application via PC, PDA, WAP and voice

Contents

About the Authors

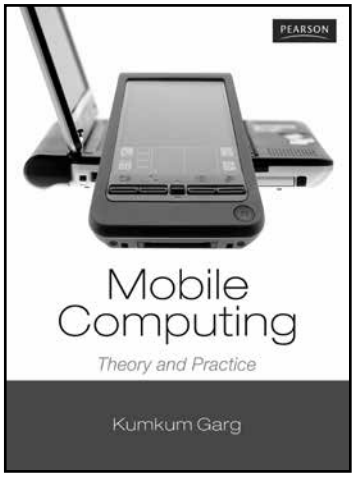
Jochen Burkhardt works in the IBM Pervasive Computing Division and has been involved in several projects in this area since the beginning of the mobile internet and pervasive computing revolution.

Dr. Horst Henn works in the IBM Pervasive Computing Division and has been involved in several projects in this area since the beginning of the mobile internet and pervasive computing revolution.

Stefan Hepper works in the IBM Pervasive Computing Division and has been involved in several projects in this area since the beginning of the mobile internet and pervasive computing revolution.

Klaus Rindtorff works in the IBM Pervasive Computing Division and has been involved in several projects in this area since the beginning of the mobile internet and pervasive computing revolution.

Thomas Schack works in the IBM Pervasive Computing Division and has been involved in several projects in this area since the beginning of the mobile internet and pervasive computing revolution.



Mobile Computing

Kumkum Garg

ISBN : 9788131731666
Copyright : 2010
Pages : 232

Basic Approach

An undergraduate text on mobile computing, covering all the basic concepts of mobile computing as well as mobile communication. The book also deals with the new concepts that have emerged in recent years like Bluetooth Security and topics on Nokia Handhelds (a topic exclusive to this book).

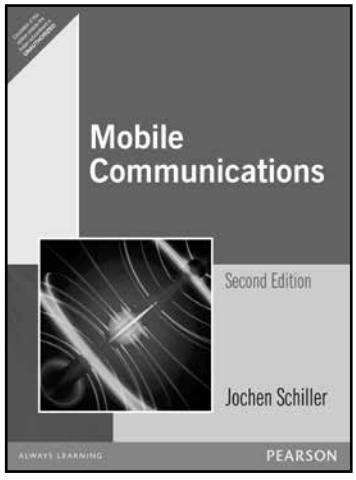
Features

- Case-Studies on topics like Coda File System, Mica Mote and Tiny OS present in the book
- Topics like Bluetooth Security, WAP, Wireless Sensor Networks discussed
- An appendix on Java and Network Programming for mobile applications is provided
- Excellent pedagogy – Subjective and Objective Type questions

Contents

About the Author

Prof. Kumkum Garg is Professor of Computing at IIT Roorkee. She obtained her M.Tech. in CSE from the University of Roorkee (now IIT Roorkee), and Ph.D. from Imperial College, London. She was awarded the Apple Distinguished Educator (ADE) award in 2006, for 'commitment to the promise of educational technology in the classroom and beyond'. Dr Garg is a Senior Member of IEEE, Fellow of the Institution of Engineers (I) and Life Member of various professional societies, including the ISTE, SMATAC and ISCEE. She has over 38 years experience in teaching and research.



Mobile Communications, 2/e

Jochen Schiller

ISBN : 9788131724262
Copyright : 2008
Pages : 512

About the Book

Mobile Communications introduces the topic by providing a thorough grounding in the field of mobile communications. A wide range of examples is combined with a strong pedagogy to allow the book's use in high level courses and for self-study. This book provides a non-mathematical, computer science focus.

Features

- Contains over 150 questions, over 250 illustrations, and a comprehensive glossary.
- Explains the most current developments in mobile communications in both research and industry in a well-structured context with detailed technical background.
- Conclude chapters with a set of exercises for self-study and references to standards, organizations, and research work related to the topic.

- Provides an up-to-date idea of the mobile/wireless communications field.
- Significant changes to be on top of this fast-developing topic.

Contents

About the Author

Jochen H. Schiller received his Masters and PhD degrees in computer science from the University of Karlsruhe, Germany, in 1993 and 1996, respectively. In 1996 -1997 he was a DFG postdoctoral research fellow at the Department of Computer Systems, Uppsala University, Sweden

Principles and Applications of GSM

Vijay K. Garg • Joseph E. Wilkes

ISBN : 9788177588798
Copyright : 1999
Pages : 504

About the Book

The book presents fundamental concepts providing a foundation for understanding the technical aspects of speech and channel coding, modulation, propagation, and other items which are used for GSM and common with its derivative. It provides sufficient details so that the reader can understand the related wireless standards. Also, it allows the reader to apply the concepts to practical wireless systems.

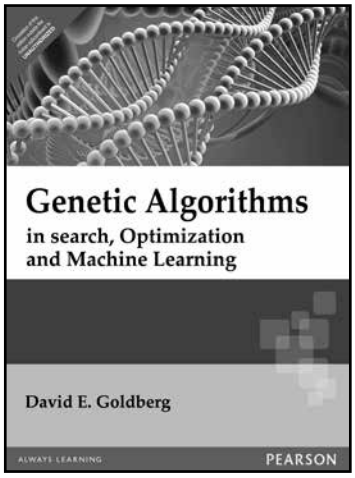
Features

- The complete guide to designing wireless systems with GSM -- the hottest mobile technology on Earth.
- Soup to nuts coverage: GSM architecture, interfaces, radio links, logical channels, coding, and much more.
- Planning, design, traffic engineering and network management.
- Wireless data, low mobility adjuncts, and future GSM enhancements.

Contents

About the Authors

Vijay K. Garg is a Distinguished Member of Technical Staff at Lucent Technologies (formerly AT&T Bell Laboratories). His responsibilities include design of GSM-based systems, evaluation of the performance. and capacity of mobile switching centers, and specification of operations system requirements for wireless networks.
Joseph E. Wilkes was on the team that designed the world's first cellular system, and is principal author of the original EIA compatibility specification for cellular telephones. He is currently a Senior Research Scientist at Bellcore.



Genetic Algorithms in search, Optimization & Machine Learning

David E. Goldberg

ISBN : 9788177588293
Copyright : 1989

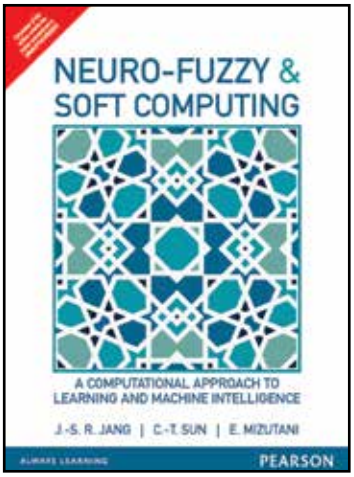
About the Book

The text introduces the theory, operation, and application of genetic algorithms----search algorithms based on the mechanics of natural selection and genetics. This book, suitable for both course work and self-study, brings together for the first time, in an informal, tutorial fashion, the computer techniques, mathematical tools, and research results that will enable both students and practitioners to apply genetic algorithms to problems in many fields: programmers, scientists, engineers, mathematicians, statisticians and management scientists will all find interesting possibilities here. Major concepts are illustrated with running examples, and Pascal computer programs illustrate major algorithms. Chapter concludes with exercises and computer assignments. No prior knowledge of Gas or genetics is assumed.

Contents

About the Author

David E. Goldberg is presently Associate Professor of Engineering Mechanics at the University of Alabama. He received his Ph.D. from the University of Michigan. As a graduate student at the University of Michigan, he spearheaded a successful project applying genetic algorithms and classifier systems to the control of natural gas pipelines. He has continued his research in genetic algorithms and classifier systems, and has had 12 years of consulting experience in industry and government and has published numerous articles and papers.



Neuro-Fuzzy and Soft Computing: A Computational Approach to Learning and Machine Intelligence

Jyh-Shing Roger Jang • Chuen-Tsai Sun • Kansai Paint Company

ISBN : 9789332549883
Pages : 614

About the Book

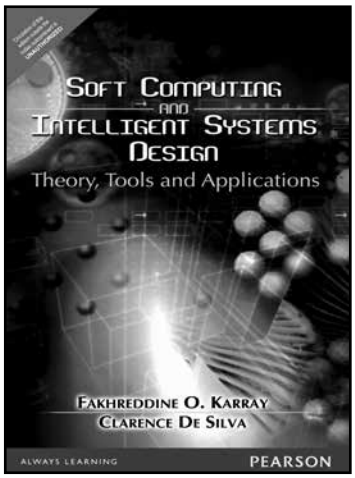
This text provides the first comprehensive treatment of the methodologies underlying neuro-fuzzy and soft computing, an evolving branch within the scope of computational intelligence. The book places equal emphasis on theoretical aspects of covered methodologies, empirical observations and verifications of various applications in practice.

Features

- The book is oriented toward methodologies that are likely to be of practical use; many step-by-step examples are included to complement explanations in the text. Pg.___
- Specially designed figures provide a visual reinforcement for as many ideas and concepts as possible. These figures were generated using MATLAB and these MATLAB files are available via FTP or WWW. Pg.___
- Includes exercises, some of which involve MATLAB programming tasks which can be expanded into suitable term projects. This will provide the student with hands-on programming experiences for practical problem-solving. Pg.___
- Each chapter includes a reference list to the research literature. This will enable students to pursue individual topics in greater depth. Pg._

Contents

Genetic Algorithms / Soft Computing



Soft Computing and Intelligent Systems Design: Theory, Tools and Applications

Fakhreddine O. Karray • Clarence W De Silva

ISBN : 9788131723241
Copyright : 2009
Pages : 584

About the Book

Traditional artificial intelligence (AI) techniques are based around mathematical techniques of symbolic logic, with programming in languages such as Prolog and LISP invented in the 1960s. These are referred to as "crisp" techniques by the soft computing community. The new wave of AI methods seeks inspiration from the world of biology, and is being used to create numerous real-world intelligent systems with the aid of soft computing tools. These new methods are being increasingly taught at the upper end of the curriculum, sometimes as an adjunct to traditional AI courses, and sometimes as a replacement for them. Where a more radical approach is taken and the course is being taught at an introductory level, we have recently published Negnevitsky's book. Karray and Silva will be suitable for the majority of courses which will be found at an advanced level. Karray and de Silva cover the problem of control and intelligent systems design using soft-computing techniques in an integrated manner. They present both theory and applications, including industrial applications, and the book contains numerous worked examples, problems and case studies. Covering the state-of-the-art in soft-computing techniques, the book gives the reader sufficient knowledge to tackle a wide range of complex systems for which traditional techniques are inadequate.

Features

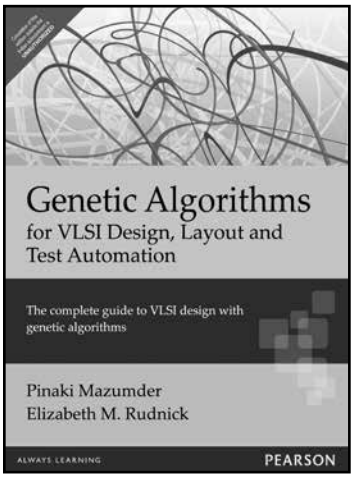
- Integrates theory and practice through the use of numerous worked examples
- Includes case studies in different areas where soft-computing techniques are applied in real-world situations
- Extensive coverage of control applications
- Extensive student and lecturer support available via the Web (including Matlab files)

Contents

About the Authors

Fakhreddine Karray is Professor of Electrical and Computer Engineering and Systems Design Engineering at the University of Waterloo, Canada. He was Program Chair of the 2002 IEEE International Symposium on Intelligent Control, is Associate Editor of four related journals and writes extensively in the area.

Clarence de Silva is Professor of Mechanical Engineering at the University of British Columbia, Vancouver, Canada. He is Editor-in-Chief of the International Journal of Control and Intelligent Systems, writes extensively in the area and has served as a consultant for IBM and Westinghouse in the US.



Genetic Algorithms: for VLSI Design, Layout & Test Automation

Pinaki Mazumder • Elizabeth Rudnick

ISBN : 9788177585742
Copyright : 1999

About the Book

Genetic Algorithms mimic the natural process of evolution, helping engineers optimize their designs by using the principle of "survival of the fittest". VLSI is especially suited to benefit from genetic algorithms— and this comprehensive book shows how to get the best results. You will discover how genetic algorithms work and how you can use them in a wide variety of VLSI design, layout and test automation tasks.

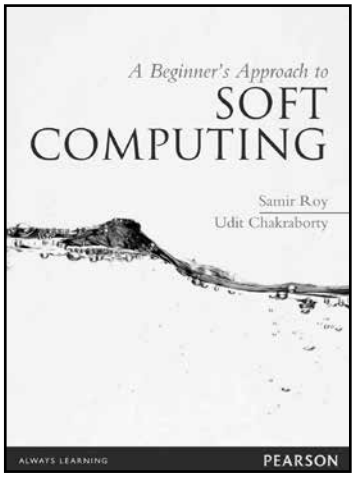
Features

- They are adaptive, and learn from experience
- They have intrinsic parallelism
- They are efficient for complex problems
- They are easy to parallelize, even on a loosely coupled Network Of Workstations (popularly known as NOW), without much communication overhead

Contents

About the Authors

Pinaki Mazumder is Professor in the Department of Electrical Engineering and Computer Science at the University of Michigan, Ann Arbor. He has worked for over six years at AT & T Bell Laboratories (USA), NTT (Japan), and BEL (India). **Elizabeth M. Rudnick** is Assistant Professor at the Center for Reliable and High Performance Computing and the Department of Electrical and Computer Engineering at the University of Illinois, Urbana. She has worked at Motorola, Sunrise Test Systems, and AMD.



A Beginner's Approach to Soft Computing

Samir Roy • Udit K. Chakraborty

ISBN : 9788131792469
Copyright : 2013
Pages : 584

About the Book

Soft computing is a branch of computer science that deals with a family of methods that imitate human intelligence. This is done with the goal of creating tools that will contain some human-like capabilities (such as learning, reasoning and decision-making). This book covers the entire gamut of soft computing, including fuzzy logic, rough sets, artificial neural networks, and various evolutionary algorithms. It offers a learner-centric approach where each new concept is introduced with carefully designed examples/instances to train the mindset of the learner.

Features

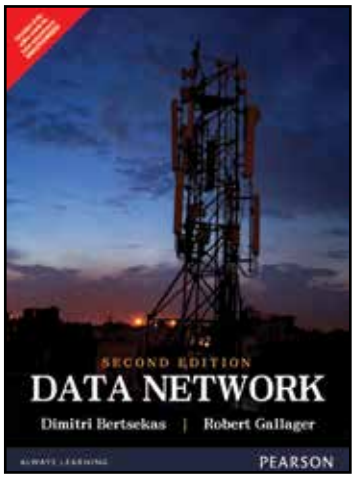
- Excellent pedagogy
  - 145 unsolved and 112 solved questions
  - More than 500 figures
  - MCQs at the end of every chapter; more than 500 MCQs in total
  - MATLAB implementation
  - Summary at the end of every chapter
- Detailed case studies are included to help the students get a practical perspective of the subject.

Contents

About the Authors

Samir Roy teaches at the Department of Computer Science & Engineering, National Institute of Technical Teachers' Training and Research (NITTTR), Kolkata, an autonomous institution under the Ministry of HRD, Government of India. He has taught different subjects of computer science for about twenty years at the undergraduate and postgraduate levels in various engineering colleges and training institutes. He has published about forty articles in international and national journals and conference proceedings. His areas of interest include artificial intelligence, soft computing, mathematical logic and educational informatics.

Udit K. Chakraborty is currently working with the Sikkim Manipal Institute of Technology as Associate Professor in the Department of Computer Science & Engineering. He has about ten years of teaching experience. His areas of interest include soft computing, natural language processing and algorithms. He has several research papers published in national and international conferences.



Data Networks, 2/e

Dimitri Bertsekas • Gal

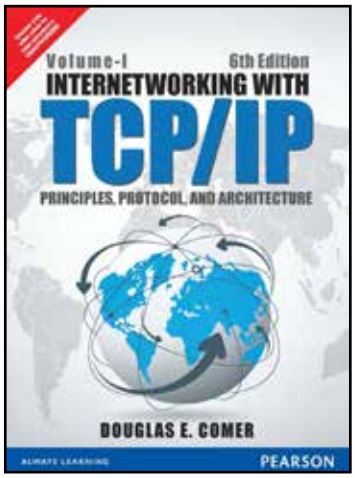
ISBN : 9789332550476

NEW

About the Book

This book is designed to develop a deep understanding of data networks and the evolving integrated networks, and to explore the various analysis and design tools. It begins with an overview of the principles behind data networks, then develops an understanding of the modeling issues and mathematical analysis needed to compare the effectiveness of different networks.

Contents



Internetworking with TCP/IP Volume One, 6/e

Douglas E Comer

ISBN : 9789332550100
Pages : 744

NEW

About the Book

An internationally best-selling, conceptual introduction to the TCP/IP protocols and Internetworking, this book interweaves a clear discussion of fundamentals and scientific principles with details and examples drawn from the latest technologies. Leading author Douglas Comer covers layering and packet formats for all the Internet protocols, includingTCP, IPv4, IPv6, DHCP, and DNS. In addition, the text explains new trends in Internet systems, including packet classification, Software Defined Networking (SDN), and mesh protocols used in The Internet of Things.
The text is appropriate for individuals interested in learning more about TCP/IP protocols, Internet architecture, and current networking technologies, as well as engineers who build network systems. It is suitable for junior to graduate-level courses in Computer Networks, Data Networks, Network Protocols, and Internetworking.

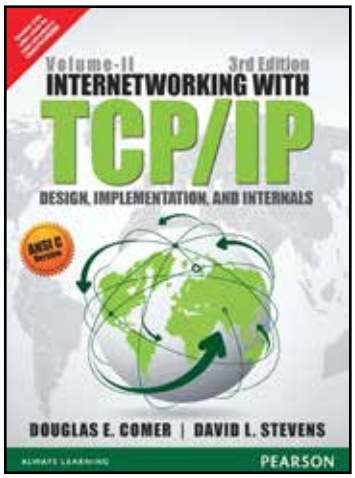
Features

- Voice and Video Over IP (RTP) — Examines the RTP protocol that allows a receiver to coordinate and play real-time data such as voice and video as well as the RSVP and COPS protocols that can be used to provide resource information.
- IP coverage — Up-to-date discussions of Internet Security and Firewalls, Design with IPSEC, the latest IPv6 features, and IP Routing.
- Discussion of routing architectures — Elaborates on the routing architectures used for large and small Internets.
- Examination of Internet application services — Provides students with information on services such as domain name system (DNS), electronic mail (SMTP, MIME), file transfer and access (FTP, TFTP, NFS), remote login (TELNET, rlogin), and network management (SNMP, MIB, ANS.I).
- Mobile IP — Describes the technology that allows a computer to move from one network to another without changing its IP address.
- Private Network Interconnection (NAT, VPN) — Teaches students about two key technologies used to interconnect private intranets and the global Internet.

Contents

About the Authors

Dr. Douglas Comer, Distinguished Professor of Computer Science at Purdue University and former VP of Research at Cisco, is an internationally recognized expert on computer networking, the TCP/IP protocols, and the Internet. The author of numerous refereed articles and technical books, he is a pioneer in the development of curriculum and laboratories for research and education.
A prolific author, Comer's popular books have been translated into over 15 languages, and are used in industry as well as computer science, engineering, and business departments around the world. His landmark three-volume series Internetworking With TCP/IP revolutionized networking and network education. His textbooks and innovative laboratory manuals have and continue to shape graduate and undergraduate curricula.



Internetworking with TCP/IP Vol. II: ANSI C Version: Design, Implementation, and Internals, 3/e

Douglas E. Comer • David L. Stevens

ISBN : 9789332550261
Pages : 682

NEW

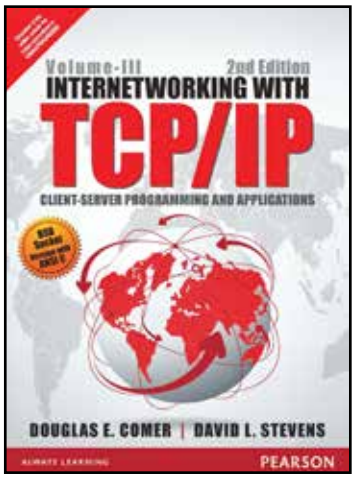
About the Book

The authors provide an in-depth look at individual TCP/IP protocols in light of design alternatives, implementation techniques with actual ANSI C code, and the internals of protocol software. This book uses the widely accepted data-mark interpretation of TCP urgent data, and a discussion of the consequences is included. Throughout the book the authors use a working system— which they designed and built using ANSI C—to explain the interaction among protocols, the complete implementation process, and the internal structure.

Features

- Reflects changes in the protocol standards and updates the example code to ANSI standard C.
- Contains working source code in ANSI C for most protocols including TCP, IP, ICMP, IGMP, UDP, ARP, RIP, SNMP, and a significant part of OSPF.
- Defines data structures, constants, and code for procedures and processes in ANSI standard C.
- Provides active experimentation with a working TCP/IP implementation.
- Implementation support for the IGMP protocol used for IP multicasting and multicast OSPF routing protocol used in applications such as audio and video multicast.
- Unique coverage of the Open Shortest path First link-state routing protocol designed by the IETF.
- Shows the latest interpretation of the urgent data processing.

Contents



Internetworking with TCP/IP Vol. III, Client-Server Programming and Applications--BSD Socket Version, 2/e

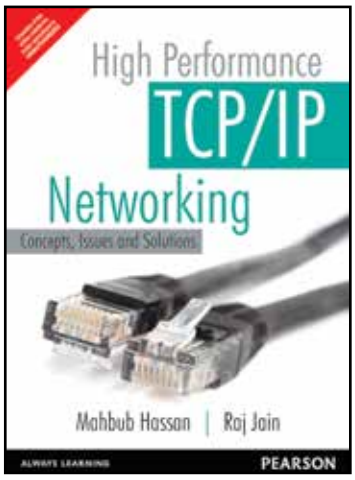
Douglas E. Comer • David L. Stevens

ISBN : 9789332549876
Pages : 519

NEW

About the Book

This is the Second Edition of Vol. III BSD Socket Version from one of the most popular TCP/IP Internetworking series ever published. This new edition includes code in ANSI C throughout. This is the only book available who's central theme is software design that teaches designers how to structure clients and servers. The server designs are directly applicable to WWW and other applications. The authors present the most complete coverage of server technology that allows designers to understand the costs and benefits of advanced server technologies. In addition, the Second Edition discusses the use of application gateways to allow client-server communication across heterogeneous protocols.



High Performance TCP/IP Networking, 1/e

Mahbub Hassan • Raj Jain

ISBN : 9789332549692
Copyright : 1999

NEW

About the Book

Designed for one-semester/-quarter undergraduate/graduate courses in Advanced Computer Networks, Advanced TCP/IP Networks, High Performance Networks, and Internetworking, in departments of computer science, electrical engineering, and computer and information sciences.
This text provides in-depth coverage of the necessary tools and techniques for the performance evaluation of TCP/IP networks. It examines performance concepts and issues for running TCP/IP over wireless, mobile, optical and satellite networks; congestion control algorithms in hosts and routers to manage traffic congestion in TCP/IP networks and enhance application performance; and high performance implementation of TCP/IP protocol stack in software and hardware.

Features

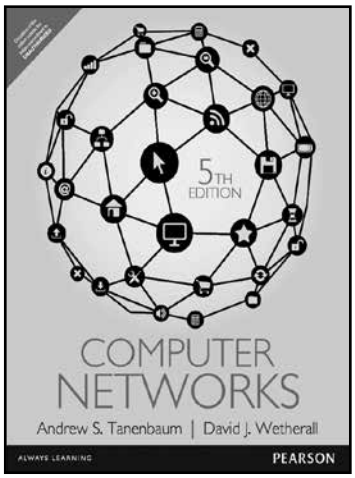
- A flexible five-part organization— Part I introduces the scope of the text; Part II provides detailed coverage of the tools and techniques for performance evaluation of TCP/IP networks; Part III examines the performance concepts and issues for running TCP/IP in the emerging network environment; Part IV discusses congestion control; and Part V explores the performance issues in implementing TCP/IP in the end system.
  Ensures students have a comprehensive guide to the study of TCP/IP networking while allowing teachers to select from a broad menu of topics.
- Focus on both wireless and optical networking—Addresses TCP performance issues in these networks; satellite networks tradeoffs; and the optimization of performance.
  Explains the concepts, issues and solutions for building high performance TCP/IP networks and familiarizes students with "performance" issues and solutions.
- A running case study throughout—Introduced in Chapter 1 based on a fictitious, but realistic organization with TCP/IP networking infrastructure, and used in several subsequent chapters with some modifications to introduce new performance problems.
  Provides students with a realistic context to apply the concepts and techniques learned in the relevant chapters. Supplies instructors with a classroom discussion topic.
- Wide variety of real-world examples throughout.
  Illustrates the use of techniques covered in practical applications.
- Chapter-opening learning objectives.
  Alerts students to key concepts in each chapter and helps them organize their study goals. Assists instructors in pointing out lecture objectives.
- Chapter summaries.
  Offers students a chance to review their understanding of key concepts in each chapter before moving on.
- Chapter-end review questions—Encourages students to re-read parts of each chapter in order to locate answers within them.
  Requires students to think, test and apply their understanding of key concepts in each chapter. Supplies instructors with material for class discussion or tests.
- Chapter-end reading lists.
  Presents students with a valuable resource for independent exploration on specific topics of interest.
- Numerous figures and illustrations.
  Enhances the visual appeal of the text and student understanding of complex performance issues and concepts.
- Laboratory exercises—Provided for select chapters.
  Offers students and instructors with increased opportunities for learning and teaching.

Contents

About the Authors

Mahbub Hassan, The University of South Wales, Australia

Raj Jain, Ohio State University



Computer Networks, 5/e

Andrew S. Tanenbaum • David J Wetherall

ISBN : 9789332518742
Copyright : 2014
Pages: : 816

About the Book

Computer Networks, Fifth Edition, is the ideal introduction to the networking field. This bestseller reflects the latest networking technologies with a special emphasis on wireless networking, including 802.11, 802.16, Bluetooth&trade, and 3G cellular, paired with fixed-network coverage of ADSL, Internet over cable, gigabit Ethernet, MLPS, and peer-to-peer networks. Notably, this latest edition incorporates new coverage on 3G mobile phone networks, Fiber to the Home, RIFD, delay-tolerant networks, and 802.11 security, in addition to expanded material on Internet routing, multicasting, congestion control, quality of service, real-time transport, and content distribution.

Tanenbaum takes a structured approach to explaining how networks work from the inside out. He starts with an explanation of the physical layer of networking, computer hardware and transmission systems then works his way up to network applications.

Features

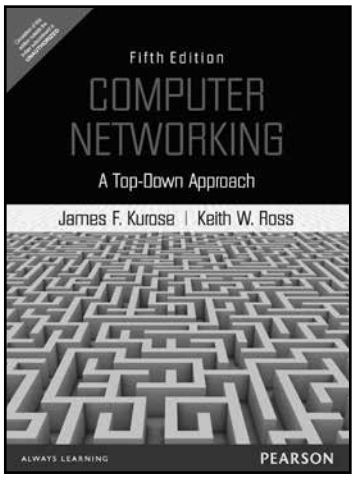
- Revised and new material on:
- Wireless networks (802.12 and 802.16)
- The 3G networks used by smart phones
- RFID and sensor networks
- Content Distribution using CDNs
- Peer-to-peer networks
- Real-time media (from stored, streaming, and live sources)
- Internet telephony (voice over IP)
- Delay-tolerant networks

Contents

About the Authors

Andrew S. Tanenbaum, Vrije University, Amsterdam, The Netherlands .

David J. Wetherall, University of Washington.



Computer Networking: A Top-Down Approach, 5/e

James F. Kurose • Keith W. Ross

ISBN : 9788131790540
Copyright : 2012

About the Book

Building on the successful top-down approach of previous editions, the Fifth Edition of Computer Networking continues with an early emphasis on application-layer paradigms and application programming interfaces, encouraging a hands-on experience with protocols and networking concepts. With this edition, Kurose and Ross have revised and modernized treatment of some key chapters to integrate the most current and relevant networking technologies.
Networking today involves much more than standards specifying message formats and protocol behaviors—and it is far more interesting. Professors Kurose and Ross focus on describing emerging principles in a lively and engaging manner and then illustrate these principles with examples drawn from Internet architecture.

Features

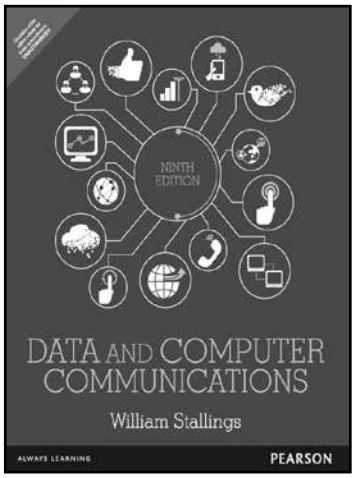
- A balanced presentation focuses on the Internet as a specific motivating example of a network and also introduces students to protocols in a more theoretical context
- A chapter on wireless and mobility includes insight into 802.11 and coverage of ad hoc networking
- Principles and Practice boxes throughout demonstrate real-world applications of the principles studied
- Case History boxes are sprinkled in to help tell the story of the history and development of computer networking
- Material on application programming development is included, along with numerous programming assignments
- A highly developed art program enhances the descriptions of concepts

Contents

About the Authors

James Kurose teaches at the University of Massachusetts at Amherst. His research interests include network protocols and architecture, network measurement, sensor networks, multimedia communication, and modeling and performance evaluation. He received his PhD from Columbia University.

Keith Ross is a professor of computer science at Polytechnic University. He has worked in peer-to-peer networking, Internet measurement, video streaming, Web caching, multi-service loss networks, content distribution networks, voice over IP, optimization, queuing theory, optimal control of queues, and Markov decision processes. Professor Ross received his PhD in Computer and Control Engineering from the University of Michigan.



Data and Computer Communication, 9/e

William Stallings

ISBN : 9789332518865
Copyright : 2014
Pages : 880

About the Book

With a focus on the most current technology and a convenient modular format, this best-selling text offers a clear and comprehensive survey of the entire data and computer communications field. Emphasizing both the fundamental principles as well as the critical role of performance in driving protocol and network design, it explores in detail all the critical technical areas in data communications, wide-area networking, local area networking, and protocol design.

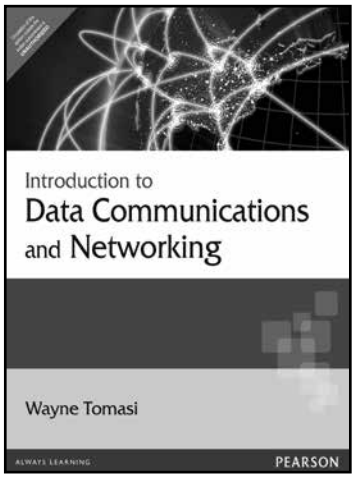
Features

- A modular format — This structure allows instructors to easily design a course to meet their individual needs. For students, it breaks this massive subject into comprehensible parts
- Unifying principles — The text repeatedly emphasizes such principles as multiplexing, flow control, and error control, and contrasts their application in specific areas of technology. This enables students to understand how the same protocol design principles are applied at different levels of the protocol architecture
- Design Approaches — Exploring alternative approaches to meeting specific communication requirements gives students a deeper understanding of communication system and protocol design
- Standards — A comprehensive discussion of the current status and future direction of related technology standards helps students understand the central role of standards in network and protocol design
- More than 250 homework problems — Problems ranging in difficulty, with solutions provided on the Instructor's Resource Center, give students the opportunity to test their comprehension of concepts
- Strong pedagogical support — The liberal use of figures and tables; glossary; list of acronyms; recommended reading list and Websites; and a bibliography provide students with convenient study tools

Contents

About the Author

William Stallings has made a unique contribution to understanding the broad sweep of technical developments in computer networking and computer architecture. He has authored 18 titles, and counting revised editions, a total of 35 books on various aspects of these subjects. In over 20 years in the field, he has been a technical contributor, technical manager, and an executive with several high-technology firms. Currently he is an independent consultant whose clients have included computer and networking manufacturers and customers, software development firms, and leading-edge government research institutions.He has six times received the prize for best Computer Science and Engineering textbook of the year from the Textbook and Academic Authors Association. Bill has designed and implemented both TCP/IP-based and OSI-based protocol suites on a variety of computers and operating systems, ranging from microcomputers to mainframes. As a consultant, he has advised government agencies, computer and software vendors, and major users on the design, selection, and use of networking software and products. Dr. Stallings holds a Ph.D. from M.I.T. in Computer Science and a B.S. from Notre Dame in Electrical Engineering.



Introduction to Data Communication and Networking

Wayne Tomasi

ISBN : 9788131709306
Copyright : 2007
Pages : 986

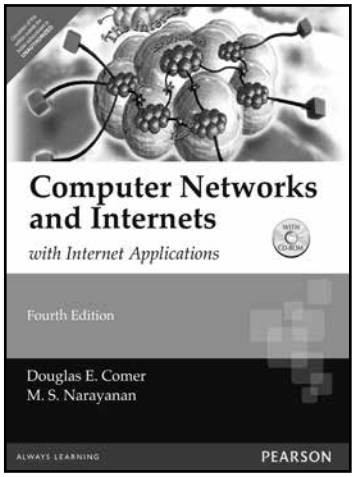
About the Book

Written to introduce students to the fundamental concepts of electronic communications systems, data systems, and networks, this text provides extensive coverage of a wide range of data communications and networking issues while offering preliminary information on basic electronic communications and telecommunications systems. Topics explored include wireless and wireline telecommunications systems, basic data communications networks and systems, local area networks, internetworks, and the Internet including TCP/IP protocol suite.

Features

- Brief history of data communications is given along with the fundamental concepts of data communications and networking
- Practical description of the TCP/IP protocol suite—Including Security topics
- Comparison of advantages and disadvantages in areas such as metallic transmission media to optical fiber transmission media, and digital pulse transmission.
- Coverage of wireless communications systems

Contents



Computer Networks and Internets with Internet Applications, 4/e

Douglas E. Comer • M. S. Narayanan

ISBN : 9788177589276
Copyright : 2008
Pages : 624

About the Book

This book provides a comprehensive, self-contained tour through all of networking - from the lowest levels of data transmission and wiring to the highest levels of application software - explaining how underlying technologies provide services and how Internet applications use those services. For instructors who want to emphasize Internet technologies and applications, Computer Networks provides substantial sections on internetworking and network applications. This updated edition reflects recent advances in networking and internet technology. An accompanying multimedia CD-ROM and online resources provide opportunities for a variety of hands-on experiences.

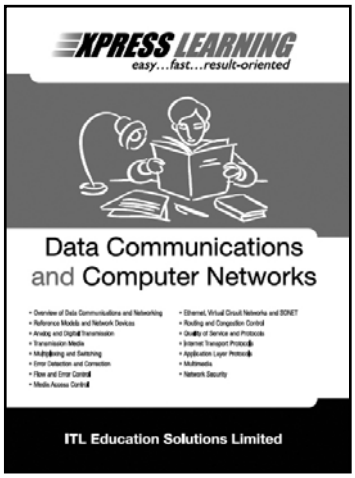
Features

- FAQ email list with answers to questions from a leading networking authority.
- NEW - Chapter 24, User Datagram Protocol: Introduces an end-to-end datagram protocol and illustrates its use. Once considered insignificant, UDP forms the important basis for multicast and broadcast applications and new applications that transfer audio or video.
- NEW - Chapter 26, Network Address Translation (NAT): Explains how NAT technology overcomes a major limitation of the Internet by allowing multiple computers to share a single IP address, especially important for residential and small business installations.
- NEW - Chapter 33, IP Telephony: Discusses the most exciting new Internet application, transmitting telephone calls over the Internet (VoIP). The chapter explains competing standards for IP telephony, including protocols such as H.323, Session Initiation Protocol (SIP), and Megacolt. This chapter also presents a sample SIP session.
- Includes a CD-ROM with animations, packet traces, more than 200 photos of networking equipment, code from the book and copies of protocol standards.

Contents

About the Authors

Douglas E. Comer is a distinguished Professor of Computer Science at Purdue University and a Fellow of the ACM.
M. S. Narayanan is PG Professor at Rajalakshmi Engineering College in Chennai



Express Learning – Data Communications and Computer Networks

ITL ESL

ISBN : 9788131761274
Copyright Year : 2012
Page Count : 312

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

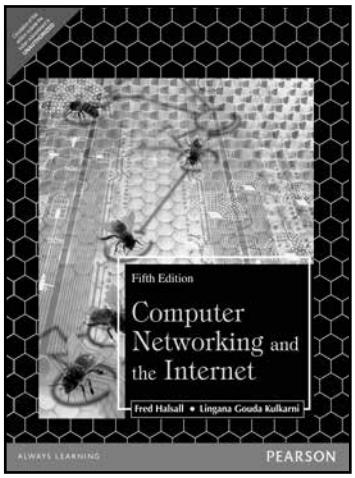
Features

- Presented in a question and answer format following the examination pattern
- Covers all key topics in the syllabus
- Designed to make learning fast and effective
- Precise and up-to-date
- Helps students excel in their examinations

Contents

About the Author

ITL Education Solutions Limited (ITL ESL) is a part of the ITL group, which has operations all over the world with a significant presence in education and IT-enabled services. It specializes in handling educational projects in IT domains with a dedicated R&D wing of industry experts that helps in designing and developing content.



Computer Networking and the Internet, 5/e

Fred Halsall • Lingana Gouda Kulkarni

ISBN : 9788177584752
Copyright : 2006
Pages : 704

About the Book

Market: For undergraduate courses in Computer Science & Information Technology, Electronics & Communications Engineering / MCA. With the advent of the World Wide Web, the Internet has rapidly become the dominant type of computer network. It now enables people around the world to use the Web for E-Commerce and interactive entertainment applications, in addition to e-mail and IP telephony. The fifth edition of this highly successful text has been completely revised and restructured to focus entirely on the Internet, and so avoids the necessity of describing protocols and architectures that are no longer relevant. As many Internet applications now involve multiple data types—text, images, speech, audio and video—the book explains in detail how they are represented. This is made accessible by extensive use of illustrations

and worked examples that make complex systems more understandable. This makes the book ideal for self-study or classroom use for students in computer science or engineering, as well as being a comprehensive reference for practitioners who require a definitive guide to networking.

Features

- A separate chapter is devoted to each of the different types of access network: telephone networks, LANs and intranets, wireless networks, and entertainment networks.
- A chapter is devoted to each of the main components of the Internet, from modern Internet protocols to the World Wide Web.
- A whole chapter is devoted to the vital topic of network security.

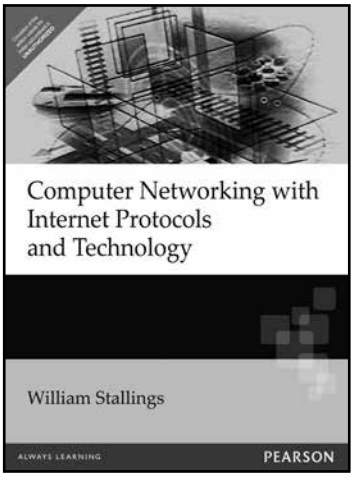
Contents

1. Data communications and networking basics
2. Telephone networks and modems
3. Local area networks and intranets
4. The Internet protocol
5. Transport protocols
6. Internet applications
7. Wireless networks
8. Entertainment networks
9. The WorldWideWeb
10. Security

About the Authors

Fred Halsall is a Professor Emeritus at the University of Wales. The previous editions of this book and its companion text Multimedia Communications have all been widely acclaimed and translated into several different languages. Professor Halsall has carried out research consultancies for a number of major communication companies and presented seminars at numerous international conferences.

Lingana Gouda Kulkarni is Professor, Department of Electronics and Communication, B. V. B. College of Engineering and Technology, Hubli, India. He received his Ph.D. in image processing in 1997 from Mysore University India.. His research areas include image processing, pattern recognition, and VLSI implementation of DIP algorithms.



Computer Networking with Internet Protocols and Technology

William Stallings

ISBN : 9788131709351
Copyright : 2003
Pages : 662

About the Book

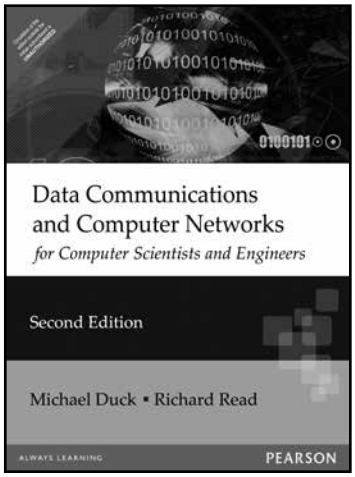
For undergraduate or graduate-level courses in Computer Networks, Internet Technology, Computer Communications and Networks, and Data Communications and Networks in the departments of Computer Science, Computer Engineering, Electrical Engineering, or Information Science and Engineering. Building on the strength of his two other successful texts, Stallings' new text provides a fresh "Top Down" and comprehensive "Top Down" survey of the entire field of computer networks and Internet technology—including an up-to-date report of leading-edge technologies. It emphasizes both the fundamental principles as well as the critical role of performance in driving protocol and network design. The basic themes of principles, design approaches, and standards throughout the text unify the discussion.

Features

- "Top down" organization—Motivates the presentation for students by better providing immediate context.
- Thorough coverage of next-generation Internet protocols—Includes resource reservation (RSVP), multiprotocol label switching (MPLS), real-time and multimedia traffic (SIP and RTP), and the use of IPv6.
- Unified coverage of integrated and differentiated services.
- Unified treatment of congestion in data networks.
- A solid introduction to TCP/IP.
- Survey of network management.
- Extensive use of figures and tables.
- A variety of pedagogical material—Includes a list of key points at the beginning of each chapter and a recommended reading list, a list of relevant Web sites, a list of key words, a set of review questions, and a set of homework problems at the end of each chapter.

Contents

Data Communication and Computer Networking



Data Communications and Computer Networks: For Computer Scientists and Engineers, 2/e

Michael Duck • Richard Read

ISBN : 9788131726082
Copyright : 2009
Pages : 440

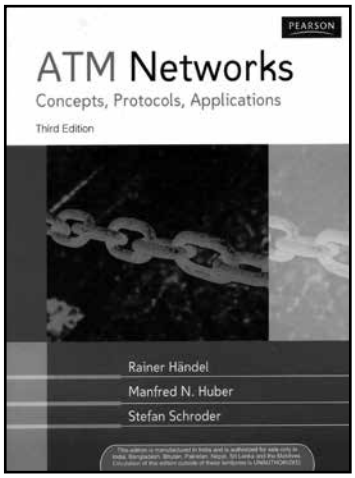
About the Book

A broad, introductory text written for engineers, focusing on the fundamental aspects of network engineering. The second edition has been thoroughly revised to cover current networking issues and technologies. Specific updates include those on networking management, new transmission technologies, security and encryption. This text is appropriate for modular courses in engineering data communications and can be used as an effective reference for practising engineers.

Features

- Unique and accessible overview of networking.
- Includes modern networking issues - management, security and encryption.
- Enhanced treatment of core network technologies including ATM and SDH/SONET.
- New chapter on TCP/IP.
- SI units used throughout.

Contents



ATM Networks : Concepts, Protocols, Applications, 3/e

Rainer Handel • Manfred N. Huber • Stefan Schroder

ISBN : 9788177585292
Copyright : 1999
Pages : 352

About the Book

This book gives a thorough introduction to the whole technical concept of ATM, from architecture and functions to networking techniques and performance issues, as laid down in various specifications from the ATM forum and the ITU. It explains the rationale for introducing ATM networking into your organization, and illustrates its potential in terms of the applications and services that ATM networks can offer.

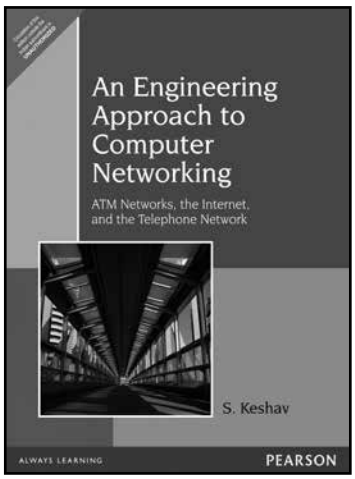
Features

- Recently defined ATM interfaces such as UTOPIA, WIRE, FUNI, IMA and the protocols P-INNI, B-ICI and AINI
- LAN emulation and Multi-Protocol Over ATM (POA)
- Internet support by ATM networks
- Voice and telephony over ATM
- Wireless ATM and mobile ATM
- Security in ATM network

Contents

About the Author

Rainer Händel, Manfred N. Huber and Stefan Schröder aer all with the Public Communication Networks Group of Siemens in Munich, Germany. They have written numerous on ATM technology.



An Engineering Approach to Computer Networking: ATM Networks, the Internet, and the Telephone Network

S. Keshav

ISBN : 9788131711453
Copyright : 1997

About the Book

This book provides and introduction to the inner workings of computer networks, taking a unique 'engineering' approach that helps readers gain insight into not just how but also why networks work the way they do.

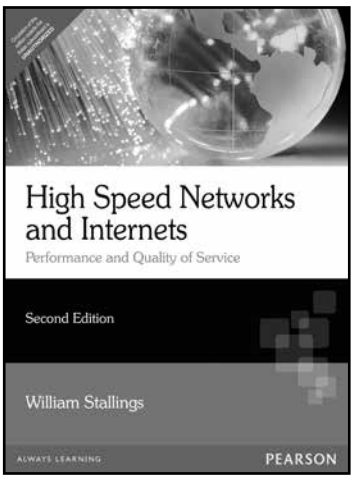
Features

- The first practical treatment of ATM
- Discusses the three major networks: telephone, Internet, and ATM

Contents

About the Author

S. Keshav is a part of the AT&T Research Team. He has taught at Indian Institute of Technology, Delhi, Columbia University, New York & Cornell University, Ithaca.



High-Speed Networks and Internets, 2/e

William Stallings

ISBN : 9788177585698
Copyright : 2002

About the Book

High-Speed Networks and Internets, Performance and Quality of Service Second Edition, William Stallings offers the most comprehensive technical book to address a wide range of design issues of high-speed TCP/IP and ATM networks in print to date. High-Speed Networks and Internets both the professional and advanced student an up-to-date survey of key issues. The Companion Website and the author's Web page offer unmatched support for students and instructors. The book features the prominent use of figures and tables and an up-to-date bibliography.

New and/or revised in this edition

In this second edition, this award-winning and best-selling author steps up to the leading edge of integrated coverage of key issues in the design of high-speed TCP/IP and ATM networks to include the following topics:

- Unified coverage of integrated and differentiated services.
- Up-to-date and comprehensive coverage of TCP performance.
- Thorough coverage of next-generation Internet protocols including (RSVP), (MPLS), (RTP), and the use of Ipv6.
- Unified treatment of congestion in data networks: packet-switching, frame relay, ATM networks, and IP-based internets.
- Broad and detailed coverage of routing, unicast, and multicast.
- Comprehensive coverage of ATM: basic technology and the newest traffic control standards.
- Solid, easy-to-absorb mathematical background enabling understanding of the issues related to high-speed network performance and design.
- Up-to-date treatment of gigabit Ethernet.
- The first treatment of self-similar traffic for performance assessment in a textbook on networks (Explains the mathematics behind self-similar traffic and shows the performance implications and how to estimate performance parameters.)
- Up-to-date coverage of compression. (A comprehensive survey.)
- Coverage of gigabit networks. Gigabit design issues permeate the book.

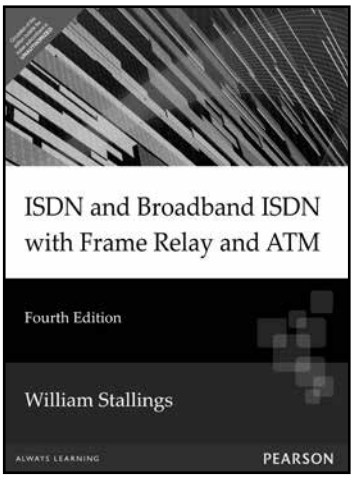
Features

- Congestion Control
- Differentiated Services
- Guaranteed Frame Rate (GFR)
- Multiprotocol Label Switching (MPLS)
- TCP/IP details
- High Speed LANs
- Frame Relay
- Wavelet Compression

Contents

About the Author

William Stallings has made a unique contribution to understanding the broad sweep of technical developments in computer networking and computer architecture. He has authored 15 titles on various aspects of these subjects (a total of 34 books including revised editions). Currently, he is an independent consultant whose clients have included computer and networking manufacturers and customers, software development firms, and leading-edge governmental research institutions. Dr. Stallings received the Ph.D. degree in computer science from M.I.T. and the B.S. degree in electrical engineering from Notre Dame. All of his Prentice Hall titles can be found at the Prentice Hall web site, http://www.prenhall.com.



ISDN and Broadband ISDN with Frame Relay and ATM, 4/e

William Stallings

ISBN : 9788131705636
Copyright : 1989

About the Book

This book provides a comprehensive, authoritative overview of the technology and standards of ISDN and Broadband ISDN. It is the only textbook treatment of ISDN and comes complete with numerous pedagogical features.

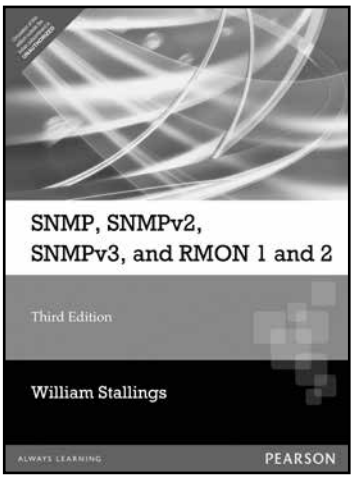
Features

- Presents the most complete and authoritative exploration of ISDN available in a text of this kind.
- Provides thorough coverage of Asynchronous Transfer Mode (ATM) including the new technology, standards, and other developments in this leading-edge area.
- Provides a discussion of frame relay that incorporates the most important advances in both technology and standards in this area crucial to ISDN and private networks.
- Provides a full treatment of standards, the key determining factor in ISDN and B-ISDN. Students will gain a valuable understanding of the various standards, including, among others:
- ITU-T recommendations.
- Frame Relay Forum specifications.
- ATM Forum specifications.
- Contains a wealth of pedagogical features (e.g. homework problems, glossary, list of acronyms, and chapter summaries) to facilitate learning, making this the only true textbook-style treatment of ISDN.

New and/or revised in this edition

- Includes new material on xDSL and ADSL as well as ATM traffic and on the available bit rate (ABR) service of ATM.
- Provides updated coverage of ITU-T standards and ATM Forum standards.

Contents



SNMP, SNMPv2, SNMPv3, and RMON 1&2, 3/e

William Stallings

ISBN : 9788131702307
Copyright : 1998

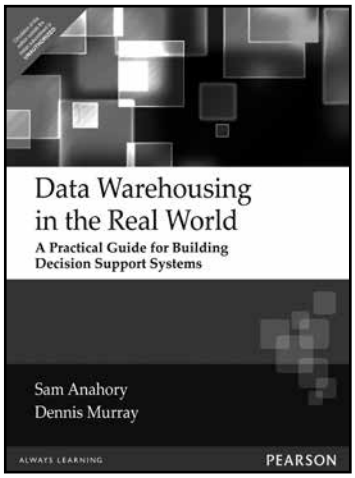
About the Book

This book is the definitive guide to SNMP-based network and internetwork management for network administrators, maangers, and designers. Concise, focusing on practical issues, and completely up to date, it covers SNMPv1, SNMPv2 and the most recent SNMPv3, as well as RMON1 and RMON2—all of which are currently deployed in LANs and WANs. With this book, you will be better equiped to determine your network management needs, gain insight into design issues, and obtain the necessary understanding to evaluate available SNMP-based products. The author presents helpful background information, including an overview of network management requirements and an explanation of fundamentals such as network management architecture; performance, fault, and accounting monitoring; and configuration and security control.

Features

- This book provides a comprehensive introduction to SNMP-based network and internetwork management.
- This book is a survey of network management technology and techniques
- It presents the original SNMP family of standards, which is still the most widely deployed version.
- This book discusses critical design issues and explores approaches to meeting communication requirements.

Contents



Data Warehousing in the Real World: A Practical Guide for Building Decision Support Systems

Sam Anahory • Dennis Murray

ISBN : 9788131704592
Copyright : 1997

About the Book

Data warehouses are the primary means by which businesses can gain competitive advantage through analyzing and using the information stored in their computerized systems. Data Warehousing in the Real World provides comprehensive guidelines and techniques for the delivery of decision support solutions using open-systems data warehouses. Written by practitioners for practitioners, this book describes each stage of the implementation process in detail.

Read this book to:

- Learn the fundamentals of designing large scale data warehouses using relational technology
- Take advantage of product-independent comprehensive guidelines which cover all the issues you need to take into account when planning and building a data warehouse
- Apply to your own situation the examples of real-life solutions taken from a variety of different business sectors
- Make use of the templates for project-plans, system architectures and database designs

Features

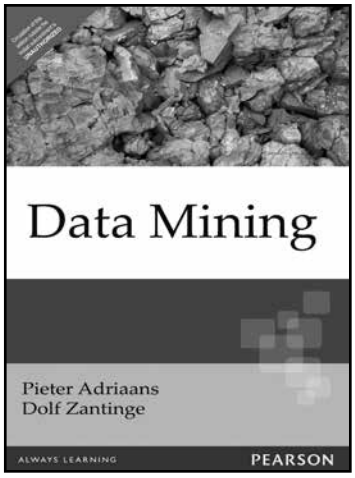
- learn the fundamentals of designing large-scale data warehouses using relational technology
- take advantage of product-independent comprehensive guidelines which cover all the issues you need to take into account when planning and building a data warehouse
- benefit from the authors' experience distilled into helpful hints and tips
- apply to your own situation the examples of real-life solutions taken from a variety of different business sectors
- make use of the templates for project-plans, system architectures and database designs.

Contents

About the Authors

Sam Anahory is Director of Systems Integration at SHL Systemhouse, an MCI Company, where he runs their Data Warehousing practice, delivering end-to-end data warehousing business solutions to clients.

Dennis Murray is the Principal Consultant responsible for Large Scalable Solutions in Oracle Corporation's Europe, Middle East and Africa advanced technologies group..



Data Mining

Pieter Adriaans • Dolf Zantinge

ISBN : 9788131707173
Copyright : 1996

About the Book

Data Mining deals with discovering hidden data and unexpected patterns and rules in large databases. It can bring significant gains to organizations, for example, through better-targeted marketing and enhanced internal performance. This is the first book to offer a comprehensive introduction to data mining. Its aim is to provide essential insights and guidelines to help you make the right decisions when setting up a data mining environment. It offers clear answers to questions such as:

- What is Data mining?
- Which techniques are suitable for my data?
- How do I set up a data mining environment?
- How do I justify the costs?

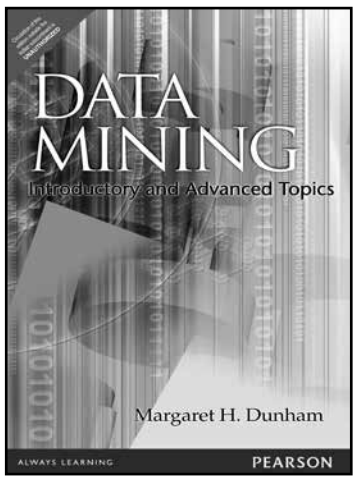
The whole data mining process, including data selection, cleaning, coding, different pattern recognition techniques and reporting is illustrated by means of an extensive case study and numerous examples.

Contents

- Introduction
- What is Learning?
- Data Mining and the Data Warehouse
- The Knowledge Discovery Process
- Setting Up a KDD Environment
- Some Real - life Applications
- Some Formal Aspects of Learning Algorithms

About the Authors

Pieter Adriaans is a director of Syllogic, where he is responsible for the development of tools for the management of client/server systems and databases. **Dolf Zantinge** has broad experience in setting up large client/server projects. He is also a director of Syllogi



Data Mining: Introductory and Advanced Topics

Margaret H. Dunham

ISBN : 9788177587852
Copyright : 2006
Pages : 328

About the Book

Market: For undergraduate courses in Computer Science & Information Technology / MCA. In this book the author provides the reader with a comprehensive coverage of data mining topics and algorithms. Data base perspective is maintained throughout the book which provides students with a focused discussion of algorithms, data structures, data types and complexity of algorithms and space. It also emphasizes the use of data mining concepts in real-world applications with large database components.

Features

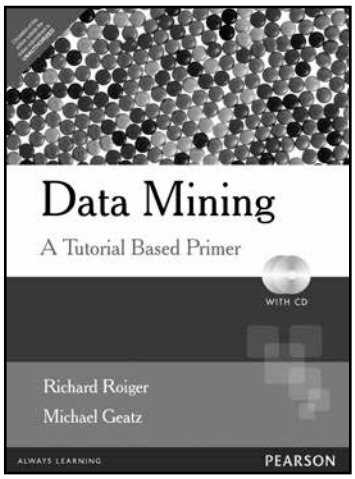
- Covers advanced topics such as Web Mining and Spatial/Temporal Mining.
- Includes succinct coverage of Data Warehousing, OLAP, Multidimensional Data, and Preprocessing.
- Concise coverage on distributed, parallel, and incremental algorithms.
- Provides case studies.
- Offers clearly written algorithms to better understand techniques.
- Algorithms are presented in a pseudocode.
- Includes a reference on how to use Prototypes and DM products.

Contents

About the Authors

Margaret H. Dunham received the B.A. and the M.S. in mathematics from Miami University in Oxford, Ohio. She earned the Ph.D. degree in computer science from Southern Methodist University. Professor Dunham's research interests encompass main memory databases, data mining, temporal databases, and mobile computing. She is currently an Associate Editor for IEEE Transactions on Knowledge and Data Engineering. She has published numerous technical papers in such research areas as database concurrency control and recovery, database machines, main memory databases, and mobile computing.

S. Sridhar is currently the director of Arunai Engineering College, Tiruvannamalai, Tamil Nadu, India.



Data Mining: A Tutorial Based Primer

Richard Roiger • Michael Geatz

ISBN : 9788131715123
Copyright : 2003
Pages : 404

INCLUDES CD

About the Book

This primer on data mining provides an introduction to the principles and techniques for extracting information from a business-minded perspective. A basic familiarity with the field of data mining concepts is built and then enhanced via 13 data mining tutorials. Upon completion of these tutorials, students will be fully able to data mine. This book is appropriate for students of CS, MIS, and Information Technology.

Features

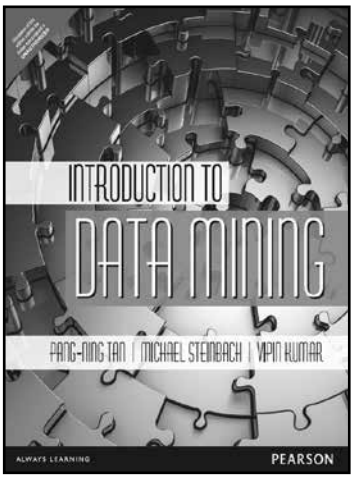
- Has a learn by doing approach to teaching the basic theory and how-to of data mining.
- Includes numerous Data Mining Sessions (step by step instructions) throughout the chapters.
- The software that accompanies the book (an Excel based add-on) gives first hand experience with the data mining process.
- Numerous business, science and health data sets are introduced and used in the text. The actual data sets are included in the accompanying CDROM.
- End of chapter material includes basic chapter review questions, more data mining projects, and theoretical based questions.
- Includes introduction to closely related topics: data warehouse design, rule based expert systems, intelligent agents

Contents

About the author

Richard J. Roiger is a professor of computer science at Minnesota State University, Mankato and a senior software engineer for Information Acumen Corporation (www.infoacumen.com). Richard received a Ph.D. degree in Computer Science from the University of Minnesota in 1991.

Michael W. Geatz is currently President of Biosensor Research Institute of America Inc. (dba Giant Medical). Formerly, he was Vice President of PulseTracer Technologies Inc., a division of $1.5 billion Zynik Capital Corp. and a software consultant to the financial and medical device industries



Introduction to Data Mining

Pang-Ning Tan • Vipin Kumar • Michael Steinbach

ISBN : 9789332518650
Copyright : 2014
Pages : 736

About the Book

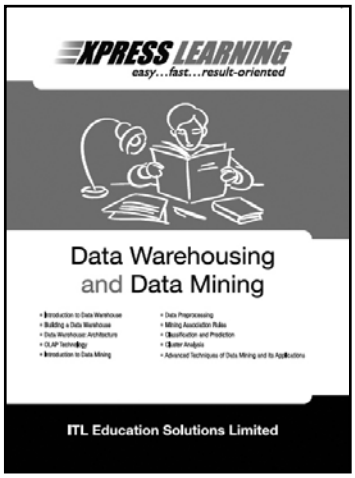
Introduction to Data Mining presents fundamental concepts and algorithms for those learning data mining for the first time. Each concept is explored thoroughly and supported with numerous examples. The text requires only a modest background in mathematics.

Each major topic is organized into two chapters, beginning with basic concepts that provide necessary background for understanding each data mining technique, followed by more advanced concepts and algorithms.

Features

- Provides both theoretical and practical coverage of all data mining topics.
- Includes extensive number of integrated examples and figures.
- Offers instructor resources including solutions for exercises and complete set of lecture slides.
- Assumes only a modest statistics or mathematics background, and no database knowledge is needed.
- Topics covered include; predictive modeling, association analysis, clustering, anomaly detection, visualization.

Contents



Express Learning - Data Warehousing and Data Mining

ITL Education Solutions Limited (ITL ESL)

ISBN : 9788131773406
Copyright : 2012

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

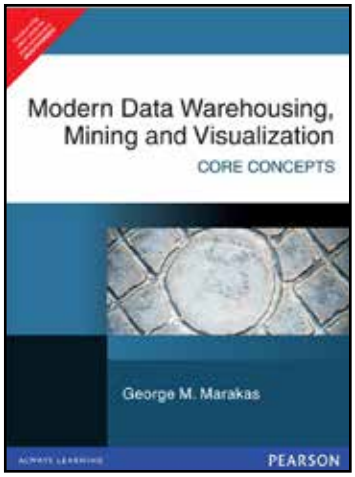
Features

- Presented in a question and answer format following the examination pattern
- Covers all key topics in the syllabus
- Designed to make learning fast and effective
- Precise and up-to-date
- Helps students excel in their examinations

Contents

About the Author

ITL Education Solutions Limited (ITL ESL) is a part of the ITL group, which has operations all over the world with a significant presence in education and IT-enabled services. It specializes in handling educational projects in IT domains with a dedicated R&D wing of industry experts that helps in designing and developing content.



Modern Data Warehousing, Mining, and Visualization: Core Concepts

George M. Marakas

ISBN : 9788131708767
Copyright : 2003

About the Book

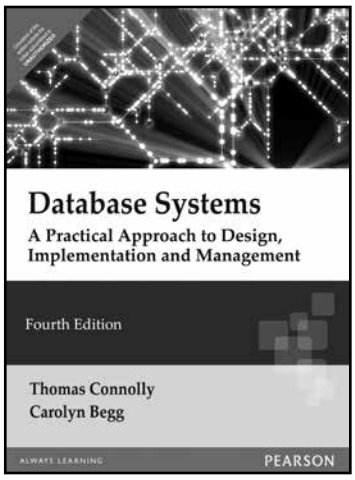
Taking a multidisciplinary user/manager approach, this text looks at data warehousing technologies necessary to support the business processes of the twenty-first century. Using a balanced professional and conversational approach, it explores the basic concepts of data mining, warehousing, and visualizationâ€"with an emphasis on both technical and managerial issues and the implication of these modern emerging technologies on those issues. Data mining and visualization exercisesâ€"using an included fully-enabled, but time-limited version of Megaputer's PolyAnalyst and TextAnalyst data mining and visualization softwareâ€"give students hands-on experience with real-world applications.

Features

- NEW - A â€œreal-worldâ€ user's perspective, rather than a designer's perspectiveâ€"Emphasizes application and implementation over design and development in all topic areas.
- NEW - Chapter Mini-casesâ€"All derived from actual situations. Each mini-case makes specific reference to each of the key players in the scenario.
- NEW - Extensive use of graphics and examplesâ€"For each concept introduced. Wherever possible, the diagrams contained in each chapter are not only referenced in the body of the text, but are positioned in such a way that they serve as a repeated visual reference for the textual discussion.
- NEW - Narrative Vignettesâ€"Presents a situation using a fictitious cast of characters to further clarify concepts associated with the process of making a decision.

- NEW - Questions for Reviewâ€"Each chapter contains a list of 10 to 20 questions, with sample responses. Each question is phrased in such a manner that a detailed and precise answer can be readily found in the chapter.
- NEW - Further Discussionâ€"Several questions at the end of each chapter ask for expanded answers on the material presented.

Contents



Database Systems: A Practical Approach to Design, Implementation and Management, 4/e

Thomas M. Connolly • Carolyn Begg • Carolyn E. Begg

ISBN : 9788131720257
Copyright : 2008
Pages : 140

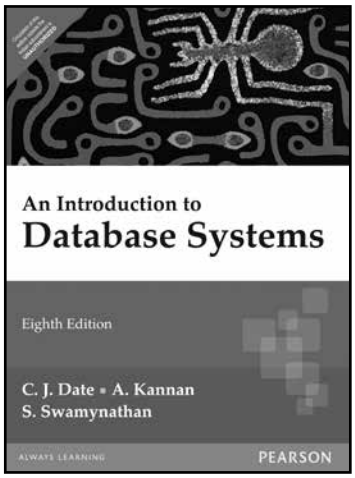
About the Book

This book places a strong emphasis on good design practice, allowing students to master design methodology in an accessible, step-by-step fashion. A clear introduction to design implementation and management issues, as well as an extensive treatment of database languages and standards, make this book an indispensable complete reference for database students and professionals. The book is designed to be used in database courses for technical and non-technical students.

Features

- Uses UML notation for ER diagrams.
- Database design methodology is explicitly divided into three phases: conceptual, logical, and physical. Each phase is described in a separate chapter with an example of the methodology working in practice.
- Extensive treatment of SQL in three tutorial style chapters.
- Comprehensive introduction to data warehousing, OLAP, and data mining.
- Extensive treatment of the Web as an emerging platform for database applications with many code samples for accessing databases from the Web including JDBC, SQLJ, ASP, ISP, and Oracle's PSP.

Contents



An Introduction to Database Systems, 8/e

C. J. Date • A. Kannan • S. Swamynathan

ISBN : 9788177585568
Copyright : 2006
Pages : 968

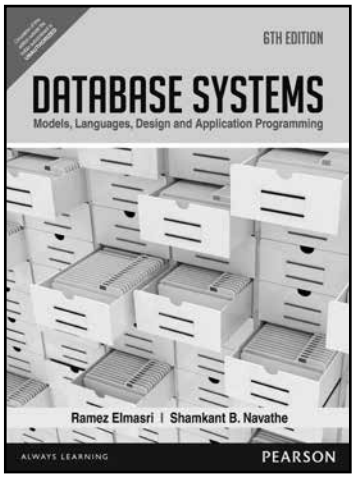
About the Book

An introduction to database systems provides a comprehensive introduction to the very large field of database systems. It furnishes a solid grounding in the foundations of database technology, while shedding some light on how the field is likely to develop in the future. This edition has been expanded and rewritten to stay current with database system trends and developments, however the overall emphasis remains on insight and understanding, and not just on formalisms.

Features

- SQL coverage has been upgraded to the level of current standard.
- Provides exceptionally strong and expanded coverage of the relational model.
- Material on types or domains has been expanded for wider coverage.
- Chapter 9 on Integrity has been completely rewritten for better understanding.
- Chapter 15 on Recovery and Chapter 16 on Concurrency provides extensive details.
- Includes careful analysis of some unorthodox conclusions regarding the ACID properties of transactions.
- Chapter 20 on Type Inheritance and chapter 23 on Temporal Databases have been completely rewritten to reflect latest research developments.M
- Chapter 27 on XML covers the relationship between databases and emerging XML standards.
- The appendices include An overview of the TransRelational Model, A BNF grammar for SQL expressions, A glossary of important abbreviations,acronyms and symbols used in the text and Storage Structures and Access Methods.

Contents



Database Systems: *Models, Languages, Design and Application Programming, 6/e*

Ramez A. Elmasri • Shamkant B. Navathe

ISBN : 9788131792476
Copyright : 2013
Pages : 1200

About the Book

Clear explanations of theory and design, broad coverage of models and real systems, and an up-to-date introduction to modern database technologies result in a leading introduction to database systems. With fresh new problems and a new lab manual, students get more opportunities to practice the fundamentals of design and implementation. More real-world examples serve as engaging, practical illustrations of database concepts. The Fifth Edition maintains its coverage of the most popular database topics, including SQL, security, data mining, and contains a new chapter on web script programming for databases.

Features

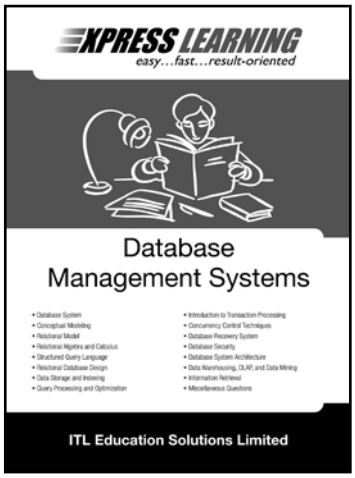
- This market-leading text serves as a valued reference for those who will interact with databases in future courses and careers. Renowned for its accessible, comprehensive coverage, it provides a solid introduction to database systems and applications.
- Includes current database application areas of GIS, genome, and digital libraries
- The presentation of XML has been expanded and updated

Contents

About the Authors

Ramez A. Elmasri is a professor in the department of Computer Science and Engineering at the University of Texas at Arlington. He holds M.S. and Ph.D. degrees in Computer Science from Stanford University, and a B.S. degree in Electrical Engineering from Alexandria University. He is known for his work on conceptual database modeling, temporal database design and indexing, database query languages and interfaces, and systems integration.

Shamkant B. Navathe is a professor and the head of the database research group at the College of Computing, Georgia Institute of Technology, Atlanta. He is well-known for his work on database modeling, database conversion, database design, distributed database allocation, and database integration. He has worked with IBM and Siemens in their research divisions and has been a consultant to various companies including Digital, CCA, HP and Equifax. He was the General Co-chairman of the 1996 International VLDB (Very Large Data Base) conference in Bombay, India.



Express Learning – Database Management Systems

ITL ESL

ISBN : 9788131760802
Copyright : 2012
Pages : 336

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

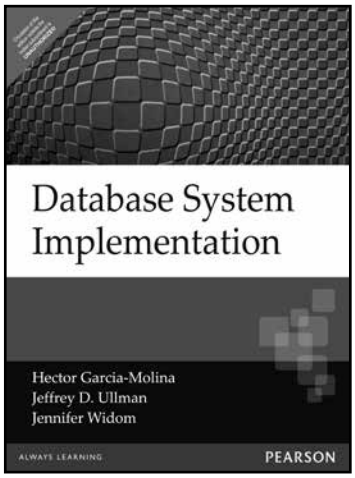
Features

- Presented in a question and answer format following the examination pattern
- Covers all key topics in the syllabus
- Designed to make learning fast and effective
- Precise and up-to-date
- Helps students excel in their examinations

Contents

About the Author

ITL Education Solutions Limited (ITL ESL) is a part of the ITL group, which has operations all over the world with a significant presence in education and IT-enabled services. It specializes in handling educational projects in IT domains with a dedicated R&D wing of industry experts that helps in designing and developing content.



Database System Implementation

Hector Garcia-Molina • Jeffrey D. Ullman • Jennifer Widom

ISBN : 9788131704134
Copyright : 2000

About the Book

Three well-known computer scientists at Stanford University—Hector Garcia-Molina, Jeffrey D. Ullman, and Jennifer Widom—have written one of the most comprehensive books on database system implementation. Hector Garcia-Molina pioneered this book at Stanford as a second database systems course for computer science majors and industry—based professionals. It focuses on the implementation of database systems, including storage structures, query processing, and transaction management. Database System Implementation is valuable as an academic textbook or a professional reference. This text covers a broad spectrum of knowledge and technology. This carefully class-tested, highly readable presentation provides students or professionals with the next level of study. Written form the point of view of the database designer, user, and application programmers, this book provides practical advice form well-known experts on how to implement state-of-the-art database systems.

Features

- Provides extensive coverage of query processing, including major algorithms for execution of queries and techniques for optimizing queries.
- Covers information integration, including warehousing and mediators, OLAP, and data-cube systems.
- Explains error-correction in RAID disks and covers bitmap indexes, data mining, data statistics, and pointer swizzling.
- Supports additional teaching materials found on the book's Web page at http://www-db.stanford.edu/-ullman/dbsi.html

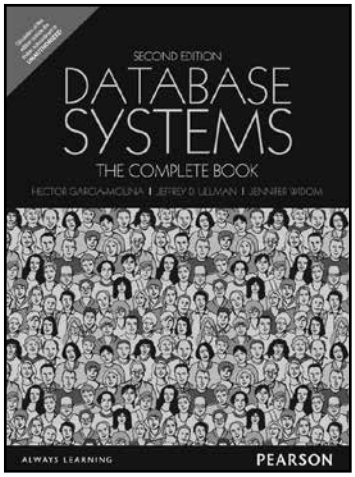
Contents

About the Authors

Jeffrey D. Ullman is the Stanford W. Ascherman Professor of Computer Science at Stanford University. He is the author or co-author of 16 books, including Elements of ML Programming (Prentice Hall 1998). His research interests include data mining, information integration, and electronic education.

Jennifer Widom is Associate Professor of Computer Science and Electrical Engineering at Stanford University. Her research interests include query processing on data streams, data caching and replication, semistructured data and XML, and data warehousing.

Hector Garcia-Molina is the L. Bosack and S. Lerner Professor of Computer Science and Electrical Engineering, and Chair of the Department of Computer Science at Stanford University.



Database Systems: The Complete Book , 2/e

Hector Garcia-Molina • Jeffrey D. Ullman • Jennifer Widom

ISBN : 9789332518674
Copyright : 2002
Pages : 1148

About the Book

Written by well-known computer scientists, this introduction to database systems offers a comprehensive approach, focusing on database design, database use, and implementation of database applications and database management systems.

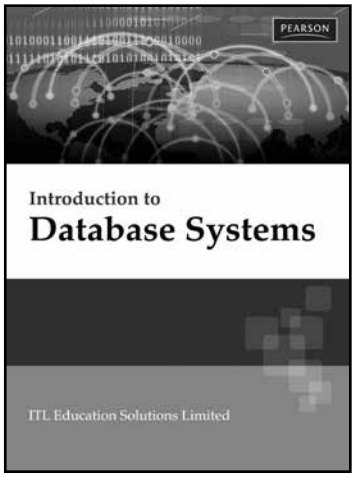
The first half of the book provides in-depth coverage of databases from the point of view of the database designer, user, and application programmer. It covers the latest database standards SQL:1999, SQL/PSM, SQL/CLI, JDBC, ODL, and XML, with broader coverage of SQL than most other texts. The second half of the book provides in-depth coverage of databases from the point of view of the DBMS implementor. It focuses on storage structures, query processing, and transaction management. The book covers the

main techniques in these areas with broader coverage of query optimization than most other texts, along with advanced topics including multidimensional and bitmap indexes, distributed transactions, and information integration techniques.

Features

- Many real-world examples.
- Extensive treatment of database modeling-Includes detailed and separate explanations of how to use E/R and ODL to design databases.
- Excellent, up-to-date and detailed coverage of SQL-Includes coverage of object-relational systems and many aspects of the new SQL:1999 standard.
- Discussion of the technologies used to connect database programming with C or Java code-Includes discussions of SQL/PSM, SQL/CLI, and JDBC.
- Coverage of advanced issues important to database designers and users.
- Discussions of how to successfully plan a database application before building it.
- Coverage of topics such as designing storage structures and implementing a variety of indexing schemes.
- Extensive coverage of query processing and optimization.
- Comprehensive coverage of transaction processing mechanisms for concurrency control and recovery, including distributed and long-duration transactions

Contents



Introduction to Database Systems

ITL Education Solutions Limited

ISBN : 9788131731925
Copyright : 2010
Pages : 580

About the Book

The book deals with implementation, design and application of DBMS and complicated topics such as relational algebra and calculus, and normalization are explained in a very simple manner.

Features

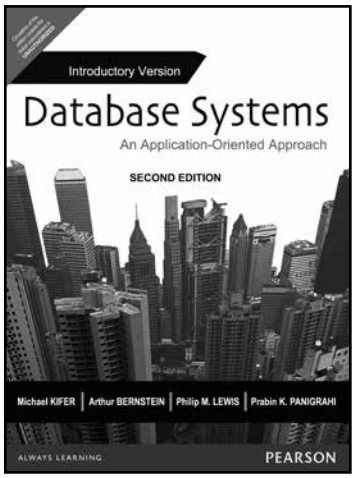
- Includes chapter objectives at the beginning of each chapter.
- Each chapter has 10 MCQ'S and 10 Fill in the Blanks
- More than 250 descriptive questions.
- More than 70 practical questions.
- Each chapter at the end has a list of Key terms along with the summary.
- Two chapters with case study each on Hospital management and Railway reservation system.
- Running marginalia with additional information on the subject.

Contents

13. Database System Architectures
14. Data Warehousing, OLAP, and Data Mining
15. Information Retrieval
16. Object-Based Databases
17. XML and updated Appendices
18. Leading Database Systems

About the Author

ITL Education Solution Limited (ITL ESL) is a part of ₹ 2000 million ITL group which has operations all over the world with significant presence in computer education and IT-enabled sevices. It specializes in handling IT implementation projects in various IT domains with a dedicated R7D wing of industry experts that helps in designing and developing content.



Database Systems: An Application-Oriented Approach, Introductory Version, 2/e

Michael Kifer • Philip Lewis • Arthur Bernstein • Prabin Panigrahi

ISBN : 9788131703748
Copyright : 2007
Pages : 624

About the Book

Designed for students learning databases for the first time, Database Systems: An Application-Oriented Approach, Introductory Version, 2/e,, presents the principles underlying the design and implementation of databases and their applications. This book consists of nine core chapters, including separate chapters on triggers (Chapter 7) and using SQL in an application (Chapter 8) that recognize the growing importance of application development in building database systems. Additional chapters (Chapters 11-17) cover database tuning, transaction processing, query processing, object-oriented databases, and XML databases and provide a variety of ways to enrich students' introduction to databases.

Features

- An application-oriented introduction to database concepts
- SQL updated to the latest standard
- Coverage of both Entity-Relationship modeling and the Unified Modeling Language
- Discussions of software-engineering issues related to implementing transaction-processing applications
- Detailed case studies providing hands-on experience in application design and programming
- In-depth coverage of XML, object-oriented databases, and database tuning

Contents

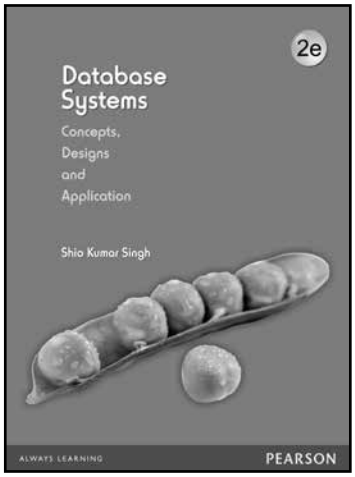
About the Authors

Michael Kifer is a professor in the Department of Computer Science at the State University of New York at Stony Brook. His interests include database systems, knowledge representation, and Web information systems

Arthur Bernstein is also a professor in the Department of Computer Science at the State University of New York at Stony Brook. His research focuses on transaction processing, Web services and concurrency, and he has published numerous articles in these areas.

Philip Lewis is a leading professor in the Department of Computer Science at the State University of New York at Stony Brook. With interests in database systems, transaction processing, and concurrency.

Prabin Panigrahi is a professor in the Department of Information Systems at the Indian Institute of Management at Indore, India. His interests include database systems, data mining, data warehousing, and management information systems.



Database Systems: Concepts, Design and Applications, 2/e

Shio Kumar Singh

ISBN : 9788131760925
Copyright : 2011
Pages : 944

About the Book

This second edition of this bestselling title is a perfect blend of theoretical knowledge and practical application. It progresses gradually from basic to advance concepts in database management systems, with numerous solved exercises to make learning easier and interesting. New to this edition are discussions on more commercial database management systems.

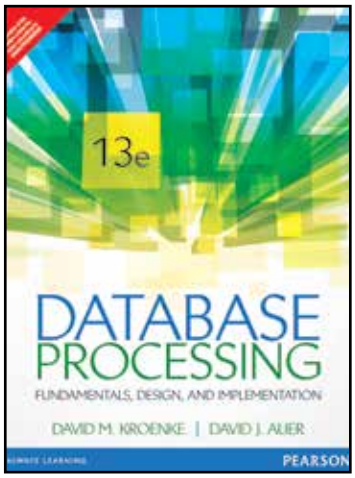
Features

- Step-by-step and easy methodologies for conceptual and logical database designs covering functional dependency, decomposition, normalization, relational algebra, relational calculus, query processing and optimization.
- Contains review questions, multiple-choice questions, fill in the blanks, and true or false exercises with answers at the end of the book.
- Extensive use of flow-charts, block-diagrams, ER diagrams and bulleted points to make concepts clear
- Includes emerging database concepts such as parallel databases, distributed database management, decision support systems, data warehousing and data mining, Web-enabled databases, mobile databases, multimedia databases, spatial databases, and digital libraries
- Discusses the most number of commercial DBMSs
  - IBM DB2
  - ORACLE
  - Microsoft SQL Server
  - Microsoft Access
  - MySQL
  - Teradata RDBMS

Contents

About the Author

S. K. Singh is Head of Maintenance Services Electrical & Telecommunication in tata Steel. He holds engineering degree in Electrical and Electronics Branches and M.Sc. (Engg) in Power Electronics. He has over 28 years of academic and professional experience in design, development, and implementation of Process Control automation, IT and Telecom solutions, Process Improvement concepts (Six-sigma, TPM, TOC), and Training & Development. The author of several books, he has been conferred the Eminent Engineer and Distinguished Engineer awards by The Institution of Engineers (India) for his contributions to the field of Computer Science and Engg. He is a Fellow of the Institution of Engineers (India) and also a Chartered Engineer.



Database Processing, 13/e

David M. Kroenke • David Auer

ISBN : 9789332549951
Pages : 640

NEW

About the Book

Database Processing reflects a new teaching method that gets students straight to the point with its thorough and modern presentation of database processing fundamentals.
The thirteenth edition has been thoroughly updated to reflect the latest software.

Features

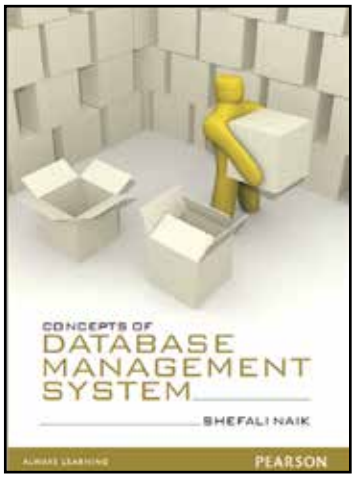
- Spiral approach to database design. Rather than teach database design once from the data models, this text gives professors a significant pedagogical opportunity to teach database design three times—once from each of the three sources:
- Existing data from spreadsheets, data files, and database extracts.
- The development of new information systems projects.
- The need to redesign an existing database to adapt to changing requirements.
- Early Introduction of SQL. This text provides an early introduction to SQL data manipulation language (DML) SELECT statements. By presenting SQL SELECT statements in Chapter 2, students learn early in the class how to query data and obtain results, seeing firsthand how database technology will be useful to them.
- The Latest Software. This edition has been updated to reflect the latest database software, including Access, SQL Server, and MySQL.
- NEW. Material on big data and the evolving NoSQL movement has been moved to Chapter 12 and expanded upon. Big data is the theme for the chapter. New material on virtualization, cloud computing, and the development of non-relational unstructured data stores (such as Cassandra and HBase) and the Hadoop Distributed File System (HDFS) is also included
- NEW. An independent Case Question set (in each chapter).
- NEW. Microsoft Office 2013. This book has been revised to update all references to Microsoft Access and other Microsoft Office products (e.g., Microsoft Excel) to the recently released Microsoft Office 2013 versions.
- NEW. Microsoft SQL Server 2012. Although most of the topics covered are backward compatible with Microsoft SQL Server 2008 R2 and Microsoft SQL Server 2008 R2 Express edition, all material in the book now uses SQL Server 2012 in conjunction with Office 2013, exclusively.
- NEW. Oracle MySQL 5.6. The new edition has been updated to include Oracle MySQL 5.6, which is the current generally available (GA) release of MySQL. The authors also now use the MySQL Installer for Windows for installations on computers with the Windows operating system.
- NEW. Big Data and the Not Only SQL movement. Coverage of Big Data and the Not Only SQL movement has been added.
- NEW. Although Oracle's Oracle Database 11g Release 2 remains the version of Oracle Database discussed in the book, all Oracle Database 11g material have been updated to reflect use of the current version of the Oracle SQL Developer GUI tool.

Contents

About the Authors

David M. Kroenke has more than 35 years' experience in the computer industry. He began as a computer programmer for the U.S. Air Force, working both in Los Angeles and at the Pentagon, where he developed one of the world's first DBMS products while part of a team that created a computer simulation of World War III. That simulation served a key role for strategic weapons studies during a 10-year period of the Cold War.

David J. Auer has more than 30 years' experience teaching college-level business and information systems courses and for the past 20 years has worked professionally in the field of information technology. He served as a commissioned officer in the U.S. Air Force, with assignments to NORAD and the Alaskan Air Command in air defense operations. He later taught both business administration and music classes at Whatcom Community College and business courses for the Chapman College Residence Education Center at Whidbey Island Naval Air Station. He was a founder of the Puget Sound Guitar Workshop (now in its 41st year of operations).



Concepts of Database Management System

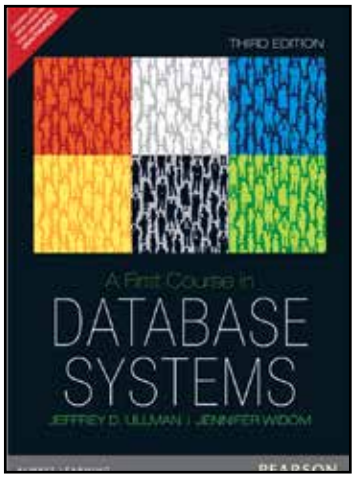
Shefali Naik

ISBN : 9789332526280
Copyright : 2014

About the Book

Concepts of Database Management System is designed to meet the syllabi requirements of undergraduate students of computer applications and computer science. It describes the concepts in an easy-to-understand language with sufficient number of examples.
The overview of emerging trends in databases is thoroughly explained. A brief introduction to PL/SQL, MS-Access and Oracle is discussed to help students get a flavor of different types of database management systems.

Contents



A First Course in Database Systems, 3/e

Jeffrey D. Ullman • Jennifer Widom

ISBN : 9789332535206
Copyright : 2014
Pages : 520

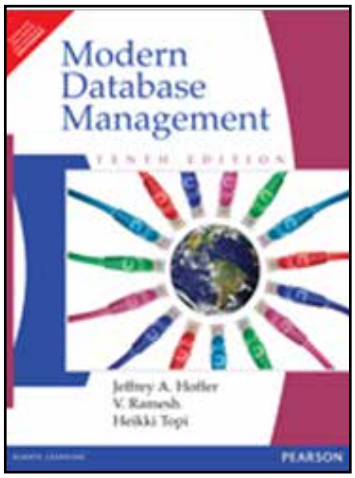
About the Book

Written by well-known computer scientists, this accessible and succinct introduction to database systems focuses on database design and use. The authors provide in-depth coverage of databases from the point of view of the database designer, user, and application programmer, leaving implementation for later courses. It is the first database systems text to cover such topics as UML, algorithms for manipulating dependencies in relations, extended relational algebra, PHP, 3-tier architectures, data cubes, XML, XPATH, XQuery, XSLT.

Features

- Large variety of real-world examples ensure the presentation is readable and engaging.
- Extensive treatment of database modeling teaches about this important first step of the planning process.
- Coverage of advanced issues important to database designers and users includes discussions of views, integrity constraints, assertions, triggers, transactions, authorization, and recursion in SQL: 1999.
- Discussion of how to successfully plan a database application before building it reflects how these plans are developed in the real world.
- Extensive exercises in almost every section provide students with the opportunity to practice and apply the concepts they've learned in each chapter.

Contents



Modern Database Management, 10/e

Jeffrey A. Hoffer • Heikki Topi • V Ramesh

ISBN : 9788131761434
Copyright : 2011
Pages : 620

About the Book

The tenth edition of the popular Modern Database Management has been expanded and upgraded to make it more relevant to improved managerial practices, database design tools and methodologies, and database technology. In addition to the expanded coverage of SQL with frequently used components, the text includes new figures to graphically depict the set-processing logic of SQL queries, thereby providing new tools to students.

Features

- A separate chapter on data quality and integration, which are extremely important with national and international regulations such as the Sarbanesâ€“Oxley Act, Basel II, COSI, and HIPAA
- Specific examples of how to connect to databases from popular programming languages such as Java and VB.NET as well as Web development languages such as Java Server Pages (JSP), ASP.NET, and PHP
- New and updated field exercises, case studies, and a set of hands-on mini-cases that could be assigned to an individual or to a team
- The problems and exercises are arranged in an increasing order of difficulty to make it easier for instructors and students to select problems and exercises for practice and assignments
- Standard data-naming conventions are used throughout the book to make it easier for students to distinguish data elements from conceptual to physical forms
- New screen captures to reflect the latest database technologies and an updated Web Resources section in each chapter

Contents

Database Systems Using Oracle, 2/e

Nilesh Shah

ISBN : 9789332549722
Pages : 456

NEW

About the Book

Updated to cover Oracle 9i, this text first introduces students to relational database concepts and database designing techniques, then teaches them how to design and implement accurate and effective database systems. With its subsequent in-depth coverage of SQL (the universal query language for relational databases) and PL/SQL (Oracle's procedural language extension to SQL), this text serves not only as an introductory guide but also as a valuable future reference. Part IV, Advanced Topics, allows students to further understand and utilize Oracle 9i architecture and administration.

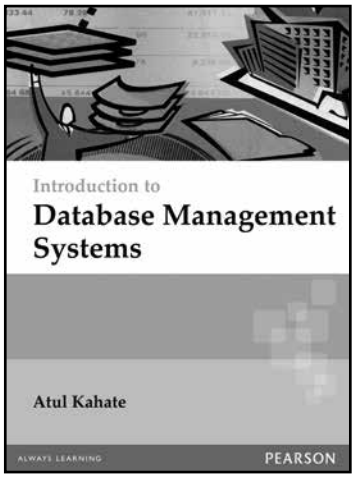
Features

- NEW - Updated material for Oracle 9 i—Introduces the new features of Oracle 9i.
- NEW - More examples—Provided throughout the text; coding examples are replaced by more than 250 actual screen shots.
- NEW - Enhanced material—Provides new and enhanced information all existing topics, including Oracle's data dictionary; and updated ERD.
- NEW - New chapters—Includes Database Administration with Enterprise Manager and a new chapter on database connectivity with Java/C++ and SQLJ.
- NEW - New lesson on SQL*Plus—Includes exercises for SQL workshet and iSQL*Plus environments; these add to the already numerous hands-on exercises and lab activities for each chapter.
- Two sample databases—Used throughout the book as examples and for lab activities; the first is a typical college student's database with demographic, schedule, and registration information; the second is a corporation's employee database with demographic and job-related data.
- Versatility—Covers the SQL and PL/SQL features that work with any version of Oracle.
- SQL Review section—Provides a review of SQL statements covered in chapters 3-9, and includes a sample database.

Contents

About the Author

Nilesh D. Shah, DeVry College of Technology and Monroe College



Introduction to Database Management Systems

Atul Kahate

ISBN : 9788131700785
Copyright : 2004
Pages : 536

About the Book

Designed specifically for a single semester, first course on Database Systems, there are 4 aspects that differentiate our book from the rest.

- Simplicity – Normally, the technology of database systems can be quite difficult to understand. There are so many terms, acronyms and buzzwords associated with the technology that people find highly complicated. This book explains each of these with very simple examples, lucid language and a lot of illustrations.
- Coverage – The book covers all the essential aspects of database systems, and also covers the areas of RDBMS. There are very few books, which cover all the theory and practice of database systems. This book covers both these aspects.
- Illustrative approach – The book contains over 400 diagrams – about one per page. This makes this book unique in terms of its visual approach. With this, even the most difficult concepts become a lot easier to understand.
- Modern topics – The book covers all the modern topics, such as OODBMS, database systems and the Internet, Data warehousing, Mobile databases, Multimedia databases, Deductive databases.

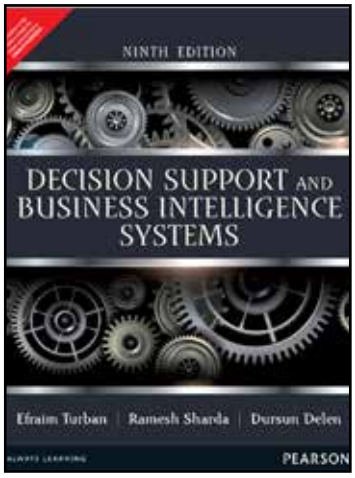
Features

- Detailed coverage of Database models, theory and architectures
- Focus on Transaction management and Concurrency issues
- A separate chapter on Database security
- Coverage of Object technology and OODBMS
- Distributed databases explained in depth

- Explanation of Data warehousing, Data mining, and OLAP
- Liberal use and explanation of SQL
- Unique appendices on Data Structures, Sorting and Searching, Database Management with Access and Case Studies with real life programs in COBOL, DB2 and C.

Contents

1. File Systems
2. An Introduction to Database Systems
3. The Relational Model
4. Database Design
5. Transaction Processing and Management
6. Database Security
7. Query Execution and Optimisation
8. Distributed Databases
9. Decision Support Systems, Data Warehousing and Data Mining
10. Object Technology and DBMS
11. Advanced Topics in DBMS



Decision Support and Business Intelligence Systems, 9/e

Efraim Turban

ISBN : 9789332518254
Copyright : 2014
Pages : 676

About the Book

Appropriate for all courses in Decision Support Systems (DSS), computerized decision making tools, and management support systems.

Decision Support and Business Intelligence Systems 9e provides the only comprehensive, up-to-date guide to today's revolutionary management support system technologies, and showcases how they can be used for better decision-making.

The 9th edition focuses on Business Intelligence (BI) and analytics for enterprise decision support in a more streamlined book.

Features

- Introduction of management support systems (MSS) technologies.
- BI and analytics for enterprise decision support.
- Extensive supply chain and ERP coverage.
- Comprehensive coverage of data warehousing.
- Comprehensive coverage of knowledge-based decision support.
- Organizational and societal impacts.
- Detailed coverage of implementation and integration.
- Links to Teradata University Network (TUN).
- Software Support.

Contents

Part I: Decision Support and Business Intelligence

Chapter 1: Decision Support Systems and Business Intelligence

Part II: Computerized Decision Support

Chapter 2: Decision Making, Systems, Modeling, and Support

Chapter 3: Decision Support Systems Concepts, Methodologies, and Technologies: An Overview

Chapter 4: Modeling and Analysis

Part III: Business Intelligence

Chapter 5: Data Mining for Business Intelligence

Chapter 6: Artificial Neural Networks for Data Mining

Chapter 7: Data Warehousing

Chapter 8: Business Performance Management

Part IV: Collaboration, Communication, Group Support Systems, and Knowledge Management

Chapter 9: Collaborative Computer-Supported Technologies and Group Support Systems

Chapter 10: Knowledge Management

Part V: Intelligent Systems

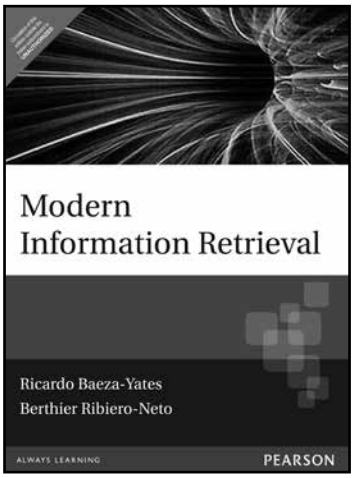
Chapter 11: Artificial Intelligence and Expert Systems

Chapter 12: Advanced Intelligent Systems

Chapter 13: Management Support Systems: Emerging Trends and Impacts

About the Author

Efraim Turban
Ramesh Sharda, Oklahoma State University
Dursun Delen, Oklahoma State University



Modern Information Retrieval

Ricardo Baeza-Yates • Berthier Ribiero-Neto

ISBN : 9788131709771
Copyright : 1999
Pages : 534

About the Book

We live in the information age, where swift access to relevant information in whatever form or medium can dictate the success or failure of businesses or individuals. The timely provision of relevant information with minimal 'noise' is critical to modern society and this is what information retrieval (IR) is all about. It is a dynamic subject, with current changes driven by the expansion of the World Wide Web, the advent of modern and inexpensive graphical user interfaces and the development of reliable and low-cost mass storage devices. **Modern Information Retrieval** discusses all these changes in great detail and can be used for a first course on IR as well as graduate courses on the topic. The book comprises two portions which complement and balance each other. The core portion includes nine chapters authored or co-authored by the designers of the book. The second portion, which is fully integrated with the first, is formed by six state-of-the-art chapters written by leading researchers in their fields. From IR models to indexing text, from IR visual tools and interfaces to the Web, from IR. multimedia to digital libraries, the book provides both breadth of coverage and richness of detail. It is our hope that, given the now clear relevance and significance of information retrieval to modern society. the book will contribute to further disseminate the study of the discipline at information science, computer science, and library science departments throughout the world.

Features

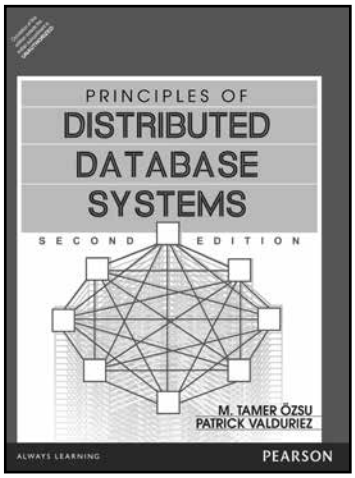
- Text IR - all the main IR models, query operations, text operations, indexing and searching (three of them co-authored with Gonzalo Navarro or Nivio Ziviani)
- The Web - challenges, measures and models, search engines, directories, query languages, metasearches and trends
- Parallel and Distributed IR - algorithms and architectures (Eric Brown)
- User Interfaces and Visualization - the main interface paradigms for query formation and visualization of results (Marti A. Hearst)
- Multimedia IR: Models and Languages - including MULTOS and SQL3 (Elisa Bertino, Barbara Catania and Elena Ferrari)
- Multimedia IR: Indexing and Searching - R-trees and GEMINI and QBIC (Christos Faloutsos)
- Libraries and Bibliographical Systems - online systems and public access catalogs (Edie M. Rasmussen)
- Digital Libraries - the main challenges for effective deployment (Edward A Fox and Ohm Sornil)

Contents

About the authors

Ricardo Baeza-Yates received his Ph.D. in Computer Science from the University of Waterloo, Canada in 1989. In 1992 and 1996, he was elected president of the Chilean Computer Science Society. In 1993, he received the Organization of American States award for yound researcher in exact sciences.

Berthier Ribeiro-Neto reveived his Ph.D. in Computer Science from the University of California, Los Angeles in 1995. He is involved with various research projects financed by Braziliam agencies; the two main projects deal with wireless information systems and video on demand. He has chaired distinguished conferences in South America and is a member of ACM, IEEE and ASIS



Principles of Distributed Database Systems

M. Tamer Ozsu • Patrick Valduriez • S. Sridhar

ISBN : 9788177581775
Copyright : 2006
Pages : 612

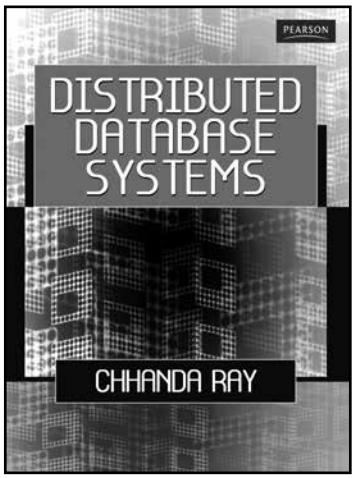
About the Book

This new edition of the best-selling text addresses recent and emerging issues in the field of distributed database systems while maintaining the key features and characteristics of the previous edition. The text has been revised and updated to reflect changes in the field. This comprehensive text focuses on concepts and technical issues while exploring the development of distributed database management systems. Principles of Distributed Database Systems presents distributed database systems within the framework of distributed data processing in general, rather than as a problem in isolation.

Features

- The relationship of distributed DBMSs with the new networking technologies is discussed.
- The query processing/optimization chapters now focus on techniques employed in commercial systems and include new algorithms such as randomized search strategies.
- Discussion of advanced transaction models and workflows has been added to the transaction management chapters.
- Full chapters are devoted to parallel DBMSs and distributed object DBMSs.
- Current issues are discussed in a new chapter, including sections on data warehousing, the World Wide Web and databases, push-based technologies, and mobile DBMSs.
- General interoperability issues and distributed object platforms such as OMA/CORBA and DCOM/OLE have been added to the multidatabase systems chapter.
- Review exercises have been added at the end of chapters to address the requirements of students of Indian universities and colleges.

Contents



Distributed Database Systems

Chhanda Ray

ISBN : 9788131727188
Copyright : 2009
Pages : 324

About the Book

Distributed Database Systems discusses the recent and emerging technologies in the field of distributed database technology. The material is up-to-date, highly readable, and illustrated with numerous practical examples. The mainstream areas of distributed database technology, such as distributed database design, distributed DBMS architectures, distributed transaction management, distributed concurrency control, deadlock handling in distributed systems, distributed recovery management, distributed query processing and optimization, data security and catalog management, have been covered in detail. The popular distributed database systems, SDD-1 and R*, have also been included.

Features

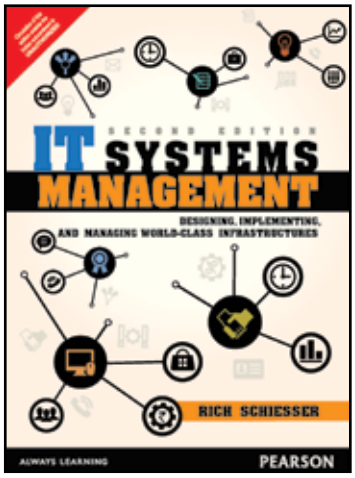
- Covers relational DBMS and current networking technologies
- Comprehensive coverage of parallel databases, distributed DBMS architectures, mobile, object-oriented and object-relational databases.
- Discussion of advanced transaction models and workflows, and random strategies for query optimization

- A chapter devoted to data warehousing and data mining.
- Case studies on the latest distributed database systems
- Pedagogy includes chapter objectives and summaries, key definitions, examples, multiple choices and review questions.

Contents

1. Overview of Relational DBMS
2. Review of Database Systems
3. Distributed Database Concepts
4. Overview of Computer Networking
5. Distributed Database Design
6. Distributed DBMS Architecture
7. Distributed Transaction Management
8. Distributed Concurrency Control
9. Distributed Deadlock Management
10. Distributed Recovery Management
11. Distributed Query Processing
12. Distributed Database Security and Catalog Management
13. Mobile Databases and Object-Oriented DBMS
14. Distributed Database Systems
15. Data Warehousing and Data Mining

Computer/IT Fundamentals



IT Systems Management: Designing, Implementing, and Managing World-Class Infrastructures, 2/e

Rich Schiesser

ISBN : 9789332550193
Copyright : 2015
Pages : 528

NEW

About the Book

This is the definitive, up-to-the-minute guide to systems management for every IT professional responsible for maintaining stable, responsive IT production environments. Top IT system management expert Rich Schiesser illuminates both the theoretical and practical aspects of systems management, using methods and examples drawn from decades of professional experience in roles ranging from data center leadership to infrastructure design. Schiesser covers every systems management discipline, every type of IT environment, and all elements of success: technology, processes, and people. This edition adds detailed new coverage of the popular IT Infastructure Library, showing how ITIL's 10 processes align with the 12 processes Schiesser presents. Another new chapter addresses key issues related to ethics, legislation, and outsourcing. Additional new coverage ranges from managing wireless networks, VoIP, and "ultra-speed" Internet to strategic security and new approaches to facilities management

Features

- Allows focused study for professionals concerned with any of the key systems management areas: people, process, and technology
- --Describes how to develop, integrate, and manage robust, bulletproof processes
- --Shows how to design, implement, and manage world-class infrastructures.
- --Demonstrates how to develop bullet-proof processes and implement proven systems management techniques

Contents

About the Authors

Rich Schiesser combines the experiences of a senior IT executive, professional educator, acclaimed author, and highly regarded consultant.

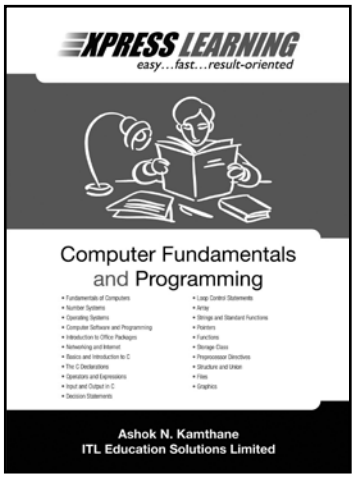
During the past three decades, Rich has headed up major computer centers at firms as diverse as Hughes Aircraft Company, the City of Los Angeles, and Twentieth Century Fox. For nearly 10 years he managed the primary computer center at Northrop Grumman Corporation, considered at the time to be one of the largest and most advanced in the world.

For the past several years, Rich has consulted on designing and implementing world-class infrastructures through his company, RWS Enterprises, Inc. Among his numerous clients are The Weather Channel, Emory Air Freight, Amazon.com, DIRECTV, Las Vegas Police, Option One Mortgage, Lionsgate Entertainment, and St. Joseph Health Systems.

Rich has also consulted at a variety of colleges, including Corinthian Colleges, Victor Valley College, Pasadena City College, University of Montana, and Kern County College District. He has taught a variety of IT classes at California State University, Los Angeles (CSULA), the University of California at Los Angeles (UCLA), and Phoenix University.

In addition to writing the first edition of IT Systems Management, Rich coauthored the best-selling book IT Production Services. He has also written more than 200 articles on IT management for leading trade journals and websites, including InformIT.com.

Rich holds a Bachelor of Science degree from Purdue University, a Master of Science degree from the University of Southern California (USC), and has completed graduate work in business administration from UCLA. He and his wife, Ann, live in Southern California, where they contribute time to their two favorite charities, the Olive Crest home for abandoned and abused children and the Legacy One organization for organ transplants.



Express Learning - Computer Fundamentals and Programming

Kamthane • ITL ESL

ISBN : 9788131794791
Copyright : 2013
Pages : 464

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

Features

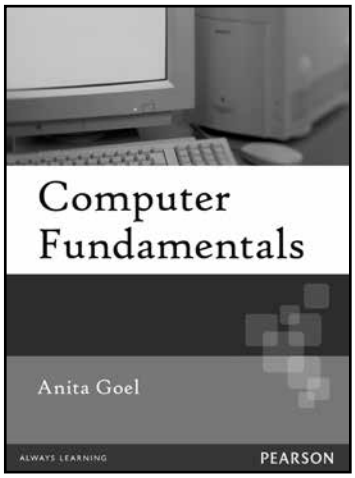
- Presented in a question and answer format following the examination pattern
- Covers all key topics in the syllabus
- Designed to make learning fast and effective
- Precise and up-to-date
- Helps students excel in their examinations

Contents

About the Authors

Ashok N. Kamthane is Associate Professor, Department of Electronics and Telecommunication at SGGS College of Engineering and Technology, Nanded, Maharashtra. He has over 20 years of teaching experience, and was associated with the development of hardware and software using 8051 on acoustic transceiver system for submarines. Prof. Kamthane is also the author of bestselling book, Programming in C.

ITL Education Solutions Limited (ITL ESL) is a part of the ITL group, which has operations all over the world with a significant presence in education and IT-enabled services. It specializes in handling educational projects in IT domains with a dedicated R&D wing of industry experts that helps in designing and developing content.



Computer Fundamentals

Anita Goel

ISBN : 9788131733097
Copyright : 2010
Pages : 500

About the Book

Computer Fundamentals is specifically designed to be used at the beginner level. It covers all the basic hardware/ software concepts in Computers and its peripherals in a very lucid manner

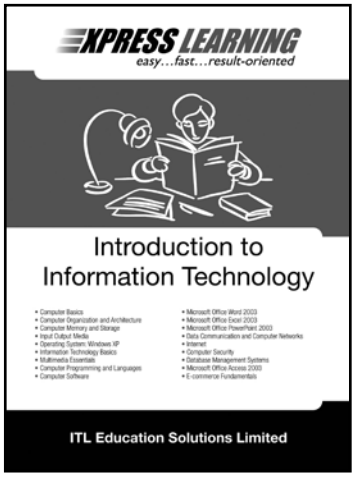
Features

- Excellent pedagogy – multiple-choice questions, true/false questions, review questions and practice problems
- Exclusive chapters on databases, multimedia, internet services and computer security
- Includes topics on sixth generation computers, USB, zip disk, notebook computers etc
- New terminology checklist at the end of each chapter
- Introductory coverage in Windows 7
- Detailed discussion on MS Office 2007 tools like Word, Excel, PowerPoint

Contents

About the Author

Dr. Anita Goel is a Reader of Department of Computer Science in Dyal Singh College, Delhi University.



Express Learning – Introduction to Information Technology

ITL ESL

ISBN : 9788131769737
Copyright : 2012
Pages : 408

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

Features

- Presented in a question and answer format following the examination pattern
- Covers all key topics in the syllabus
- Designed to make learning fast and effective
- Precise and up-to-date
- Helps students excel in their examinations

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Introduction to Computer Science, 2/e

ITL Education Solutions Limited

ISBN : 9788131760307
Copyright : 2011
Pages : 528

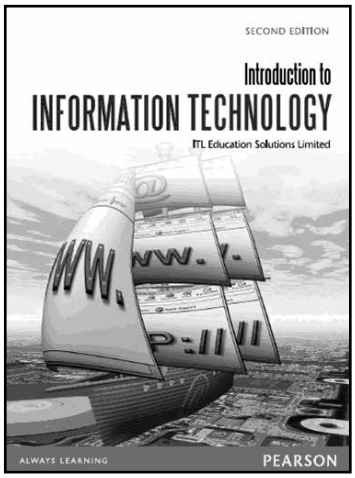
About the Book

The book furthers the first edition by including discussions on the recent topics. Few of the newly added topics are: blue-ray disk, USB drive, virtual reality etc. Inclusion of large number of practice questions make the text very useful for students in preparing for their examinations.

Features

- Concepts supported by lots of illustrations and examples
- Chapter revamped to include recent developments
- Large number of unsolved questions for practice

Contents



Introduction to Information Technology, 2/e

ITL ESL

ISBN : 9788131760291
Copyright : 2012
Pages : 788

About the Book

Keeping pace with the continuously changing trends in IT field, this new edition of Introduction to Information Technology incorporates the major changes that have taken place in the field of information technology since the release of its first edition, including not only the latest trends but also future technologies. The coverage of practical and historic perspectives on information technology demonstrates how concepts are applied to real systems and shows their evolution since its beginnings. Written in a clear, concise and lucid manner, each chapter is designed to be covered in two or three lectures while keeping inter-chapter dependencies to a minimum.

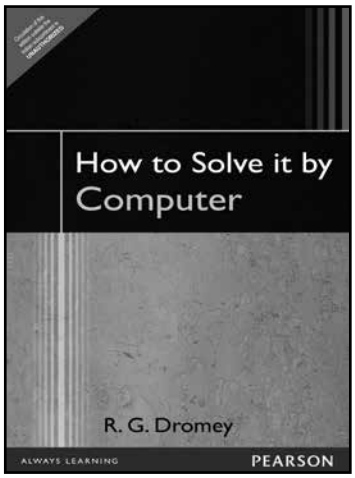
Features

- Complete coverage of the course of various universities across India
- Inclusion of current advances like: IPTV, Blogging, RFID, Brain Computer Interface
- Exhaustive discussion on MS Office 2003
- Discussion on Windows 7
- Coverage on MS Office 2007
- Excellent pedagogy: Chapter openers, Chapter objectives, Fact files and things to remember, Further reading, Exercises

Contents

About the Author

ITL Education Solutions Limited (ITL ESL) is a part of the ITL group, which has operations all over the world with a significant presence in education and IT-enabled services. It specializes in handling educational projects in IT domains with a dedicated R&D wing of industry experts that helps in designing and developing content.



How to Solve it by Computer

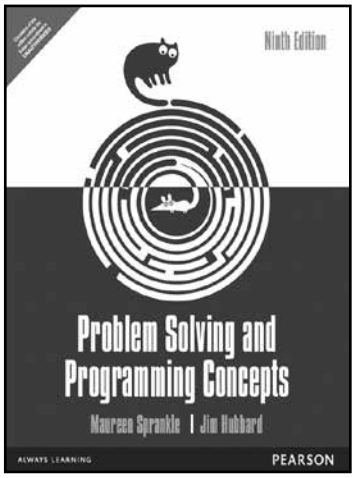
R. G. Dromey

ISBN : 9788131705629
Copyright : 2007
Pages : 464

About the Book

The inspiration for the approach taken in this book has comefrom the classic work of Polya on general and mathematical problem-solving.Throughout the book,a conscious effort has been made to convey something ofthe flavor of either a personal dialouge or an instructor-student diolouge thatmight tke place in the solution of a problem.This style of presentationcoupled with a carefully chosen set of examples,makes the book attractive to awide range of readers.The problem sets have been carefully designed to test,reinforce, and extend the reader's understanding of the strategies and conceptspresented.

Contents



Problem Solving and Programming Concepts, 9/e

Maureen Sprankle

ISBN : 9789332518841
Copyright : 2014
Pages : 488

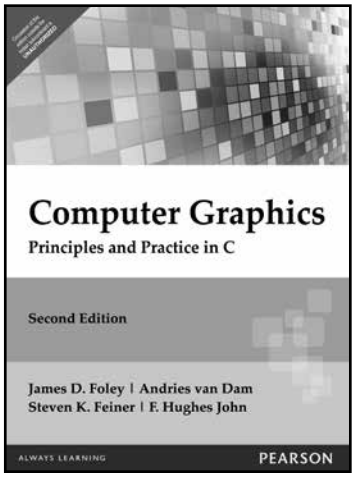
About the Book

Revised to reflect the most current issues in the programming industry, this widely adopted text emphasizes that problem solving is the same in all computer languages, regardless of syntax. Sprankle and Hubbard use a generic, non-language-specific approach to present the tools and concepts required when using any programming language to develop computer applications. Designed for students with little or no computer experience — but useful to programmers at any level — the text provides step-by-step progression and consistent in-depth coverage of topics, with detailed explanations and many illustrations.

Features

- A generic, non-language-specific approach presents the tools and concepts required when using any programming language to develop computer applications.
- Broad coverage ranges from the basics of mathematical functions and operators to the design and use of such techniques as code, arrays, pointers, other data structures, database concepts, and object- oriented programming concepts.
- Problem-solving tools are used to discuss the problem analysis chart, interactivity (structure) chart, IPO chart, the coupling diagram, algorithms, flowcharts, and tools to help with the development of object oriented programming solutions.
- Structured programming techniques include sequential, decision, loop, and case logic structures.
- A full chapter on variables, constants, data types, functions, operators, equations, and expressions gives students a solid foundation in the concepts that are important to know before starting to develop a program, and which make setting up the basic instructions much easier.
- Various types of data structures are explored, with full chapter coverage on arrays, stacks, linked lists, binary trees, and database.
- Problem solving for applications details includes techniques for page layout, spreadsheets, database management systems, and document processing.
- "What's Wrong with This?" sections in problem sections challenge students to think critically and analytically to debug programs.
- "Putting It All Together sections" walk students through a complete solution for a given problem, using the concepts previously presented.
- Chapter Problems give students hands-on experience in solving problems that are typically found in computer language textbooks.
- Abundant pedagogical aids integrated throughout include chapter objectives, chapter summaries, key words, chapter exercises and problems, glossaries, and tables of flowcharting symbols and functions.

Contents



Computer Graphics : Principles & Practice in C, 2/e

James D. Foley • Steven K. Feiner • Andries van Dam • F. Hughes John

ISBN : 9788131705056
Copyright : 1996

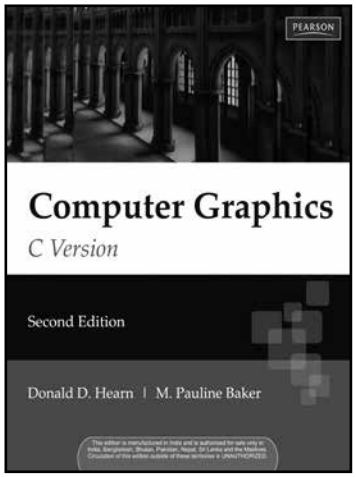
About the Book

The most comprehensive, authoritative, and up-to-date book on computer graphics now presents examples in the C programming language. As before, the authors provide a unique combination of current concepts and practical applications. Important algorithms in 2D and 3D graphics are detailed for easy implementation.

Features

- Programming with SRGP, a simple but powerful raster graphics package that combines features of Apple's Quick Draw and MET X-Window System's graphics library.
- Hierarchical, geometric modeling using SPHIGS, a simplified dialect of the 3D graphics Standard PHIGS
- Raster graphics hardware and software, including both basic and advanced algorithms for scan converting and clipping line, polygons, conics, spline curves, and text.
- Image synthesis, including visible surface determination, illumination and shading models, image manipulation and antialiasing
- Techniques for photorealistic rendering, including ray tracing and radiosity methods
- Surface modeling with parametric polynomials, including NURBS, and solid-modeling representations such as B-reps, CSG, and octrees
- Advanced modeling techniques such as fractals, grammar-based models, particle systems, physically based modeling techniques such as fractals, grammar-based models, particle systems, physically based modeling, and volume rendering.
- Concepts of computer animation and descriptions of state-of-the-art animation systems

Contents



Computer Graphics, C Version, 2/e

Donald D Hearn • M. Pauline Baker

ISBN : 9788177587654
Copyright : 1997

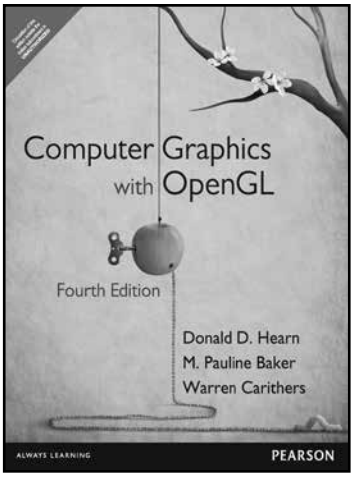
About the Book

Reflecting the rapid expansion of the use of computer graphics and of C as a programming language of choice for implementation, this new version of the best-selling Hearn and Baker text converts all programming code into the C language. Assuming the reader has no prior familiarity with computer graphics, the authors present basic principles for design, use, and understanding of computer graphics systems. The authors are widely considered authorities in computer graphics, and are known for their accessible writing style.

Features

- Discusses current computer graphics hardware and software systems, techniques and applications.
- Explores algorithms for creating and manipulating graphics displays and techniques for implementation.
- Use of programming examples written in C to demonstrate the implementation and application of graphic algorithms.
- Explores GL, PHIGS, PHIGS+, GKS and other graphics libraries.
- Includes thorough coverage of 3-D modeling and rendering.
- Features current topics such as distributed ray tracing, radiosity, physically based modeling, particle systems and visualization techniques.
- Includes appendix with a detailed discussions on a variety of mathematical methods used in graphic algorithms.

Contents



Computer Graphics with OpenGL, 4/e

Donald D Hearn • M. Pauline Baker • Warren Carithers

ISBN : 9789332518711
Copyright : 2014
Pages : 822

About the Book

Assuming no background in computer graphics, this textbook presents basic principles for the design, use, and understanding of computer graphics systems and applications. The authors, authorities in their field, offer an integrated approach to two-dimensional and three-dimensional graphics topics. A comprehensive explanation of the popular OpenGL programming package, along with C++ programming examples illustrates applications of the various functions in the OpenGL basic library and the related GLU and GLUT packages.

Features

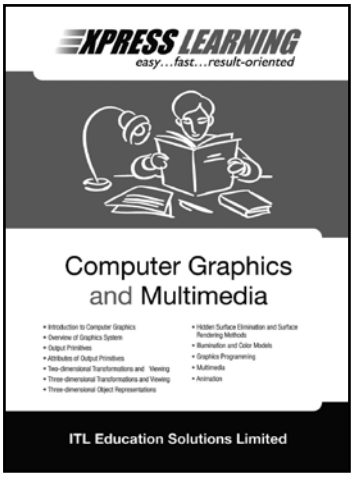
- Complete and comprehensive discussion of the OpenGL computer graphics programming library which provides a large and efficient collection of device independent functions for creating graphics with a general-purpose language
- Revised content brings the text up-to-date with current advances in computer graphics technology and applications
- 2D and 3D topics are combined which provides a much more productive organization for teaching 3D graphics
- Key topics like Animation, object representation, 3D viewing pipeline, illuminations models, surface-rendering technique, and texture mapping are expanded and updated
- All programming examples in C++ gives students and teachers over 120 reusable C++ programs for instruction and programming
- Detailed discussions on a variety of mathematical methods used in graphic algorithms—Appear in the appendix
- Thorough coverage of 3-D modeling and renderin

Contents

About the Authors

Donald Hearn joined the Computer Science faculty at the University of Illinois at Urbana-Champaign in 1985. Dr. Hearn has taught a wide range of courses in computer graphics, scientific visualization, computational science, mathematics, and applied science. Also, he has directed numerous research projects and published a variety of technical articles in these areas.

M. Pauline Baker is on the faculty of the Computer Science Department and the School for Informatics at Indiana University-Purdue University. Dr- Baker is also a Distinguished Scientist and the Director of the Pervasive Technology Lab for Visualization and Interactive Spaces, and she collaborates with research groups on the use of computer graphics and virtual reality to explore scientific data. Previously, Dr. Baker was the Associate Director for Visualization and Virtual Environments at NCSA (National Center for Supercomputer Applications), University of Illinois.



Express Learning - Computer Graphics and Multimedia

ITL ESL

ISBN : 9788131785911
Copyright : 2013
Pages : 352

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

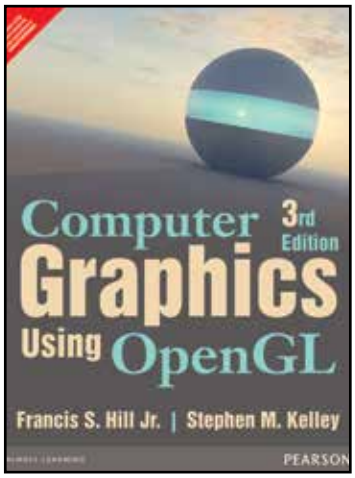
Features

- Presented in a question and answer format following the examination pattern
- Covers all key topics in the syllabus
- Designed to make learning fast and effective
- Precise and up-to-date
- Helps students excel in their examinations

Contents

About the Author

ITL Education Solutions Limited (ITL ESL) is a part of the ITL group, which has operations all over the world with a significant presence in education and IT-enabled services. It specializes in handling educational projects in IT domains with a dedicated R&D wing of industry experts that helps in designing and developing content.



Computer Graphics Using OpenGL, 3/e

Francis S Hill • Stephen M Kelley

ISBN : 9789332555303
Pages : 800

NEW

About the Book

Updated throughout for the latest developments and technologies, this text combines the principles and major techniques in computer graphics with state-of-the-art examples that relate to things students see everyday on the Internet and in computer-generated movies. Practical, accessible, and integrated in approach, it carefully presents each concept, explains the underlying mathematics, shows how to translate the math into program code, and displays the result.

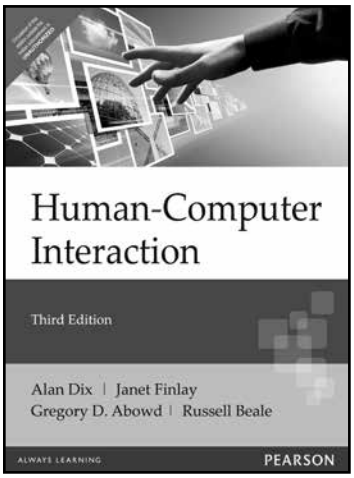
Features

- Text-specific Web site:
  Easy for student to use and obtain source code from book. – Offers convenient access to many images, references and sample programs to support the discussion in the book.
  Vastly expanded to include all color images, source programs for all complete programs given in the text, and resources closely related to the book's material.
- C++ as the underlying programming language –Introduces useful classes for graphics, but does not force a rigid object-oriented posture.
- Early, in-depth treatment of 3D graphics and the underlying mathematics – Enables students to produce realistic 3D graphics much earlier in a course. Students can write programs to "fly" a camera through a 3D scene.
- Extensive case studies at the end of each chapter.
  Clear flow of ideas from first principles to the techniques of graphics:
  Develops the underlying mathematics from first principles.
  Shows students where the math comes from, why it is used, and how it is applied, allowing them to grasp it much more quickly and apply it to their graphics work.
  Clear presentation of the links between a concept, underlying mathematics, program coding, and the result – e.g., the use of vectors in graphics, the underlying theory of transformations, the mathematics of perspective projections, etc.
- An abundance of state-of-the-art worked examples.
- Numerous practice exercises (approx. 30 per chapter).

Contents

About the Author

F.S. Hill Jr. is a Professor Emeritus of the Electrical and Computer Engineering Department at the University of Massachusetts at Amherst. He received a Ph. D. degree from Yale University in 1968, worked for 3 years in digital data transmission at Bell Telephone Laboratories, and joined the University in 1970. He is the author of numerous articles in the field of signal processing, communications, and computer graphics. He has been editor and associate editor of the IEEE Communications Society magazine. He is also a fellow of the IEEE. He is co-author of the book Introduction To Engineering and has won several awards for outstanding teaching.
Stephen M. Kelley and **Dr. Hill** met in 2000 in connection with a National Science Foundation distance learning project. Since then co-teaching courses in computer graphics at the University of Massachusetts and co-authoring Computer Graphics using OpenGL, 3rd Edition. Stephen Kelley recently graduated from the University of Massachusetts with a degree in Interactive Multimedia and Computer Graphics along with a minor in Information Technology. Stephen also runs his own web development and consulting company, Intangible Inc.



Human-Computer Interaction, 3/e

Alan Dix • Janet E. Finlay • Gregory D. Abowd • Russell Beale

ISBN : 9788131717035
Copyright : 2003
Pages : 860

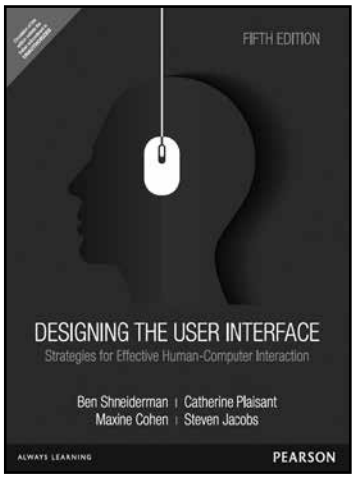
About the Book

The second edition of **Human-Computer Interaction** established itself as one of the classic textbooks in the area, with its broad coverage and rigorous approach, this new edition builds on the existing strengths of the book, but giving the text a more student-friendly slant and improving the coverage in certain areas. The revised structure, separating out the introductory and more advanced material will make it easier to use the book on a variety of courses. This new edition now includes chapters on Interaction Design, Universal Access and Rich Interaction, as well as covering the latest developments in ubiquitous computing and Web technologies, making it the ideal text to provide a grounding in HCI theory and practice.

Features

- Strong usable design
- Gives details of HCI in practice
- Covers the latest topics
- Increased coverage of social and contextual models and theories
- New chapters on:
  i. Interaction Design
  ii. Universal Access
  iii. Rich Interaction

Contents



Designing the User Interface: Strategies for Effective Human-Computer Interaction, 5/e

Ben Shneiderman • Maxine Cohen
Steven M. Jacobs • Catherine Plaisant

ISBN : 9789332518735
Copyright : 2014
Pages : 572

About the Book

The much-anticipated fifth edition of Designing the User Interface provides a comprehensive, authoritative introduction to the dynamic field of human-computer interaction (HCI). Students and professionals learn practical principles and guidelines needed to develop high quality interface designs–ones that users can understand, predict, and control. It covers theoretical foundations, and design processes such as expert reviews and usability testing. Numerous examples of direct manipulation, menu selection, and form fill-in give readers an understanding of excellence in design The new edition provides updates on current HCI topics with balanced emphasis on mobile devices, Web, and desktop platforms. It addresses the profound changes brought by user-generated content of text, photo, music, and video and the raised expectations for compelling user experiences.

Features

- Provides a broad survey of designing, implementing, managing, maintaining, training, and refining the user interface of interactive systems.
- Describes practical techniques and research-supported design guidelines for effective interface designs
- Covers both professional applications (e.g. CAD/CAM, air traffic control) and consumer examples (e.g. web services, e-government, mobile devices, cell phones, digital cameras, games, MP3 players).
- Delivers informative introductions to development methodologies, evaluation techniques, and user-interface building tools.
- Supported by an extensive array of current examples and figures illustrating good design principles and practices.
- Includes dynamic, full-color presentation throughout.
- Guides students who might be starting their first HCI design project

Contents

About the Authors

Ben Shneiderman is a Professor in the Department of Computer Science, Founding Director (1983—2000) of the Human-Computer Interaction Laboratory (http://www.cs.umd.edu/hcil), and Member of the Institute for Advanced Computer Studies and the Institute for Systems Research, all at the University of Maryland at College Park. He is a Fellow of the ACM and AAAS and received the ACM CHI (Computer Human Interaction) Lifetime Achievement Award. His books, research papers, and frequent lectures have made him an international leader in this emerging discipline. For relaxation he likes biking, hiking, skiing, and travel.

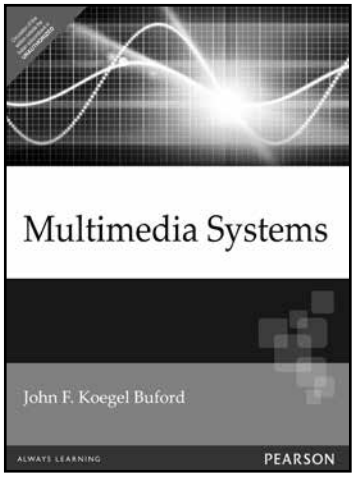
Catherine Plaisant is Associate Research Scientist at the Human-Computer Interaction Laboratory of the University of Maryland Institute for Advanced Computer Studies. She earned a Doctorat d'Ingénieur degree in France in 1982 and has been conducting research in the field of human-computer interaction since then. In 1987, she joined Professor Shneiderman at the University of Maryland, where she has worked with students and members of the lab, throughout the growth of the field of human-computer interaction. Her research contributions range from focused interaction techniques to innovative visualizations validated with user studies to practical applications developed with industrial partners.

Maxine S. Cohen is a Professor in the Graduate School of Computer and Information Sciences at Nova Southeastern University in Fort Lauderdale, Florida where she teaches graduate courses in Human-Computer Interaction (HCI). Before joining NSU, she worked at IBM in the User Centered Design department. Prior to IBM, she was a faculty member in the Computer Science department, in the Watson School of Engineering at the State University of New York at Binghamton. She has been teaching and working in the HCI field for over 20 years. She received a B.A. in Mathematics from the University of Vermont, a M.S. (specialization Computer Science) and a Ph.D. (specialization Systems Science) from the State University of New York at Binghamton.

Steven M. Jacobs recently retired from the aerospace industry and is now a lecturer at Northern Arizona University, Flagstaff, Arizona. He was formerly with Northrop Grumman Mission Systems in Carson, California. Mr. Jacobs managed engineers developing user interface and web applications software for various government and commercial applications. He was also Adjunct Assistant Professor at the University of Southern California for 17 years, where he developed and

taught their graduate computer science courses in user interface design and human performance engineering. He has also taught short courses in similar topics for UCLA Extension and ACM. He received his M.S.C.S. from UCLA, B.A. in Mathematics from Monmouth University (N.J.).

Multimedia



Multimedia Systems

John F. Koegel Buford

ISBN : 9788177588279
Copyright : 1994

About the Book

With ongoing work in computing and communications driving new multimedia applications, designers and developers need convenient access to the latest ideas and experiences. Carefully edited by John F. Koegel Buford, Multimedia Systems brings such information together I one place and provides a coherent framework for understanding this rapidly changing field. It presents a technical introduction to key issues in the design and development of multimedia systems, including detailed discussion of new technologies, current research and practice, and future directions.

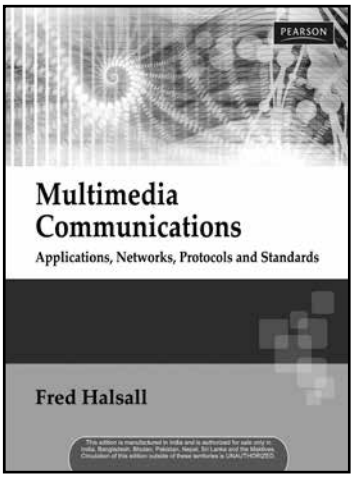
Features

- Provides a single source for basic information on digital media and fundamental multimedia concepts
- Reviews issues affecting the development of global multimedia information and communication systems
- Survey current research and practice, as well as future directions in multimedia systems
- Provides an integrated treatment of multimedia technologies and their use in a variety of computing applications

Contents

About the Author

John F. Koegel Buford is Director of the Interactive Media Group, a multimedia research group active since 1990, and the developer of various multimedia applications and system services. Dr. Buford has authored more than twenty-five publications, has served as a consultant on multimedia technology, and is active in the multimedia standards community. He holds B.S. and M.S. degrees in Electrical Engineering and Computer Science from MIT and a Ph.D. in Computer Science from the Technizche Universitaet Graz, Austira. He is currently an Assistant Professor of Computer Science at the University of Massachusetts Lowll.



Multimedia Communications: Applications, Networks, Protocols and Standards

Fred Halsall

ISBN : 9788131709948
Copyright : 2001

About the Book

The fast-growing field of multimedia communications involves he use of varied media types (text, images, speech, audio and video) in a wide range of subjects areas.

These include:

- How to represent the different media types in a digital form;
- The communication requirements associated with the different types of multimedia applications (video telephony/conferencing, electronic mail, interactive TV, electronic commerce, web TV, etc.
- The operation of the different types of communication networks that are used (campus networks and LANs, the internet and the world wide web, switched telephone networks, and home-entertainment networks such as cable and satellite);
- The new communication protocols and standards that have been developed for use with each of these networks to meet the more demanding requirements of multimedia application.

Multimedia Communications by Fred Halsall addresses all of these subject areas to depth that enables the reader to build up a thorough understanding of the technical issues associated with this rapidly evolving subject. In addition, the book contains all of the foundation material that is necessary to enable it to be used as a textbook in both computer science and electronic engineering departments. The book is also essential reference for computing and networking professionals.

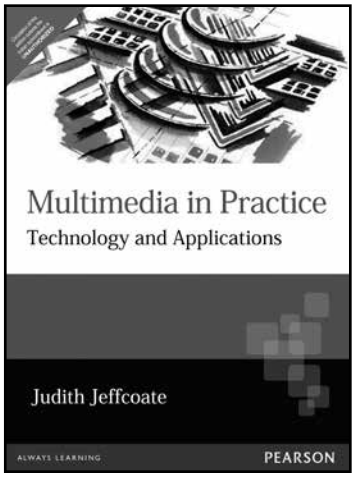
Features

- Embraces all of the main subject areas associated with multimedia communications in a single textbook;
- Extensive use of details diagrams and worked examples as an aid to understanding each major topic;
- End of chapter exercises associated with all topics covered.

Contents

About the Authors

Fred Halsall is a Professor of Communications Engineering at the University of Wales, Swansea. Professor Halsall has been involved in research and education in the field of computer networking for the past 30 years. He has published over 50 refereed journal and conference papers. His four textbooks include the successful Data Communications, Computer Networks and Open Systems. He is a Fellow of the IEE and a member of the IEEE.



Multimedia In Practice

Judith Jeffcoate

ISBN : 9788131707159
Copyright : 2007
Pages : 256

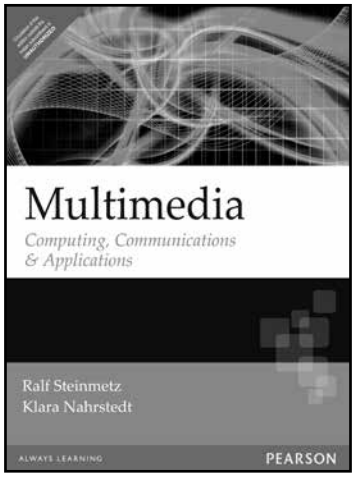
About the Book

Designed as a guide for program development managers and project leaders who need to introduce multimedia features into their applications, this comprehensive volume covers the full range of multimedia available, outlines the basic components and technologies, describes a range of possible applications (illustrated with real-world examples), and discusses the impact of multimedia on professionals in the computing industry.

Features

- Factors to be taken into account when planning projects.
- Multimedia related to other key technologies.
- Multimedia Applications identified for a specific sector.
- Comparison of available hardware and software.
- Explanation of new technology and standards.

Contents



Multimedia: Computing Communications & Applications

Ralf Steinmetz • Klara Nahrstedt

ISBN : 9788177584417
Copyright : 1995

About the Book

Combining audio and video with text, image, graphics and animation offers a more dynamic presentation than can be achieved through the use of text and image alone. This integration of media provides the possibility for a spectrum of new applications. **Multimedia: Computing, Communications and Applications** examines the challenges of this technology and probes today's developments toward fully integrated working systems.

Features

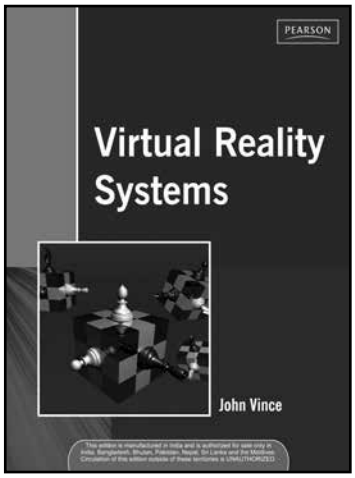
This book serves as a basis for the development of individual components of a multimedia system. Concepts are described and possible practical implementations are presented.

- Basic sound, Image and Graphics Concepts
- Data Compression
- Multimedia Operating and Communication Systems
- User Interfaces
- Multimedia Applications
- Video and Animation
- Optical Storage Media
- Documents, Hypertext MHEG
- Synchronization

With the character of a reference book, Multimedia: Computing, Communications and Applications allows exploration of covered topics without extensive previous study and achieves a complete and balanced view of multimedia systems.

Contents

- Introduction
- Multimedia: Media and Data Streams
- Sound/Audio
- Images and Graphics
- Video and Animation
- Data Compression
- Optical Storage Media
- Computer Technology
- Multimedia Operating Systems
- Networking Systems
- Multimedia Communication Systems
- Database Systems
- Documents, Hypertext and MHEG
- User Interfaces
- Synchronization
- Abstractions for Programming
- Multimedia Applications
- Future Directions



Virtual Reality Systems

John Vince

ISBN : 9788131708446
Copyright : 1995

About the Book

This book provides a lucid introduction to Virtual Reality. Students and practitioners alike will benefit from John Vinces detailed examination of the core technologies underlying Virtual Reality including real-time computer graphics, colour displays and simulation software. With this book you will learn the tricks used in collision detection, object picking, head tracking, teleporting and tactile feedback.

Features

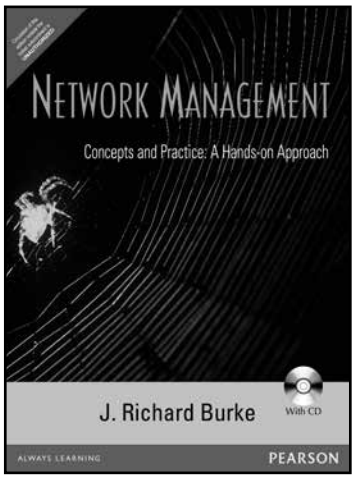
- Outlines the physiological, psychological, hardware and software principles used to create the immersive and interactive experiences characterized by VR systems.
- An overview of computer graphics provides a foundation for the modelling, graphics and animation techniques utilized by VR systems
- Explores the mathematical techniques used to create objects and animate features in virtual environments
- Investigates the challenge of interfacing humans to virtual worlds.

Contents

1. Virtual Reality and Virtual Environments
2. The Historical Development of VR
3. 3D Computer Graphics
4. Geometric Modeling
5. Geometrical Transformations
6. A Generic VR System
7. Animating the Virtual Environment
8. Physical Simulation
9. Human Factors
10. Virtual Reality Hardware
11. Virtual Reality Software
12. Virtual Reality Applications
13. The Future

About the Author

Professor John Vince is Chief Scientist at Thomson Training & Simulation Ltd. He has written several books on topics in computer graphics including 3-D Computer Animation also published by Addison-Wesley and presented many tutorials on the subject world-wide.



Network Management: Concepts and Practice, A Hands-On Approach

J. Richard Burke

ISBN : 9788131718490
Copyright : 2008
Pages : 544

About the Book

Designed for those with limited background in network management, this is the only text that teaches the abstract concepts of network management by demonstrating them using the included network management software. Burke presents the standard networking management concepts and provides students with one of the only texts available to demonstrate how to practice network management concepts on a small LAN. The text uses a network management application and software that enable students to focus on the fundamentals of network management.

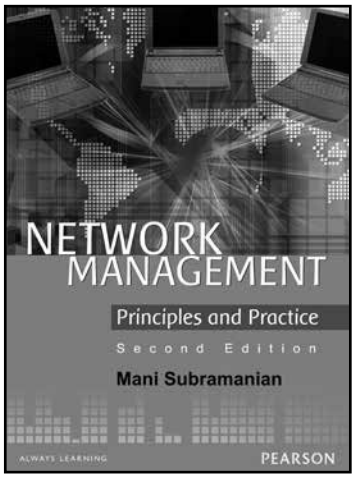
Features

- Demonstration of network management implementation – The only book available that focuses on demonstration and includes the management software used by the author to do those demonstrations.
- Configuration of SNMPv3 network management commands – Enables instructors to show students how to configure authenticated and/or encrypted SNMPv3 commands to Get or Set scalar and table data.
- Coverage of a GUI tool that generates authentication and encryption keys – Familiarizes both instructors and students with a tool that eliminates the need for software described in the standard to create authentication and encryption keys.
- Tables that list network implementation decisions to produce reliable, cost-effective implementations – Gives instructors a list of topics on which to base lectures.
- Classification of current NSM tools according to functionality and cost.

Contents

About the Author

J. Richard Burke has written well-received textbooks that cover TCP/IP. Windows NT 4.0 Server, and C and C++. He has developed training manuals for the Novel NetWare operating system and LAN and WAN networking and has authored more than 40 technical publications. Currently, his own company develops computer networking training materials and he is Adjunct Professor in the Electrical and Computer Engineering Department at North Carolina State University. Dr. Burke is past chair of the Computer Society Publications Committee and has received the Society's Meritorious Service Award. He is a senior member of The Institute of Electrical and Electronics Engineers.



Network Management: Principles and Practice, 2/e

Mani Subramanian

ISBN : 9788131727591
Copyright : 2010
Pages : 724

About the Book

This edition is thoroughly updated and expanded to address broadband network management and the latest trends in the network management technology and standards. The author's unique approach thoroughly illustrates the theoretical and practical aspects of network management, and the technologies and the tools that academics and network managers simply must know.

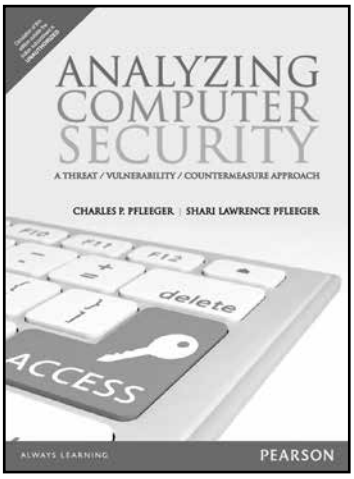
Features

- Network management extended to telecommunications management
- Maps the concept of eTOM with TMN
- Extensive treatment on the design of an NMS with practical perspective
- Focuses on management of wired, fixed wireless and mobile broadband access, and home networks including evolving management protocols and MIBs
- Elucidates management of Optical and MPLS networks widely deployed in the telecommunications network
- Web-, CORBA-, and XML-based technologies addressed along with NGOSS technology

Contents

About the Author

Mani Subramaniam is a professor at Georgia Institute of Technology, where he teaches a Network Management course based on his years of industry experience. He has led research and development at several networking corporations and has practical knowledge of networking and network management. In 1989, he was elected Technical Director of the OSI Network Management Forum and was responsible for the first release of OSI NM specifications. Dr. Subramanian received his Ph.D. from Purdue University.



Analyzing Computer Security: A Threat / Vulnerability / Countermeasure Approach

Charles P. Pfleeger

ISBN : 9789332517424
Copyright : 2013
Pages : 848

About the Book

In this book, the authors of the 20-year best-selling classic Security in Computing take a fresh, contemporary, and powerfully relevant new approach to introducing computer security. Organized around attacks and mitigations, the Pfleegers' new Analyzing Computer Security will attract students attention by building on the high-profile security failures they may have already encountered in the popular media. Each section starts with an attack description. Next, the authors explain the vulnerabilities that have allowed this attack to occur. With this foundation in place, they systematically present today's most effective countermeasures for blocking or weakening the attack. One step at a time, students progress from attack/problem/harm to solution/protection/mitigation, building the powerful real-world problem solving skills they need to succeed as information security professionals. Analyzing Computer Security addresses crucial contemporary computer security themes throughout, including effective security management and risk analysis economics and quantitative study privacy, ethics, and laws and the use of overlapping controls. The authors also present significant new material on computer forensics, insiders, human factors, and trust.

Features

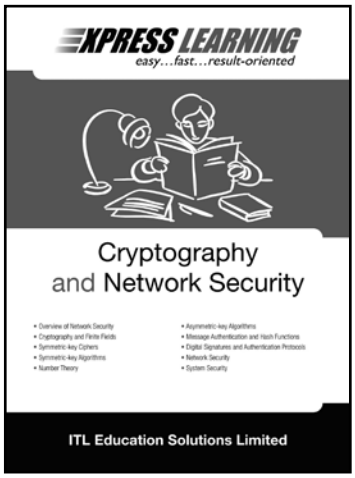
- Introduces computer security the way today's practitioners want to learn it: by identifying threats, explaining the vulnerabilities that cause them, and presenting effective countermeasures
- Contains up-to-date coverage of security management, risk analysis, privacy, controls, forensics, insider attacks, human factors, trust, and more

Contents

About the Author

Dr. Charles P. Pfleeger, an independent computer and information security consultant, provides threat/vulnerability analysis, design review, training, expert testimony, and security advice to clients worldwide. He was master security architect at Cable and Wireless and Exodus Communications, and professor of computer science at the University of Tennessee. Dr. Pfleeger is coauthor of Security in Computing, Fourth Edition (Prentice Hall, 2007), today's leading college computer security textbook.

Dr. Shari Lawrence Pfleeger is Director of Research for the Institute for Information Infrastructure Protection at Dartmouth College, a consortium working to protect the U.S. cyber infrastructure. The Journal of Systems and Software has repeatedly named her one of the world's top software engineering researchers. Dr. Pfleeger is coauthor of Security in Computing, Fourth Edition (Prentice Hall, 2007), today's leading college computer security textbook



Express Learning – Cryptography and Network Security

ITL ESL

ISBN : 9788131764527
Copyright : 2012
Pages : 196

About the Book

Express Learning is a series of books designed as quick reference guides to important undergraduate and postgraduate computer courses. The organized and accessible format of these books allows students to learn important concepts in an easy-to-understand, question-and-answer format. These portable learning tools have been designed as one-stop references for students to understand and master the subjects by themselves.

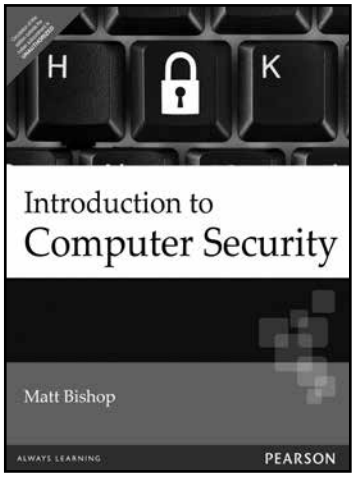
Features

- Presented in a question and answer format following the examination pattern
- Covers all key topics in the syllabus
- Designed to make learning fast and effective
- Precise and up-to-date
- Helps students excel in their examinations

Contents

About the Author

ITL Education Solutions Limited (ITL ESL) is a part of the ITL group, which has operations all over the world with a significant presence in education and IT-enabled services. It specializes in handling educational projects in IT domains with a dedicated R&D wing of industry experts that helps in designing and developing content.



Introduction to Computer Security

Matt Bishop

ISBN : 9788177584257
Copyright : 2006
Pages : 616

About the Book

Introduction to Computer Security draws upon Bishop's widely praised Computer Security: Art and Science, without the highly complex and mathematical coverage that most undergraduate students would find difficult or unnecessary. The result: the field's most concise, accessible, and useful introduction. Matt Bishop thoroughly introduces fundamental techniques and principles for modeling and analyzing security. Readers learn how to express security requirements, translate requirements into policies, implement mechanisms that enforce policy, and ensure that policies are effective. Along the way, the author explains how failures may be exploited by attackers and how attacks may be discovered, understood, and countered. Supplements available including slides and solutions.

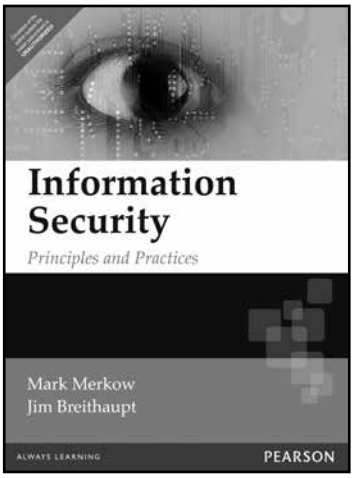
Features

- Focuses more on the application of theory thereby students will immediately be able to apply what they learn.
- An excellent and beautifully written introduction to the concept of computer security.
- An introduction to the science and challenges of computer security, useful as either a self-teaching tool or a classroom text.
- Trimmed down and less expensive version of Bishop's definitive work on computer security, with more mathematical and advanced sections removed.

Contents

About the Author

Matt Bishop is a Professor in the Department of Computer Science at the University of California at Davis. A recognized expert in vulnerability analysis, secure systems/ software design, network security, access control, authentication, and UNIX security, Bishop also works to improve computer security instruction.
Sathyanarayana S.V. is Assistant Professor in the Department of Telecommunication Engineering at J.N.N. College of engineering, Shimoga.



Information Security: Principles and Practices

Mark Merkow • James Breithaupt

ISBN : 9788131712887
Copyright : 2007
Pages : 275

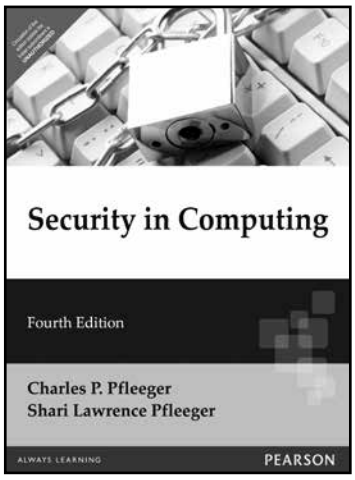
About the Book

For a introductory course in information security covering principles and practices. This text has been developed to cover the 10 domains in the Information Security Common Body of Knowledge. They include: Security Management Practices, Security Architecture and Models, Business Continuity Planning (BCP) and Disaster Recovery Planning (DRP), Law, Investigations, and Ethics, Physical Security, Operations Security, Access Control Systems and Methodology, Cryptography, Telecommunications, Network, and Internet Security.

Features

- Information Security Principles and Practices provides thorough coverage of each domain so students understand these widely accepted categories of information security.
- This text's coverage of why students need to know about information security, principles of success and the future of information security prepares them for the real-world environment.
- Appendices include: Common Body of Knowledge, Security Policy and Standards Taxonomy, Sample Policies, and HIPAA Security Rule Standards, which provides students with real-life examples and additional resources.

Contents



Security in Computing, 4/e

Charles P. Pfleeger • Shari Lawrence Pfleeger

ISBN : 9788131727256
Copyright : 2009
Pages : 876

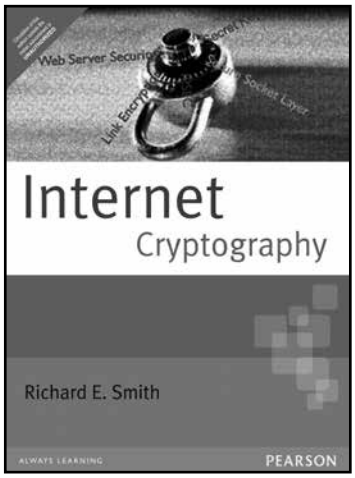
About the Book

The New State-of-the-Art in Information Security: Now Covers the Economics of Cyber Security and the Intersection of Privacy and Information Security for years, IT and security professionals and students have turned to Security in Computing as the definitive guide to information about computer security attacks and countermeasures. In their new fourth edition, Charles P. Pfleeger and Shari Lawrence Pfleeger have thoroughly updated their classic guide to reflect today's newest technologies, standards, and trends. The authors first introduce the core concepts and vocabulary of computer security, including attacks and controls. Next, the authors systematically identify and assess threats now facing programs, operating systems, database systems, and networks. For each threat, they offer best-practice responses. Security in Computing, Fourth Edition, goes beyond technology, covering crucial management issues faced in protecting infrastructure and information. This edition contains an all-new chapter on the economics of cybersecurity, explaining ways to make a business case for security investments. Another new chapter addresses privacy--from data mining and identity theft, to RFID and e-voting.

Features

- Programming mistakes that compromise security: man-in-the-middle, timing, and privilege escalation attacks
- Web application threats and vulnerabilities
- Networks of compromised systems: bots, botnets, and drones
- Rootkits--including the notorious Sony XCP
- Wi-Fi network security challenges, standards, and techniques
- New malicious code attacks, including false interfaces and keystroke loggers
- Improving code quality: software engineering, testing, and liability approaches
- Biometric authentication: capabilities and limitations
- Using the Advanced Encryption System (AES) more effectively
- Balancing dissemination with piracy control in music and other digital content
- Countering new cryptanalytic attacks against RSA, DES, and SHA
- Responding to the emergence of organized attacker groups pursuing profit

Contents



Internet Cryptography

Richard E. Smith

ISBN : 9788131704127
Copyright : 1997

About the Book

Here, in one comprehensive, soup-to-nuts book is the solution for Internet security: modern-day cryptography. Written by a security expert with a wealth of practical experience, this book covers network and Internet security in terms that are easy to understand, using proven technology, systems, and solutions. Form the client workstation to the Web host to the e-mail server, every aspect of this important topic is examined and explained. The once-daunting subject of cryptography is demystified and applied to today's security challenges. This book is written for people who want to move data safely across the Internet and protect corporate resource from unauthorized access. Using real-life case studies, examples, and commercially available software products, cryptography is presented as a practical solution to specific, everyday security challenges.

Features

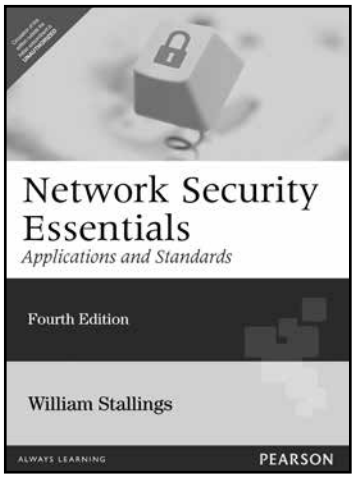
- Essentials of Cryptography
- Networking and Internet fundamentals
- Encryption Building Blocks
- Virtual Private Networks

Contents

- Acknowledgments
- Introduction
- Encryption Basics
- Link Encryption
- Managing Secret Keys
- Security at the IP Layer
- Legal Considerations
- Setting Realistic Security Objectives
- Secured Electronic Mail
- World Wide Transaction Security
- Internet Firewalls
- Virtual Private Networks
- Remote Access with IPSEC
- IPSEC and Firewalls
- Public Key Crypto and SSL
- World Wide Web Transaction Security
- Secured Electronic Mail
- Public Key Certificates

About the Author

Richard E. Smith works for Secure Computing Corporation where he provides consulting services in network security to commercial and government organizations, including the National Security Agency. He holds an M.S. and Ph.D. computer science from the University of Minnesota and a B.S. in engineering from Boston University.



Network Security Essentials: Applications and Standards, 4/e

William Stallings

ISBN : 9788131761755
Copyright : 2011
Pages : 432

About the Book

In this age of universal electronic connectivity, viruses and hackers, electronic eavesdropping, and electronic fraud, security is paramount. Network Security: Applications and Standards, provides integrated, comprehensive, up-to-date coverage of Internet-based security tools and applications through William Stallings's trademark blend of outstanding clarity, careful organization, and extensive pedagogical support. It presents a practical survey of applications and standards with an emphasis on applications that are widely used on the Internet and for corporate networks.

Features

- Dozens of figures and tables that simplify and illuminate key concepts
- 50% more "field-tested" homework problems
- Strong discussion of design principles for effective security
- Up-to-date coverage of viruses, worms, and other malware
- Keyword lists, recommended readings, and glossary

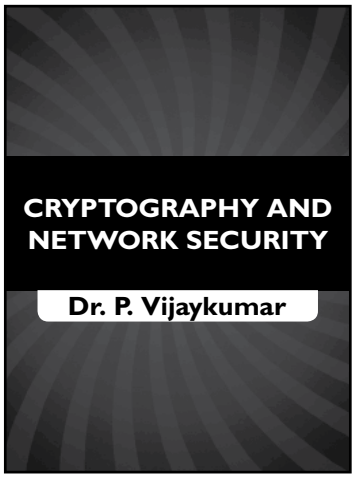
New To This Edition

- Expanded coverage of pseudorandom number generation
- New coverage of federated identity, HTTPS, Secure Shell(SSH), and wireless network security
- Completely rewritten and updated coverage of IPSec and new chapter on legal and ethical issues

Contents

1. Introduction
2. Symmetric Encryption and Message Confidentiality
3. Public-Key Cryptography and Message Authentication
4. Key Distribution and User Authentication
5. Transport-Level Security
6. Wireless Network Security
7. Electronic Mail Security
8. IP Security
9. Intruders 305
10. Malicious Software
11. Firewalls

Appendices



Cryptography and Network Security

Dr. P. Vijaykumar • Dr. S. Bose

ISBN : 9789332543645
Copyright : 2016

NEW

About the Book

This book elaborates the basic and advanced concepts of cryptography and network security issues. It is user friendly since each chapter is modelled with several case studies and illustration. All algorithms are explained with various algebraic structures to map the theoretical concepts of cryptography with modern algebra. Moreover, all the concepts are explained with the secure multicast communication scenarios that deal with one to many secure communications.

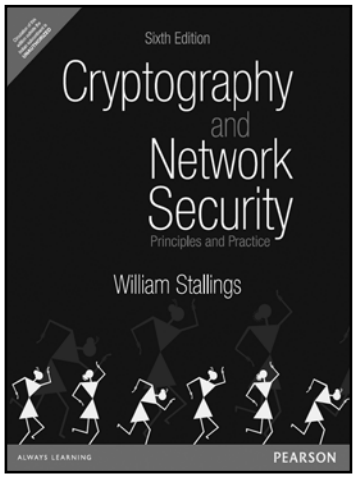
Features

- The theoretical model of cryptography and security concepts are explained using various algorithms
- Includes 10 case studies.
- All the algorithms are explained with reference to group theory
- Includes Java implementation of all the well known private and public key crypto systems
- This book supports many Secure Multicasting Algorithms.
- Includes 200 examples and 250 exercises

Contents

About the Author

Dr.P.Vijaykumar, Assistant Professor in University College of Engineering Tindivanam
Dr.S.Bose, Associate Professor in Anna University, Chennai



Cryptography and Network Security: Principles and Practice, 6/e

William Stallings

ISBN : 9789332518773
Copyright : 2014
Pages : 660

About the Book

In this age of universal electronic connectivity, viruses and hackers, electronic eavesping, and electronic fraud, security is paramount. This text provides a practical survey of both the principles and practice of cryptography and network security. First, the basic issues to be addressed by a network security capability are explored through a tutorial and survey of cryptography and network security technology. Then, the practice of network security is explored via practical applications that have been implemented and are in use today. An unparalleled support package for instructors and students ensures a successful teaching and learning experience.

Features

- Use of Sage to illustrate cryptographic algorithms: The Sage computer algebra system is used to provide numerous examples of cryptographic algorithms and is also used as the basis for numerous hands-on assignments.
- Comprehensive up-to-date survey of cryptographic algorithms. The student gains an understanding of all of important cryptographic algorithms and is able to assess their relative strengths and weaknesses.
- Complete coverage of authentication and digital signatures. Enables the student to compare and evaluate competing approaches, and thus understand each better.
- Unified, comprehensive treatment of mutual trust topics. Key management and user authentication are fundamental to the successful use of cryptographic services.
- Excellent collection of homework problems. Approximately 300 problems reinforce material in the text and also introduce new concepts and techniques.
- Solid yet easy-to-follow mathematical background. It is impossible to assess the relative strengths of various approaches without some understanding of number theory and probability.
- Comprehensive, up-to-date coverage of IP Security. IPSec is one of the most complex and one of the most important of the new network security standards.
- Comprehensive, up-to-date coverage of wireless network Security. The student gains an understanding of the importance of this topic.
- Coverage of both PGP and S/MIME for electronic mail security: These are the two most important approaches to email security.
- Comprehensive and unified discussion of intruders and viruses. The threats of intruders (hackers) and viruses are distinct, but there are also similarities

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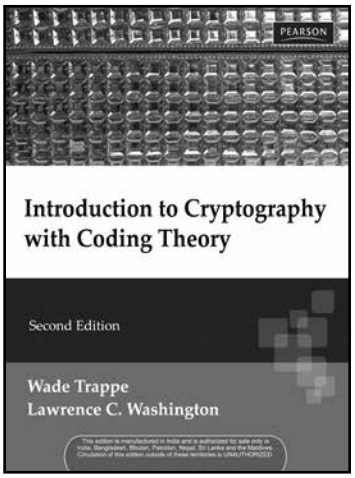

Introduction to Cryptography With Coding Theory, 2/e

Wade Trappe • Lawrence C. Washington

ISBN : 9788131714768
Copyright : 2007
Pages : 592

About the Book

With its lively, conversational tone and practical focus, this new edition mixes applied and theoretical aspects for a solid introduction to cryptography and security, including the latest significant advancements in the field.

Features

- **Balances applied and theoretical aspects of security —** Presents applications and protocols where cryptographic primitives are used in practice, such as SET and SSL.
- **Coverage of Rijndael and AES —** Provides a detailed explanation of AES, which has replaced Feistel-based ciphers (DES) as the standard block cipher algorithm.
- **Coverage of practical applications of cryptography to security protocols —** Connects the cryptographic tools developed earlier in the book to the building of real security tools, demonstrating to students that there is more to security and cryptography than just math.
- **Friendly, story-like discussion of security concepts —** Uses historical examples to illustrate the concepts of security and cryptanalysis by relating theory to easier-to-grasp events.
- **Modern methods such as Elliptic curves, Lattice methods, and Quantum Techniques —** Provides thorough coverage of topics that are becoming increasingly prominent in the field.
- **Major coverage of coding theory —** Offers a discussion of coding theory, which is often covered in today's cryptology courses.
- **Numerous example calculations —** Includes many examples, especially in purely mathematical chapters such as Ch. 3.
- **Public key certificate —** Provides an example of what an actual public key certificate looks like, rather than just describing it.
- Mathematica/Maple/Matlab problems and notebooks — Allow students to work with realistic sized examples in RSA and Digital Signatures, as well as classical cryptosystems and those with elliptic curves.
- **Practical examples and applications —** Give students hands-on experience with the large-numbered cryptography of today's security systems, and provides a discussion of security protocols.

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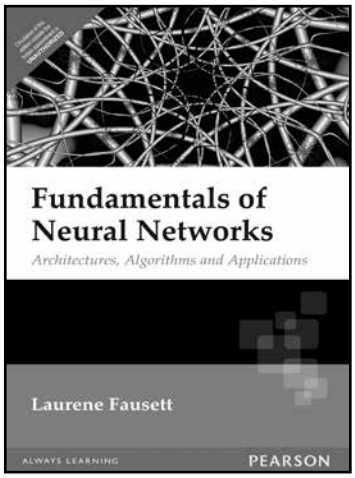


Fundamentals of Neural Networks: Architectures, Algorithms and Applications

Laurene V. Fausett

ISBN : 9788131700532
Copyright : 1994
Pages : 480

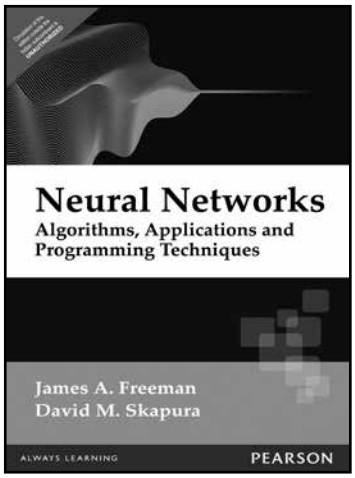
About the Book

An exceptionally clear, thorough introduction to neural networks written at an elementary level. Written with the beginning student in mind, the text features systematic discussions of all major neural networks and fortifies the reader's understudy with many examples.

Features

- covers all major neural networks.
- shows architectures in a similar format for all nets — illustrating the similarities and differences among them.
- clarifies the differences in the capabilities of the different networks by focusing on simple problems — in many cases variations of a theme.
- presents algorithms in enough detail to facilitate the writing of computer programs.
- gives detailed examples of simple applications.
- provides mathematical development when it provides a guide to proper implementation of a net.
- includes exercises and 25 computer projects.

Contents



Neural Networks: Algorithms, Applications, and Programming Techniques

James A. Freeman • David M. Skapura

ISBN : 9788131708088
Copyright : 1991
Pages : 416

About the Book

This Book provides a solid and practical introductions to neural networks—computational models inspired by the brain. The authors explain the basic concepts and technology underlying such models, then show how these models can be applied to the solution of diverse problems in science and engineering. The book's aim is not to explore every corner of current and future research, but to focus on what works and to present techniques useful for solving real problems.

Features

- A firm understanding of the operation of the specific networks presented
- The ability to program simulations of those networks successfully
- The ability to apply neural networks to real engineering and scientific problems

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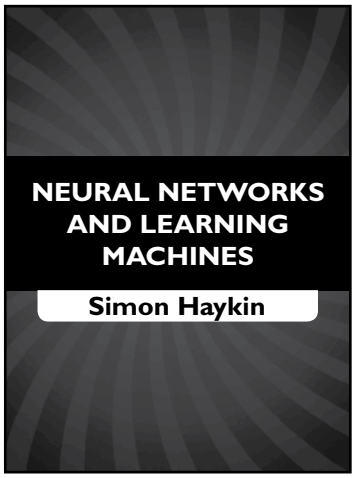

Neural Networks and Learning Machines

Simon Haykin

ISBN : TBA
Copyright : 2016

Coming Soon

About the Book

Refocused, revised and renamed to reflect the duality of neural networks and learning machines, this edition recognizes that the subject matter is richer when these topics are studied together. Ideas drawn from neural networks and machine learning are hybridized to perform improved learning tasks beyond the capability of either independently.

Features

- Computer-oriented experiments distributed throughout the text.
- Extensive, state-of-the-art coverage exposes students to the many facets of neural networks and helps them appreciate the technology's capabilities and potential applications.
- Reinforces key concepts with chapter objectives, problems, worked examples, a bibliography, photographs, illustrations, and a thorough glossary.
- Explores the intricacies of the learning process—an essential component for understanding neural networks.
- Considers recurrent networks, such as Hopfield networks, Boltzmann machines, and meanfield theory machines, as well as modular networks, temporal processing, and neurodynamics.
- Integrates computer experiments throughout, giving students the opportunity to see how neural networks are designed and perform in practice.
- 'Information-theoretic learning models, including copulas, independent components analysis(ICA), coherent ICA, and information bottleneck.
- Stochastic dynamic programming, including approximate and neurodynamic procedures.
- Recurrent neural networks trained using sequential-state estimation algorithms.

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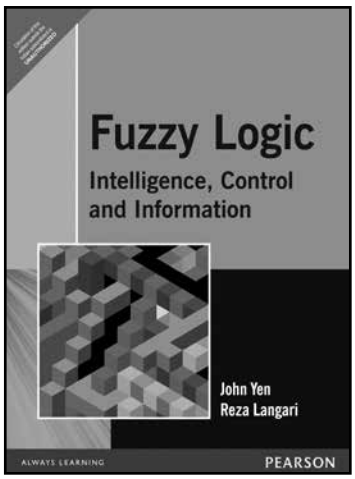
About the Author

Simon O. Haykin, McMaster University, Ontario Canada



Fuzzy Logic: Intelligence, Control, and Information

John Yen • Reza Langari

ISBN : 9788131705346
Copyright : 1999
Pages : 532

About the Book

This text is appropriate for an undergraduate electrical engineering course in fuzzy logic. Providing equal emphasis on theoretical foundations and practical issues, this book features fuzzy logic concepts and techniques in intelligent systems, control, and information technology.

Features

- Comprehensive and up-to-date coverage.
- Provides examples and exercises that are related to real world problems.
- Uses Fuzzy Logic Toolbox for MATLAB™ to demonstrate exemplar applications and to develop hands-on exercises.
- Provides design guidelines and design methods for developing fuzzy logic applications.
- Provides a modern perspective of the fuzzy logic technology.
- Introduces core concepts and techniques gently in two steps.
- Provides relevant background material so that students from a wide range of disciplines can easily understand the text.
- Introduces the connection between fuzzy logic and related ideas, methods, and theories developed in other disciplines (e.g., artificial intelligence, probability theory, control, model identification, etc.)
- Summarizes key concepts at the end of each chapter.
- Highlights motivations and benefits of employing fuzzy logic in control engineering and information systems.
- Discussion of open research issues and their implications.
- Advanced topics are separated from the basic material in the chapter that immediately follows.

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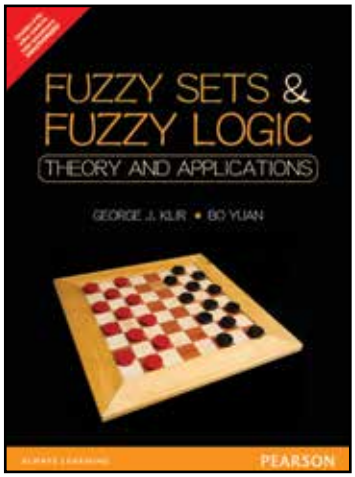

Fuzzy Sets and Fuzzy Logic: Theory and Applications, 2/e

NEW

George J. Klir • Bo Yuan

ISBN : 9789332549425
Copyright : 1995
Pages : 592

About the Book

Reflecting the tremendous advances that have taken place in the study of fuzzy set theory and fuzzy logic from 1988 to the present, this book not only details the theoretical advances in these areas, but considers a broad variety of applications of fuzzy sets and fuzzy logic as well.

Features

- Details the advances that have taken place in fuzzy set theory and fuzzy logic in recent years.
- Requires only a basic knowledge of classical (nonfuzzy) set theory, classical (two-valued) logic, and probability theory.
- Includes all bibliographical, historical, and other side remarks in the notes that follow each individual chapter.
- Includes a set of exercises after each chapter.
- Offers an overview of neural networks, genetic algorithms, and rough sets in Appendices A-C.
- Includes a glossary of key concepts and a glossary of symbols.

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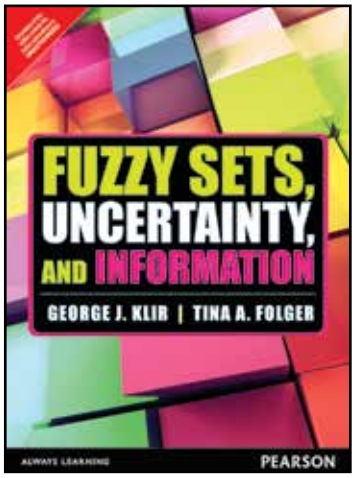

Fuzzy Sets, Uncertainty, and Information

George J. Klir

ISBN : 9789332550001
Pages : 368

NEW

About the Book

The concept of uncertainty and its relationship to the increasingly important concept of information and complexity need to be brought under a new mathematical formulation.

This book is intended to make an understanding of this mathematical formalism accessible to students and professionals in a broad range of disciplines and covers the various issues of uncertainty, information and complexity from a broad perspective based on formalism of fuzzy set theory. No prior knowledge of fuzzy set theory or information theory is required; the reader is however assumed to be familiar with basic notions of set theory, logic and probability theory, though the fundamentals of these subject areas are briefly over viewed in the book.

The book is suitable as a text at the advanced under-graduate/postgraduate level that covers uncertainty, information and complexity from a broad perspective in mathematics courses in artificial intelligence, engineering and computer science.

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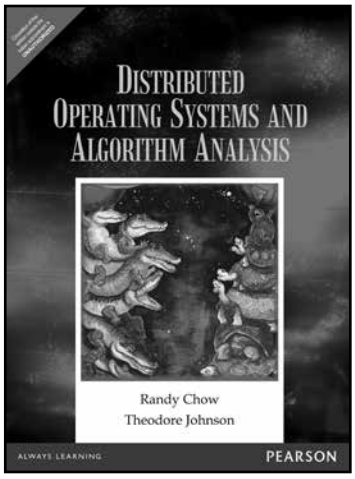


Distributed Operating Systems and Algorithm Analysis

Randy Chow • Theodore Johnson

ISBN : 9788131728598
Copyright : 2009
Pages : 550

About the Book

This book integrates the theory and practice of distributed operating systems and algorithms. It combines coverage of distributed operating systems and distributed algorithms, allowing instructors to cover the algorithms involved in distributed operating systems with optional depth as desired and motivate the study of distributed algorithms by showing how they are applied in operating systems. Currently all books treat these as separate topics. This text includes coverage of parallel systems, distributed systems, real-time systems, computer networks and algorithms for asynchronous distributed systems, and uses examples from many commercial and experimental operating systems. Included in the book are a number of programming projects.

Features

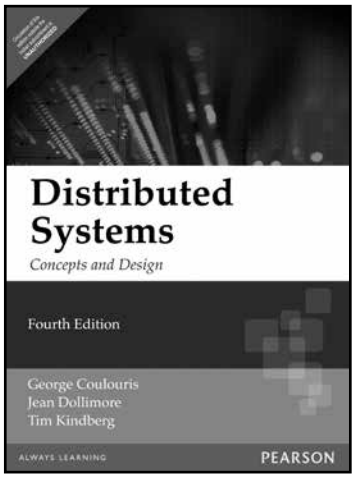
- Integrates and balances coverage of the advanced aspects of operating systems with the distributed algorithms used by these systems.
- Includes extensive references to commercial and experimental systems to illustrate the concepts and implementation issues.
- Provides precise algorithm description and explanation of why these algorithms were developed.
- Structures the coverage of algorithms around the creation of a framework for implementing a replicated server-a prototype for implementing a fault-tolerant and highly available distributed system.
- Contains programming projects on such topics as sockets, RPC, threads, and implementation of distributed algorithms using these tools.
- Includes an extensive annotated bibliography for each chapter, pointing the reader to recent developments.

Contents

About the Authors

Randy Chow is a professor of Computer and Information Science and Engineering at the University of Florida. His research interests include computer networks, distributed systems, computer security, and system performance evaluation.

Theodore Johnson is a member of the technical staff at the Database Research department of AT&T Labs-Research. Previously, he was a professor of Computer and Information Science and Engineering at the University of Florida. His research interests include distributed systems, databases, and performance modeling.



Distributed Systems: Concepts and Design, 4/e

George Coulouris • Jean Dollimore • Tim Kindberg

ISBN : 9788131718407
Copyright : 2008
Pages : 944

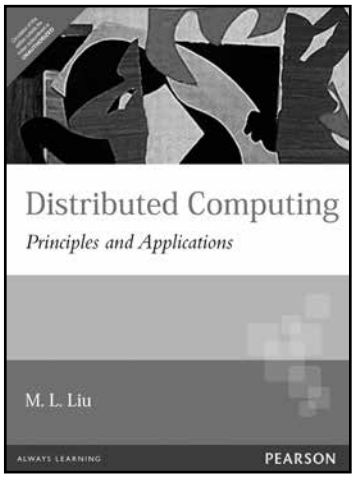
About the Book

Broad and up-to-date coverage of the principles and practice in this fast moving area. Includes the key issues in the debate between components and web services as the way forward for industry. The depth of coverage will enable students to evaluate existing distributed systems and design new ones.

Features

- Three entirely new chapters on Peer-to-Peer Systems, Web Services, and Mobile and Ubiquitous Systems.
- More than 25 detailed case studies of well-known systems, 8 of them new including studies of the Grid, Cooltown, Bluetooth andthe (in)security of the WiFi WEP protocol.
- Updated coverage of XML and its security extensions, the Advanced Encryption Standard and security design for ubiquitous systems.

Contents



Distributed Computing: Principles and Applications

M.L. Liu

ISBN : 9788131713327
Copyright : 2004
Pages : 448

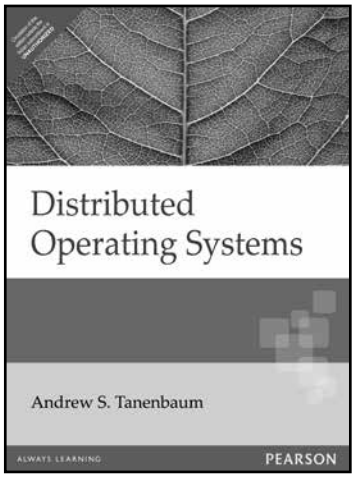
About the Book

Distributed Computing provides an introduction to the core concepts and principles of distributed programming techniques. It takes a "how-to" approach where students learn by doing. Designed for students familiar with Java, the book covers programming paradigms, protocols, and application program interfaces (API's), including RMI, COBRA, IDL, WWW, and SOAP. Each chapter introduces a paradigm and/or protocol, and then presents the use of a DPI that illustrates the concept. The presentation uses narrative, code examples, and diagrams designed to explain the topics in a manner that is clear and concise. End-of-chapter exercises provide analytical as well as hands-on exercises to prompt the reader to practice the concepts and the use of API's covered throughout the text. Using this text, students will understand and be able to execute, basic distributed programming techniques used to create network services and network applications, including Internet applications.

Features

- Contains a concise, hands-on introduction to distributed programming using the latest technologies.
- Uses extensive programming and self-check exercises to help convey and reinforce basic ideas.
- Relates the concepts and technologies to real world applications through sidebars of news articles.
- Includes supplementary Web site with programming samples, sample lab exercises, test questions, and links.

Contents



Distributed Operating Systems

Andrew S. Tanenbaum

ISBN : 9788177581799
Copyright : 1995

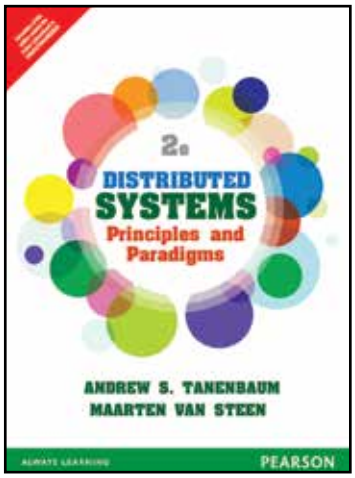
About the Book

As distributed computer systems become more pervasive, so does the need for understanding how their operating systems are designed and implemented. Andrew S. Tanenbaums **Distributed Operating Systems** fulfills this need. Representing a revised and greatly expanded Part II of the best-selling Modern Operating Systems, it covers the material from the original book, including communication, synchronization, processes, and file systems, and adds new material on distributed shared memory, real-time distributed systems, fault-tolerant distributed systems, and ATM networks. It also contains four detailed case studies: Amoeba, Mach, Chorus, and OSF/DCE. Tanenbaums trademark writing provides readers with a thorough, concise treatment of distributed systems.

Features

- offers the most up-to-date coverage of emerging techniques and technology, including the only coverage of Distributed Shared Memory available to date.
- provides four detailed case studies of actual distributed systems, including:
  - Amoeba.
  - Mach.
  - Chorus.
  - DCE.
- supports narrative with a strong pedagogical framework, including:
  - over 250 figures.
  - over 200 references.
  - suggested readings.
  - nearly 200 problems.
- new material on distributed real-time systems.
- new material on ATM.
- new material on fault-tolerance

Contents



Distributed Systems: Principles and Paradigms, 2/e

Andrew S Tanenbaum • Maarten Van Steen

ISBN : 9789332549807
Pages : 704

NEW

About the Book

Very few textbooks today explore distributed systems in a manner appropriate for university students. In this unique text, esteemed authors Tanenbaum and van Steen provide full coverage of the field in a systematic way that can be readily used for teaching. No other text examines the underlying principles – and their applications to a wide variety of practical distributed systems – with this level of depth and clarity.

Features

- First part of the book dedicates one chapter to each of seven key principles of all distributed systems: communication, processes, naming, synchronization, consistency and replication, fault tolerance, and security.
- Second part of the book devoted to real-world distributed case studies:
- Numerous end-of-chapter exercises – Explain how the various principles of distributed systems work in practice.
- "Big picture" concepts and many technical details:
- Excellent coverage of timely, advanced distributed systems topics – Examines security, payment systems, recent Internet and Web protocols, scalability, and caching and replication.

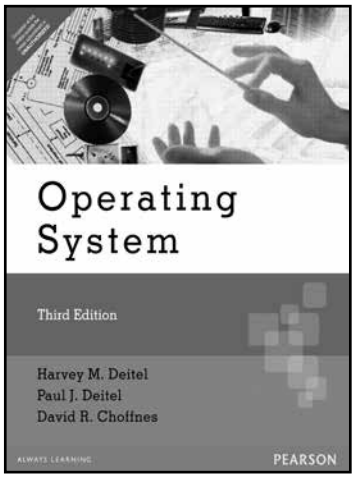
Contents

About the Authors

Andrew S. Tanenbaum has a B.S. Degree from M.I.T. and a Ph.D. from the University of California at Berkeley. He is currently a Professor of Computer Science at the Vrije Universiteit in Amsterdam, The Netherlands, where he heads the Computer Systems Group. He is also Dean of the Advanced School for Computing and Imaging, an interuniversity graduate school doing research on advanced parallel, distributed, and imaging systems. Nevertheless, he is trying very hard to avoid turning into a bureaucrat.

Prof. Tanenbaum is a Fellow of the ACM, a Fellow of the IEEE, a member of the Royal Netherlands Academy of Arts and Sciences, winner of the 1994 ACM Karl V. Karlstrom Outstanding Educator Award, and winner of the 1997 ACM/SIGCSE Award for Outstanding Contributions to Computer Science Education. He is also listed in Who's Who in the World.

Maarten van Steen is a professor at the Vrije Universiteit, Amsterdam where he teaches operating systems, computer networks, and distributed systems. He has also given various highly successful courses on computer systems related subjects to ICT professionals from industry and governmental organizations.



Operating System, 3/e

Harvey M. Deitel • Paul J. Deitel • David R. Choffnes

ISBN : 9788131712894
Copyright : 2007
Pages : 1270

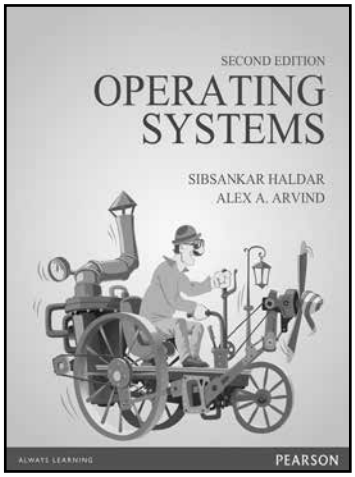
About the Book

For one- and two-semester **Operating Systems** courses (in the most recent ACM/IEEE curriculum) that universities offer to juniors, seniors and graduate Computer Science students. The text goes beyond the standard coverage in operating systems courses with key chapters on multiprocessing, networking, distributed systems, performance, and security. The text features extensive, up-to-the-minute case studies on the latest versions of Linux (2.6) and Microsoft Windows XP. An abundance of charts, diagrams, illustrations and exercises (both with and without solutions) is included.

Features

- Conforms to all core requirements and elective topics of the IEEE/ACM's CC2001 Operating Systems course (except for shell scripting).
- Approximately 300 charts, tables and illustrations and extensive Web resources in every chapter.
- Hundreds of self-review questions and answers (two after each section).
- End-of-chapter and end-of-book glossaries with approximately 1800 terms defined.
- Pseudocode in C/C++/Java-like syntax.
- Works Cited section at the end of every chapter.
- Multithreading treatments in pseudocode and Java.
- 100+ page case studies of Linux 2.6 and Windows XP 100+.
- Mini case studies on key operating systems.
- Biographic features on key operating systems people.
- "Operating Systems Thinking" features.
- Anecdotes.

Contents



Operating Systems, 2e

Sibsankar Haldar • Alex Aravind

ISBN : 9789332500303
Copyright : 2014
Pages : 832

New Edition

About the Book

Designed to meet the needs of undergraduate computer science students, Operating Systems follows the principle of top-down design and bottom-up development. The discussion of key concepts with few references to technologies helps the reader grasp the fundamentals easily.

Features

- Platform-independent, in-depth discussion of fundamental concepts
- Lucid explanation of the solutions to the problem of process synchronization
- An overview chapter that introduces relevant concepts and related terms
- Running marginalia that presents additional information without disrupting the continuity of the text

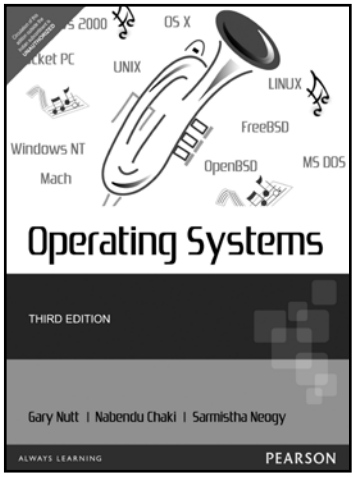
- Two detailed technological case studies, on Linux 2.6 and Microsoft Windows XP
- Over 650 end-of-chapter questions and exercises

Contents

About the Authors

Sibsankar Haldar obtained his B.E. in electrical engineering from Bengal Engineering College (now Bengal Engineering and Science University) in 1984. He went on to receive his M.Tech. in computer science and engineering from the Indian Institute of Technology Kanpur in 1986, and Ph.D. from the Department of Computer Science and Automation, the Indian Institute of Science, Bangalore in 1990. From 1987 to 1990, he also served as a scientific officer in the same department where he taught courses in programming languages, databases, and operating systems. As an academic, he was for many years, affiliated with several prominent institutes as the Memorial University of Newfoundland, Canada; Utrecht University and Centrum Wiskunde & Informatica, the Netherlands; Ecole Polytechnic, France; Tata Institute of Fundamental Research, Mumbai; and Indian Statistical Institute, Kolkata. In 1997, Dr Haldar shifted to the industry to work with Axes Technologies, Bangalore. He also worked with various organizations like Nortel Networks, Canada; Lucent Technologies Bell Laboratories, USA; Timesten (now a part of Oracle),USA; Nucleodyne, USA; and Motorola (later Motorola Mobility) before joining Oracle in 2012.

Alex A. Aravind is currently a professor in the department of computer science at the University of Northern British Columbia (UNBC), Canada. An alumnus of the Indian Institute of Technology Kharagpur from where he obtained his M.Tech. in computer science, Dr Aravind received his Ph.D. from the Indian Institute of Science. He worked as a scientific offer in the Supercomputer Education and Research Centre (SERC), Indian Institute of Science, Bangalore during 1996–1997. Then he moved to Canada having obtained a post-doctoral fellowship at the Memorial University of Newfoundland, St. John's in 1997.
Dr. Aravind joined the UNBC in 1999 where he teaches operating systems. From UNBC, Alex has received teaching excellence award, in 2012, and research excellence award, in 2013. His areas of research interest include operating systems, concurrent and distributed computing, and wireless sensor networks. He has published several research articles in leading journals and conferences, and supervised graduate students. A member of the Association for Computing Machinery (ACM), Institute of Electrical and Electronics Engineers (IEEE), and the Society for Computer Simulation International (SCS), Dr Aravind has chaired a number of conference sessions, organized workshops, and delivered invited talks.



Operating Systems, 3/e

Gary Nutt

ISBN : 9788131723593
Copyright : 2009
Pages : 856

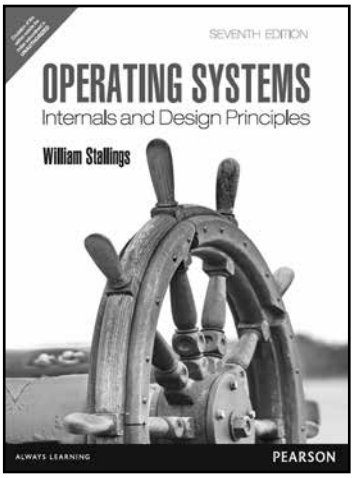
About the Book

Operating Systems, Third Edition, has become a market leader by striking a balance between introducing the basic principles and putting examples from Linux, UNIX, and Windows into practice. The book promotes an understanding of contemporary operating system concepts and how they are applied today. This edition gives more breadth to the coverage of operating system principles and more opportunities for readers to see and work with real-world examples.

Features

- Uses the most common operating systems, including Linux, UNIX, and Windows
- Contains overall design enhancements to facilitate students¡¦ understanding. This includes a further focus on principles and an expanded art program.
- Contains more Labs! More exercises than in the previous edition are included to give students substantial hands-on experience with Linux, UNIX, and Windows
- Is updated and enhanced with the latest information on:

Contents



Operating Systems: Internals and Design Principles, 7/e

William Stallings

ISBN : 9789332518803
Copyright : 2014
Pages : 708

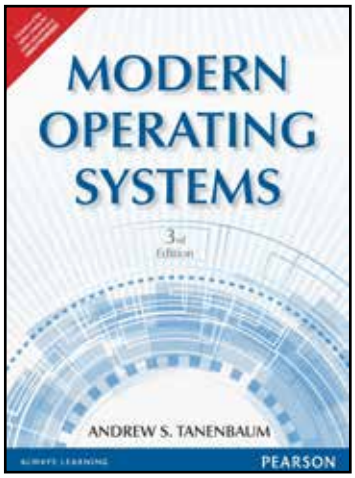
About the Book

Operating Systems: Internals and Design Principles provides a comprehensive and unified introduction to operating systems topics. Stallings emphasizes both design issues and fundamental principles in contemporary systems and gives readers a solid understanding of the key structures and mechanisms of operating systems. He discusses design trade-offs and the practical decisions affecting design, performance and security. The book illustrates and reinforces design concepts and ties them to real-world design choices through the use of case studies in UNIX and Windows.

Features

- Running case studies focused on how specific operating systems implement specific concepts are embedded throughout the text instead of end of book case studies. This enhances the student understanding of relevant concepts at the point of study.
- A copy of all algorithms in an easy-to-read Pascal pseudocode is available on the author's Web site.
- Several types of projects are supported by the text, including:
  o Simulations, which students access via the Web, with no programming or platform involved.
  o Small projects, designed to take a week or two to complete.
  o Two major programming projects, one to build a shell (or command line interpreter) and one to build a process dispatcher, are included. The text describes the projects, and step-by-step exercises are included at the Instructors Resource Center. The exercises can be uploaded to the instructor's Web site.
  o A more extensive set of seven programming projects provide for more substantial two-person assignments
- Projects are evenly split between system-level projects and kernel-level projects
- Detailed treatment of threads — one of the most important developments in operating systems — is included. The text helps students to understand the relationship between process and thread and the way in which threads are managed and used.
- A unique comprehensive treatment of scheduling covers key recent developments in scheduling theory and design in the areas of multiprocessor scheduling and real-time scheduling.
- Comprehensive, unified treatment of I/O offers broad and thorough coverage of this critical part of any operating system.
- Is updated and enhanced with the latest information on:

Contents



Modern Operating Systems, 3/e

Andrew S Tanenbaum • Herbert Bos

ISBN : 9789332550018
Pages : 1163

NEW

About the Book

Modern Operating Systems, Fourth Edition, is intended for introductory courses in Operating Systems in Computer Science, Computer Engineering, and Electrical Engineering programs.

The widely anticipated revision of this worldwide best-seller incorporates the latest developments in operating systems (OS) technologies. The Fourth Edition includes up-to-date materials on relevant OS. Tanenbaum also provides information on current research based on his experience as an operating systems researcher.

Modern Operating Systems, Third Edition was the recipient of the 2010 McGuffey Longevity Award. The McGuffey Longevity Award recognizes textbooks whose excellence has been demonstrated over time. http://taaonline.net/index.html

Features

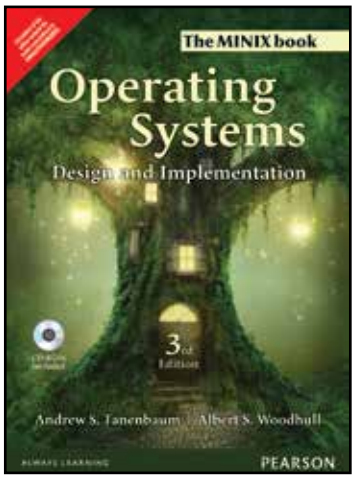
- Provide Practical Detail on the Big Picture Concepts
- A clear and entertaining writing style outlines the concepts every OS designer needs to master.
- In-depth topic coverage includes processes, threads, memory management, file systems, I/O, deadlocks, interface design, multimedia, performance tradeoffs, and the newest trends in OS design.
- Multimedia file systems are covered–an important topic that most books miss. The chapter on Multimedia Operating Systems has been moved to the Web, primarily to make room for new material and keep the book from growing to a completely unmanageable size.
- A thorough treatment of computer security includes viruses, worms, malware and other digital pests. This chapter far exceeds anything written in any other book. It also discusses ways to combat them.
- Coverage of multiprocessors, multicomputers, virtual machines, and distributed systems reflects that the field is rapidly moving from an era of single-processor systems to multicore systems, multiprocessors, and distributed systems.
- Case studies of popular operating systems: UNIX, Linux, Windows 8, and Android
- NEW and UPDATED: Chapters 2—6 have been updated, with older material removed and some new material added.
- NEW: Chapter 7 is completely new. It covers the important topics of virtualization and the cloud.
- NEW and UPDATED: Chapter 8 is an updated version of the previous material on multiprocessor systems. There is more emphasis on multicore systems now, which have become so important in the past few years. A long section on VMware has been added.
- NEW and UPDATED: Chapter 9 has been heavily revised and reorganized, with considerable new material on exploiting code bugs, malware, and defenses against them.

Contents

About the Authors

Andrew S. Tanenbaum has an S.B. degree from M.I.T. and a Ph.D. from the University of California at Berkeley. He is currently a Professor of Computer Science at the Vrije Universiteit in Amsterdam, The Netherlands. He was formerly Dean of the Advanced School for Computing and Imaging, an interuniversity graduate school doing research on advanced parallel, distributed, and imaging systems. He was also an Academy Professor of the Royal Netherlands Academy of Arts and Sciences, which has saved him from turning into a bureaucrat. He also won a prestigious European Research Council Advanced Grant.

Herbert Bos obtained his master degree from Twente University and his Ph.D. from Cambridge University Computer Laboratory in the UK. Since then, he has worked extensively on dependable and efficient I/O architectures for operating systems like Linux, but also research systems based on MINIX 3. He currently a professor in Systems and Network Security in the department of Computer Science at the Vrije Universiteit in Amsterdam, the Netherlands. His main research field is that of system security. With his students, he works on novel ways to detect and stop attacks, to analyze and reverse engineer malware, and to take down botnets (malicious infrastructures that may span millions of computers). In 2011, he obtained an ERC Starting Grant for his research on reverse engineering. Several of his students have won the Roger Needham Ph.D. Award for best Ph.D. thesis in systems in Europe.



Operating Systems: Design and Implementation, 3/e

Andrew S Tanenbaum • Albert S Woodhull

ISBN : 9789332550513
Pages : 1080

NEW

About the Book

Revised to address the latest version of MINIX (MINIX 3), this streamlined, simplified new edition remains the only operating systems text to first explain relevant principles, then demonstrate their applications using a Unix-like operating system as a detailed example. It has been especially designed for high reliability, for use in embedded systems, and for ease of teaching.

Features

- Accompanying CD-ROM with the latest version of MINIX and simulators for running MINIX on other systems – A small, easy-to-understand highly reliable operating system is available for study; unique to this text.
- Relevant sections of MINIX code are described in detail in most chapters – Provides problems at the end of each chapter, with separate solutions manual for the instructor.
- Simulators for running MINIX on other systems are available.
- MINIX includes networking based in TCP/IP – the full source code of the MINIX TCP/IP implementation is included on the CD-ROM.

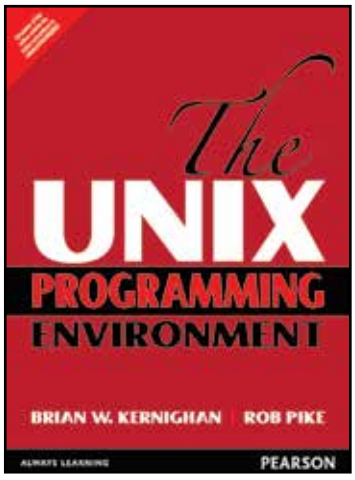
Contents

About the Authors

Andrew S. Tanenbaum has a B.S. Degree from M.I.T. and a Ph.D. from the University of California at Berkeley. He is currently a Professor of Computer Science at the Vrije Universiteit in Amsterdam, The Netherlands, where he heads the Computer Systems Group. He is also Dean of the Advanced School for Computing and Imaging, an interuniversity graduate school doing research on advanced parallel, distributed, and imaging systems.

Prof. Tanenbaum is a Fellow of the ACM, a Fellow of the IEEE, a member of the Royal Netherlands Academy of Arts and Sciences, winner of the 1994 ACM Karl V. Karlstrom Outstanding Educator Award, and winner of the 1997 ACM/SIGCSE Award for Outstanding Contributions to Computer Science Education. He is also listed in Who's Who in the World.

Albert S. Woodhull was a faculty member in the School of Natural Science, Hampshire College, Amherst, MA for many years. He has taught at the University of Massachusetts and Smith College in the US, and he has been a visiting faculty member on multiple occasions at universities in Nicaragua, supported on two of these visits by Fulbright grants. He also served as a computer and network system administrator at the University of Massachusetts. He holds an B.S. degree from M.I.T. and a Ph.D. from the University of Washington. His home page on the web is at http://minix1.woodhull.com/asw/.



The UNIX Programming Environment

Kernighan • Pike

ISBN : 9789332550254
Pages : 368

NEW

About the Book

Designed for first-time and experienced users, this book describes the UNIX® programming environment and philosophy in detail. Readers will gain an understanding not only of how to use the system, its components, and the programs, but also how these fit into the total environment.

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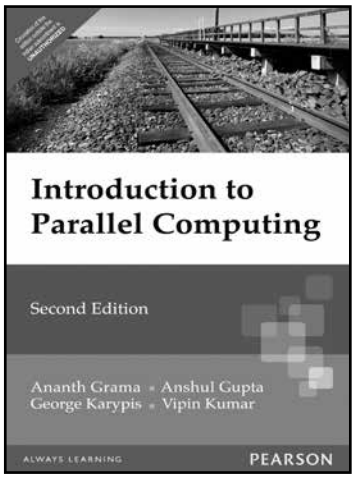

An Introduction to Parallel Computing: Design and Analysis of Algorithms, 2/e

Ananth Grama • Vipin Kumar • Anshul Gupta • George Karypis

ISBN : 9788131708071
Copyright : 2003
Pages : 656

About the Book

Introduction to Parallel Computing, 2e provides a basic, in-depth look at techniques for the design and analysis of parallel algorithms and for programming them on commercially available parallel platforms. The book discusses principles of parallel algorithms design and different parallel programming models with extensive coverage of MPI, POSIX threads, and Open MP. It provides a broad and balanced coverage of various core topics such as sorting, graph algorithms, discrete optimization techniques, data mining algorithms, and a number of other algorithms used in numerical and scientific computing applications.

Features

- Complete end-to-end source of information on almost all aspects of parallel computing.
- Complete coverage of traditional Computer Science algorithms, scientific computing algorithms, and data inverse algorithms.
- Modular nature of the book's presentation enables instructors to teach a variety of undergraduate and graduate level courses.
- Chapter on principles of parallel programming lays out the basis for abstractions that capture critical features of the underlying architecture of algorithmic portability.
- Chapter on programming paradigms introduces standardized programming models such as MPI, POSIX threads, and OpenMP.
- Provides an emphasis on portability.

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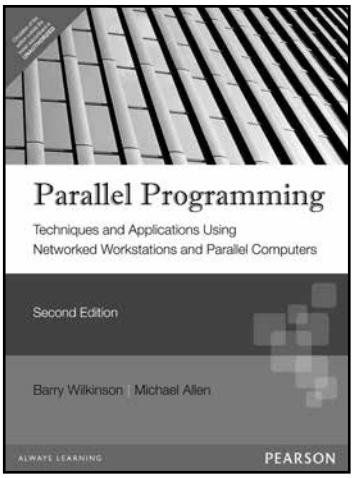

Parallel Programming: Techniques and Applications Using Networked Workstations and Parallel Computers, 2/e

Barry Wilkinson

ISBN : 9788131702390
Copyright : 2006
Pages : 488

About the Book

Designed for undergraduate/graduate-level parallel programming courses. This nontheoretical, highly accessible text—which is linked to real parallel programming software—covers the techniques of parallel programming in a practical manner that enables students to write and evaluate their parallel programs. Supported by the National Science Foundation and exhaustively class-tested, it is the first text of its kind that does not require access to a special multiprocessor system, concentrating instead only on parallel programs that can be executed on networked workstations using freely available parallel software tools. The Second Edition has been revised to incorporate a greater focus on cluster programming as this type of programming has become more widespread with the availability of low-cost computers.

Features

- Chapter on Distributed Shared Memory (DSM) programming—Describes techniques and tools for shared memory programming on clusters.
- Content revisions throughout.
- Required software (MPI, PVM, DSM) available FREE!
- Usage of MPI and PVM pseudocodes.
- Thorough coverage of shared memory programming and Pthreads.
- Exploration of such applications as numerical algorithms, image processing and searching and optimization.

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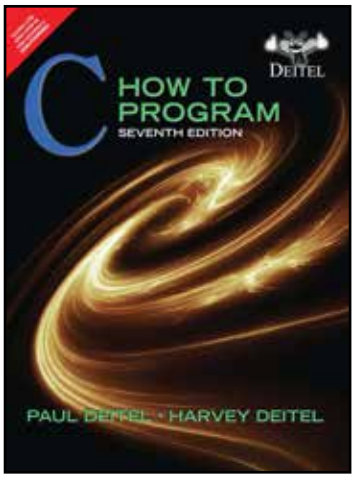


C How to Program, 7/e

Paul Deitel • Harvey Deitel

NEW

ISBN : 9789332555310
Pages : 976

About the Book

For introductory courses in C Programming. Also for courses in Programming for Engineers, Programming for Business, and Programming for Technology.

The Deitels' How to Program series offers unparalleled breadth and depth of object-oriented programming concepts and intermediate-level topics for further study. Using the Deitels' signature "Live-Code™ Approach," this complete, authoritative introduction to C programming introduces fundamentals of structured programming, and covers relevant features of C language's C-201X standard. It also includes an updated treatment of C++ for those who want to transition to object-oriented concepts. Finally, new material on security is added to this edition.

Features

- Signature "Live Code™ Approach" — Language features are presented in the context of a wide variety of complete working programs.
  — Features thousands of lines of code in hundreds of complete working programs.
  — Enables students to confirm that programs run as expected. — Students can also manipulate the code from the book's Companion Website (www.pearsonhighered.com/deitel) or from the authors' website (www.deitel.com).
- Outstanding, consistent and applied pedagogy:
  — Icons throughout identify Software Engineering Observations; Good Programming Practices; Common Programming Errors; Portability Tips; Performance Tips, Testing and Debugging Tips, and Look-and-Feel Observations.
  — Provides hundreds of valuable programming tips and facilitates learning.
- Extensive set of interesting exercises and substantial projects.
  — Enables students to apply what they've learned in each chapter.
  — "Making a Difference" Exercises Set.Students are encouraged to use computers and the Internet to research and solve problems that really matter.

These exercises are meant to increase awareness of important issues the world is facing.

Contents

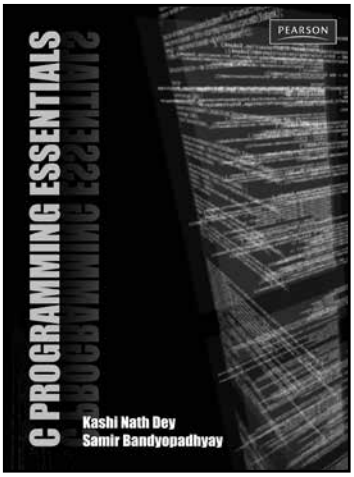
About the Authors

Paul J. Deitel, CEO and Chief Technical Officer of Deitel & Associates, Inc., is a graduate of the MIT Sloan School of Management, where he studied Information Technology. He holds the Java Certified Programmer and Java Certified Developer professional certifications, and has been designated by Sun Microsystems as a Java Champion—"a prominent member of the Java community whose input is solicited by the company in order to improve the Java platform." He has delivered programming language courses to clients including numerous Fortune 1000 companies, government organizations and the military. Paul is one of the world's most experienced corporate trainers. He has also lectured on C and Java for the Boston Chapter of the Association for Computing Machinery. The Deitels are the world's best-selling programming language textbook authors.

Dr. Harvey M. Deitel, Chairman and Chief Strategy Officer of Deitel & Associates, Inc., has 46 years of academic and industry experience in the computer field. Dr. Deitel earned B.S. and M.S. degrees from the Massachusetts Institute of Technology and a Ph.D. from Boston University. He has 20 years of college teaching

experience, including earning tenure and serving as the Chairman of the Computer Science Department at Boston College before founding Deitel & Associates, Inc. He and Paul are the co-authors of several dozen books and multimedia packages. With translations published in many languages, the Deitels' texts have earned international recognition and are used in over 150 countries. Dr. Deitel has delivered hundreds of professional seminars to major corporations, academic institutions, government organizations and the military.

C Programming



C Programming Essentials

Kashi Nath Dey • Samir Kumar Bandyopadhyay

ISBN : 9788131728895
Copyright : 2010
Pages : 292

About the Book

C Programming Essentials is specifically designed t be used at the beginner and intermediate level. The book is organized around language as the tool for design and programming and library functions. It demonstrates key techniques that make C effective and focuses on the fundamental concepts necessary for mastery. An introduction to C99 is also provided

Features

- Get to know common programming errors
- New terminology checklist at the end of each chapter
- Over 100 MCQs
- More than 100 true/false questions
- 100 review questions
- 300 line diagrams

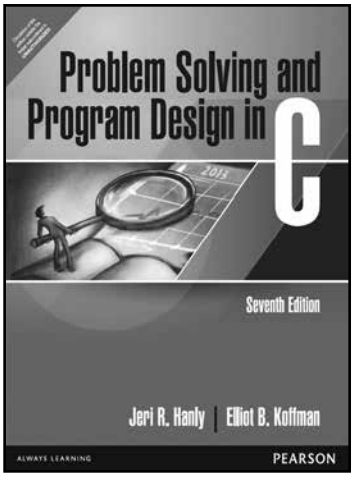
Contents

About the Authors

K.N. Dey is a Reader at the Department of Computer Science and Engineering at the University of Calcutta.

S.K. Bandyopadhyay is a Professor at the Department of Computer Science and Engineering at the University of Calcutta.

C Programming



Problem Solving and Program Design in C, 7/e

Jeri R. Hanly • Elliot B. Koffman

ISBN : 9789332518810
Copyright : 2014
Pages : 840

About the Book

Problem Solving and Program Design in C is one of the best-selling introductory programming textbooks using the C programming language. It embraces a balanced approach to program development and an introduction to ANSI C. The book provides a gradual introduction to pointers and covers programming with functions early in the text. In later chapters, students learn to implement fundamental data structures such as lists, stacks, queues, and trees in a language that fosters their understanding of stack- and heap-dynamic memory allocation and programmer-controlled pointers. To enhance students' learning experience it offers the right amount of pedagogical features that include end-of-section and chapter exercises, examples and case studies, syntax and program style display boxes, error discussions and end-of-chapter projects.

Features

- Gradual introduction to pointers with a consistent emphasis on the connection between problem solving skills and effective software development
- Early coverage of functions, logical operators, and operators with side effects
- Chapter 0 explains the various fields of study in CS, as well as the career paths available to those who major in CS-related disciplines
- Inclusion of advanced programming topics in the "Multiprocessing Using Processes and Threads" chapter
- "On to C++" chapter provides an introduction to the C++ programming language
- End-of-section and end-of-chapter exercises, case studies and end-of-chapter projects offer practical learning opportunities at relevant points in the text
- A glossary provides quick access to important computing terms

Contents

Programming in C

Shubhnandan Jamwal

ISBN : 9789332525610
Copyright : 2014
Pages : 336

About the Book

Programming in C is an introductory-level text book which follows a practical approach to help the students learn programming in a procedural manner. It discusses the line-by-line explanation of concepts and logic, used in the programs. All the programs in the book are fully-tested and compiled.

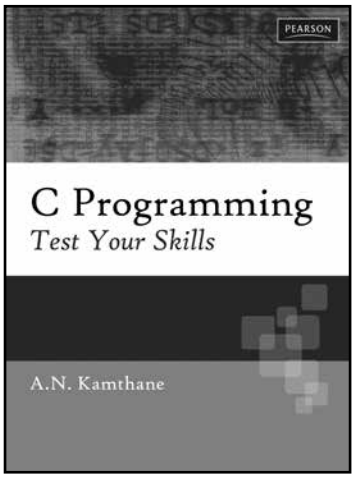
Features

- A separate chapter on dynamic memory allocation
- Over 100 fully-tested and executable programs
- Two model test papers added for practice

Contents

About the Author

Dr. Subhnandan Jamwal is currently working as Assistant Professor at the University of Jammu in the department of computer applications.



C Programming: Test Your Skills

Ashok Kamthane

ISBN : 9788131732090
Copyright : 2010
Pages : 354

About the Book

C Programming: Test Your Skills is specifically designed to be used as the supplementary text for learning C Programming. It is ideal for self practice or test preparation and hones one's problem solving abilities through varieties of exercises.

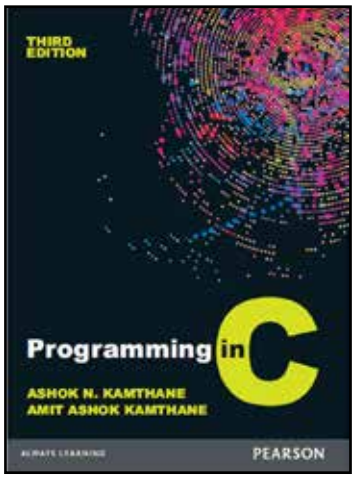
Features

- Excellent pedagogy – multiple-choice questions, fill in the blanks, true/false questions, find the bugs, review questions and practice problems
- Solutions/hints/answers to critical problems/questions
- No prerequisites of mathematical/ technical background

Contents

About the Author

Prof. Ashok N. Kamthane is Head of Department of Electronics and Telecommunication Engineering, SGGS College of Engineering and Technology, Nanded, Maharashtra. He has over 22 years of teaching experience, and was associated with the development of hardware and software using 8051 on acoustic transceiver system for submarines.



Programming in C, 3/e

Ashok Kamthane

ISBN : 9789332543553
Copyright : 2016
Pages : 688

About the Book

C is one of the most popular programming languages. It runs on most software platforms and computer architecture. This revised edition of our best-selling text Programming in C not only maintains the exclusivity of previous editions but also enhances it with the addition of new programs and illustrations. Challenging concepts are supported with numerous solved and unsolved programs. The new chapter on computer graphics ensures that this book comprehensively covers the syllabi of most universities. The book also uses the Turbo C compiler, which is the most widely used C compiler.

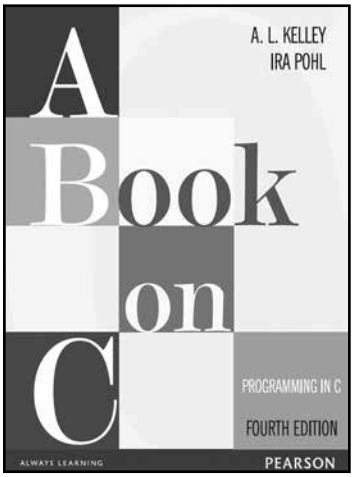
Features

- New flowcharts and diagrams
- Online more than 100 programs Fully tested and executed programs
- Chapter on Computer Graphics

Contents

About the Author

Ashok N. Kamthane is associate professor in Electronics and Telecommunication Engineering Department at SGGS Institute of Engineering and technology, Nanded, Maharashtra. He has over 32 years teaching experience, and was associated with the development of hardware and software using 8051 on acoustic transceiver system for submarines.



A Book on C, 4/e

A. L. Kelley • Ira Pohl

ISBN : 9788131724347
Copyright : 1998

About the Book

Now in its fourth edition, **A Book on C** retains the features that have made it a proven best-selling tutorial and reference on the ANSI C programming language. This edition builds on the many existing strength of the text to improve, update, and extend the coverage of C, and now includes information on transitioning to Java and C++ from C.

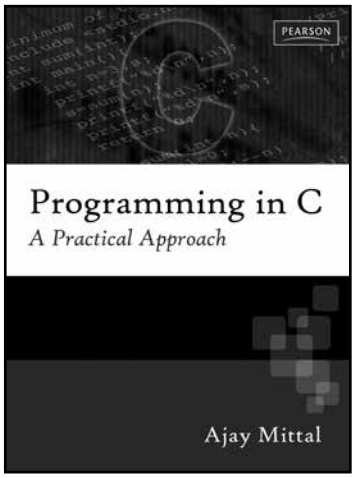
Features

- New and updated programming examples and dissections—the authors' trademark technique for illustrating and teaching language concepts.
- Recursion is emphasized with revised coverage in both text and exercises.
- Multifile programming is given greater attention, as are the issues of correctness and type safety. Function prototypes are now used throughout the text.
- Abstract Data Types, the key concept necessary to understanding objects are carefully covered.
- Updated material on transitioning to C++, including coverage of the important concepts of object-oriented programming.
- New coverage is provided on transitioning from C to Java
- References to key programming functions and C features are provided in convenient files.

Contents

About the Authors

A.L. Kelley & **Ira Pohl** are professors of computer science at the University of California, Santa Cruz.



Programming in C: A Practical Approach

Ajay Mittal

ISBN : 9788131729342
Copyright : 2010
Pages : 764

About the Book

This book on C Programming has a perfect blend of theory as well as practicals. The presentation is in such a way that helps the readers to learn the concepts through practice and programming.

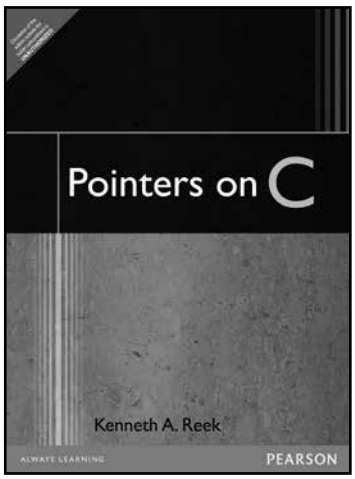
Features

- The book discusses the behavior of the programs with regards to compilers like Borland Turbo C 3.0, Borland Turbo C 4.5 and MS VC++ 6.0
- The book contains over 200 find the output, 300 MCQs
- 60 programming exercises and over 450 test yourself questions to test the student's understanding.
- More than 150 solved programs
- Programs explained alongwith flowcharts and algorithms

Contents

About the Author

Mr. Ajay Mittal is an Asst. Professor at the Dept. of Computer Science and Engineering, PEC University of Technology, Chandigarh. He has an experience of over 10 yrs in teaching C Programming and analysis and design of algorithm.



Pointers on C

Kenneth Reek

ISBN : 9788131715840
Copyright : 2007
Pages : 640

About the Book

Designed for professionals and advanced students, Pointers On C provides a comprehensive resource for those needing in-depth coverage of the C programming language. An extensive explanation of pointer basics and a thorough exploration of their advanced features allow programmers to incorporate the power of pointers into their C programs.

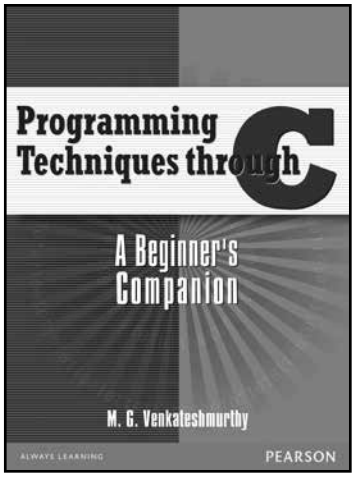
Features

- Provides complete background information needed for a thorough understanding of C.
- Covers pointers thoroughly, including syntax, techniques for their effective use and common programming idioms in which they app Paperbackear.
- Compares different methods for implementing common abstract data structures.
- Offers an easy, conversant writing style to clearly explain difficult topics, and contains numerous illustrations and diagrams to help visualize complex concepts.
- Includes Programming Tips, discussing efficiency, portability, and software engineering issues, and warns of common pitfalls using Caution! Sections.

Contents

About the Author

Kenneth A. Reek, Professor of Computer Science at Rochester Institute of Technology, is an experienced C programmer who has served as a consultant for local industries.



Programming Techniques Through C: A Beginners Companion

M. G. Venkateshmurthy

ISBN : 9788131705087
Copyright : 2002
Pages : 248

About the Book

A hands-on book on rudiments of programming, **Programming Techniques through C: A Beginner's Companion** teaches you the techniques of solving problems from simpler ones like "finding out the area of a triangle" to more involved ones like "sorting and searching".

The visual approach to solve problems in a step-by-step manner through flowcharts makes it easy for the beginners to solve problems and write programs using the C programming language. The emphasis is on problem solving procedures rather than learning a language.

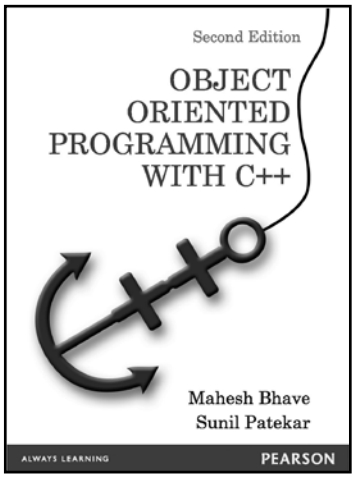
Features

- The procedure to solve a problem is explained in The Method which is independent of any programming language.
- A detailed Flowchart is given for each problem to determine the sequence of operations.
- Just required C details are provided in C Tips to enable learners gain insights.
- Complete C programs are provided for each example discussed.
- Includes end-of-chapter exercises to test your understanding.

Contents

About the Author

Dr. M. G. Venkateshmurthy is a renowned teacher in Computer Science with a rich teaching experience of more than 32 years. He obtained his bachelor degree in Electrical Engineering from the University of Mysore, M.Tech. in Computer Technology from IIT, Delhi, and Ph.D. in Computer Science from Anna University, Chennai. He is actively involved in academics and an expert on curriculum development bodies of various Universities. Currently he is the Professor & Head of the Department of Computer Science & Engineering and the Vice-Principal at Malnad College of Engineering, Hassan, Karnataka. His areas of interest include Artificial Intelligence, Programming Languages & Operating Systems.



Object Oriented Programming with C++, 2/e

Mahesh Bhave • Sunil Patekar

ISBN : 9788131770726
Copyright : 2012
Pages : 688

About the Book

This fully revised and indispensable edition of **Object-Oriented Programming with C++** provides a sound appreciation of the fundamentals and syntax of the language, as well as of various concepts and their applicability in real-life problems. Emphasis has been laid on the reusability of code in object-oriented programming and how the concepts of class, objects, inheritance, polymorphism, friend functions, and operator overloading are all geared to make the development and maintenance of applications easy, convenient and economical.

Features

- Excellent pedagogy
  - o 312 subjective-type questions
  - o 192 objective-type questions
  - o Over 200 fully tested programs with outputs
- Summary at the end of every chapter to strengthen the learning process
- Wide variety of real-life problems to spur the learner's imagination and creativity
- A complete simulation program on the game of Snakes and Ladders using object-oriented techniques
- Programs discussed in the book are tested and compiled using g++ compiler

New to the 2nd edition:

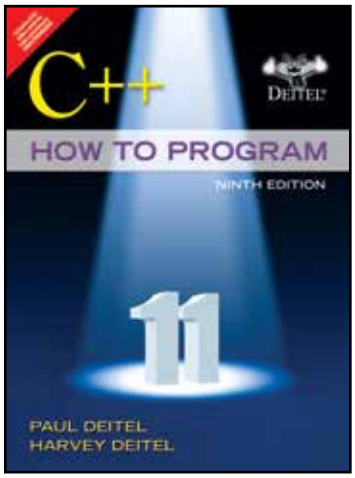
- New chapters added to thoroughly explain templates and exception handling
- More programs added to enhance user experience and understanding
- New sections to detail the concepts of data abstraction, proxy classes and concrete classes
- Understanding of input/output streams has been enhanced by addition of new topics such as manipulators, format states and error states

Contents

About the Authors

Dr. Mahesh Bhave has total 24 years teaching experience at at Veermata Jijabai Technological Institute (VJTI) Mumbai.

S. A. Patekar is currently Dean at the Vidyalankar Institute of Technology (VIT), Mumbai and formerly Professor and Head, Department of Computer Technology, Veermata Jijabai Technological Institute (VJTI), Mumbai.



C++: How to Program, 9/e

Paul Deitel • Harvey Deitel

NEW

ISBN : 9789332559592
Copyright : 2016
Pages : 1064

About the Book

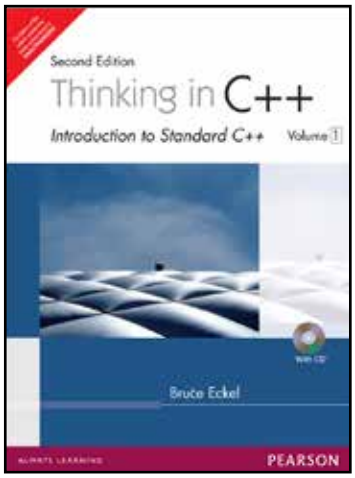
This best-selling comprehensive text is aimed at readers with little or no programming experience. It teaches programming by presenting the concepts in the context of full working programs and takes an early-objects approach. The authors emphasize achieving program clarity through structured and object-oriented programming, software reuse and component-oriented software construction. The Ninth Edition encourages students to connect computers to the community, using the Internet to solve problems and make a difference in our world. All content has been carefully fine-tuned in response to a team of distinguished academic and industry reviewers.

Contents

About the Authors

Paul J. Deitel, CEO and Chief Technical Officer of Deitel & Associates, Inc., is a graduate of the MIT Sloan School of Management, where he studied Information Technology. He holds the Java Certified Programmer and Java Certified Developer professional certifications, and has been designated by Sun Microsystems as a Java Champion—"a prominent member of the Java community whose input is solicited by the company in order to improve the Java platform."

Dr. Harvey M. Deitel, Chairman and Chief Strategy Officer of Deitel & Associates, Inc., has 46 years of academic and industry experience in the computer field. Dr. Deitel earned B.S. and M.S. degrees from the Massachusetts Institute of Technology and a Ph.D. from Boston University. He has 20 years of college teaching experience, including earning tenure and serving as the Chairman of the Computer Science Department at Boston College.



Thinking in C++, Vol. 1, 2/e

Bruce Eckel

ISBN : 9788131706619
Copyright : 2000
Pages : 688

About the Book

Learn about the C++ ANSI standard from C++ expert and Standard Committee member Bruce Eckel. Assuming a basic grasp of C, Eckel guides students from understanding C to actually thinking in C++, so that they eventually write code in a total C++ mindset. His goal is to teach students the language so well that it becomes their expressive medium of choice.

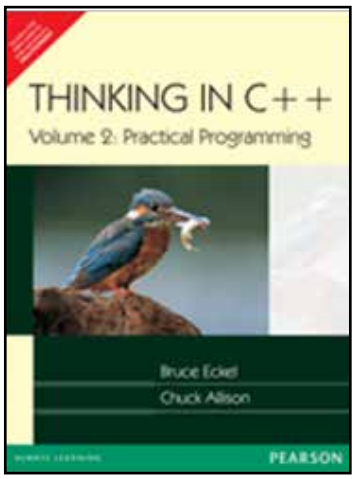
Features

- NEW - Coverage of the new ANSI C++ standardâ€"Completely rewritten.
- NEW - A cross-platform multimedia CD-ROM introduction to ANSI C.
- NEW - Emphasis on the most important and most usable features of C++.
- NEW - Practical advice and common pitfall coverage.
- NEW - The Standard Template Library.
- One of the most widely praised and accessible presentations of object-oriented programming with C++.
- Demonstrations of how to step back from coding to consider design strategies, and attempt to â€œget into the headâ€ of the designer.
- Problem features in each chapterâ€"Explained based on the way the author sees a particular type of problem being solved using the language.
- How to write portable C++ code that is compatible with any C++ platform.

Contents

About the Authors

Richard Hale Shaw "The one book you must have if youâ€™re doing serious development with C++."



Thinking in C++, Volume 2 : Practical Programming

Bruce Eckel • Chuck Allison

ISBN : 9788131711729
Copyright : 2004
Pages : 824

About the Book

This text fills the need for a practical C++ topics book beyond the introductory level. No other text covers the topics needed to prepare students for production C++ programming. It streamlines the process of learning the C++ language, presenting material a simple step at a time, which allows the reader to digest each concept before moving on, and provides them with a solid foundation in C++.

Features

- Emphasis on advanced testing techniques to produce optimized error free code.
- In depth coverage of STL with real world reusable code examples.
- Simple short exercises that simplify complex programming routines.
- Both authors are highly respected and widely known.

Contents

Part I: Building Stable Systems

1. Exception Handling.
2. Defensive Programming.
3. Debugging Techniques.

Part II: The Standard C++ Library

4. Strings in Depth.
5. Iostreams.
6. Templates in Depth.
7. STL Containers and Iterators.
8. STL Algorithms.

Part III: Advanced Topics

9. Run-time Type Identification.
10. Multiple Inheritance.
11. Design Patterns

Starting Out with C++ : From Control Structures through Objects, Brief Edition, 7/e

Tony Gaddis

ISBN : 9789332536661
Copyright : 2014
Pages : 1146

About the Book

In Starting Out with C++: From Control Structures through Objects, Brief Edition, 7e, Gaddis takes a problem-solving approach, inspiring students to understand the logic behind developing quality programs while introducing the C++ programming language. This style of teaching builds programming confidence and enhances each student's development of programming skills. This edition in the Starting Out Series covers the core programming concepts that are introduced in the first semester introductory programming course. As with all Gaddis texts, clear and easy-to-read code listings, concise and practical real-world examples, and an abundance of exercises appear in every chapter.

This book includes the first 15 chapters from the best-selling Starting Out with C++: From Control Structures through Objects, and covers the core programming concepts that are introduced in the first semester introductory programming course.

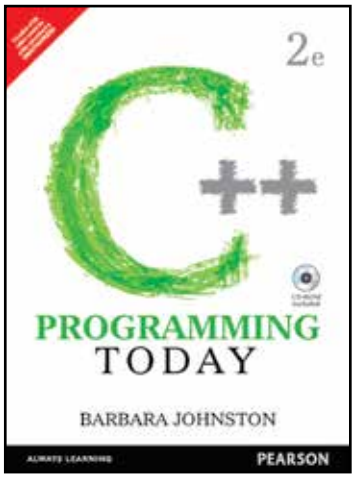
Features

- Control structures, functions, arrays, and pointers are covered before objects and classes.
- A clear and student-friendly writing style simplifies programming processes for beginning programmers with two to three stepped-out examples following each major concept.
- Concise real-world examples that students understand and relate to foster motivation and retention.
- A variety of exercises in each chapter encourage students to put concepts to work as they are learned. Source code is provided so students can run the programs themselves.
- Case Studies, Programming Challenges, and Group Projects simulate real-world applications and present real-world problems to be solved.

Contents

1. Introduction to Computers and Programming
2. Introduction to C++
3. Expressions and Interactivity
4. Making Decisions
5. Loops and Files
6. Functions
7. Arrays
8. Searching and Sorting Arrays
9. Pointers
10. Characters, C-Strings, and More About the string Class
11. Structured Data
12. Advanced File Operations
13. Introduction to Classes
14. More About Classes
15. Inheritance, Polymorphism, and Virtual Functions

Appendix A: Getting Started with Alice
Appendix B: The ASCII Character Set
Appendix C: Operator Precedence and Associativity



C++ Programming Today, 2/e

Barbara Johnston

ISBN : 9789332550506
Pages : 656

NEW

About the Book

C++ Programming Today, 2/e presents the C++ language and object-oriented theory in an easy-to-read, comprehensive text. Written in an easy-to-read, informal style, it guides the student from beginning programming through complex object-oriented techniques. The text has a large variety of program examples along with easy-to-understand figures, summary reference tables, and appendices. The text is filled with practical programming information including style guidance, debugging, multi-file program construction, and real-world, commonsense programming advice. Extensively classroom tested during development, the text incorporates the excellent student feedback and suggestions the author received. In addition, Visual C++ 2005 Express Edition is packaged with the text, providing students with an excellent development tool for learning object-oriented programming

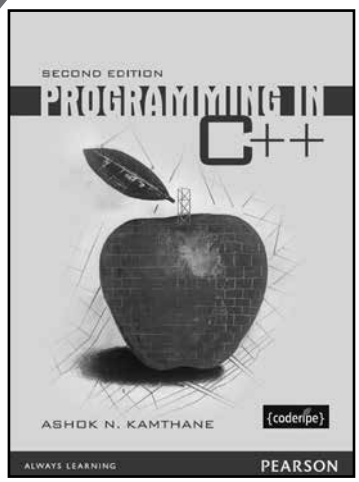
Features

- More that 115 complete C++ programs are spread out over 8 chapters. By including both code snippets and then showing the concept in a complete program, students can better understand how programming concepts fit into "bigger" programs.
- Several C++ classes are introduced early in the text. Once students reach the chapter on writing their own classes, they have already mastered the object-oriented concepts.
- End-of-chapter exercises engage students' interest since string, vector, queue, stringstream, ifstream and ofstream classes are introduced early.
- Unique Practice! sections at the end of each chapter illustrate the common compiler and linker errors beginning students often run into, the cause of the error and how to solve it – generating overwhelmingly enthusiastic student feedback.
- Each chapter includes many programming exercises suitable for weekly assignments.
- More than 140 figures, diagrams, and screen captures illustrate topics and concepts wherever possible.
- The concise appendices handle essential topics for beginning students that other texts often exclude.
- Visual C++ 2005 Express Edition is packaged with the text, providing students with an excellent development tool for learning object-oriented programming.

Contents

About the Authors

Barbara Johnston is a faculty member in the Business and Information Technology Division of Central New Mexico Community College. At the college, she is program chair for Computer Programming and Database Technology programs. She teaches C++, Java, OpenGL, and Windows programming courses. Ms Johnston also supports the software development staff of Rapid Imaging Software, Inc. by writing Java and C++ applications. Before joining the faculty of CNM, she was a software engineer and engineering manager for Rockwell International Corporation working mainly on scientific visualization and data modeling projects. Ms. Johnston earned a MS in Electrical Engineering, MA in Mathematics Education, and BS in Biology, from the University of New Mexico. Her other text books include the C++ Programming Today 1st Ed and Java Programming Today.



Programming in C++, 2/e

Ashok Kamthane

ISBN : 9788131791448
Copyright : 2013
Pages : 816

About the Book

The revised and updated version of the student-friendly, practical and example-driven book, **Programming in C++**, continues to give its readers a solid background and a learning platform to understand the fundamentals of C++. This comprehensive book, enriched with illustrations and a number of solved programs, will help the students unleash the full potential of C++. A chapter on basics of Java language and its relation to C++, to help the students get a foundation of other object-oriented languages.

Features

- Excellent pedagogy
  - Over 650 unsolved questions
  - More than 250 MCQs
  - Around 600 fully-tested programs
- Detailed and point-wise summary at the end of every chapter
- Exhaustive discussion on important topics like memory models, strings, templates, STL and exception handling
- Step-by-step programming procedure followed
- Each solved program explained thoroughly with output

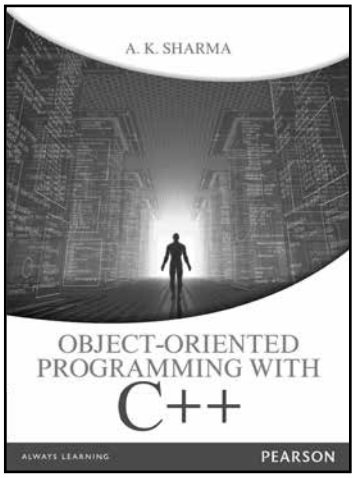
New to the second edition:

- New chapters discussing memory management and graphics
- New chapter titled 'Basics of C++'
- More programs added to enhance the student's understanding of the concepts
- New sections on the difference between C and C++, dynamic memory allocation and container classes
- Three mini projects included as supplements

Contents

About the Author

Ashok N. Kamthane is Associate Professor, Department of Electronics and Telecommunication at SGGS College of Engineering and Technology, Nanded, Maharashtra. He has over 20 years of teaching experience, and was associated with the development of hardware and software using 8051 on acoustic transceiver system for submarines. Professor Kamthane is also the author of the bestselling book, Programming in C.



Object-Oriented Programming with C++

A.K. Sharma

ISBN : 9789332515833
Copyright : 2014
Pages : 352

About the Book

Object-Oriented Programming (OOP) is a paradigm shift in programming, which defines, creates, and manipulates objects to develop reusable software.

This book is designed to help students understand the concepts governing OOP and develop a talent in them to choose right the OOP tools for a given problem situation. Dealing at length with the creation and manipulation of OOP components using C++, Object-Oriented Programming with C++ uses examples that reflect current practices and standards to provide a hands-on experience to budding software engineers.

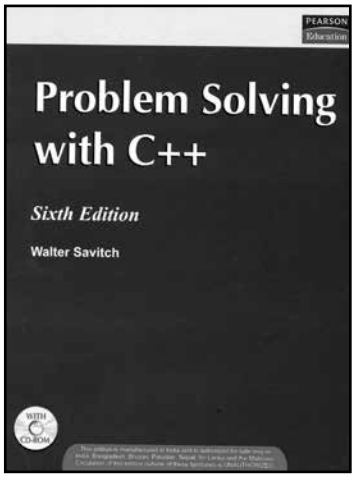
Features

- Begins with the basic principles and builds on them systematically to cover advanced topics.
- Elucidates the design of classes using the open-close principle and Liskov's substitution principle
- An exclusive chapter on UML
- Effective use of diagrams and real-life examples
- Over 100 fully tested and executable programs
- More than 100 MCQs

Contents

About the Author

Ashok N. Kamthane is Associate Professor, Department of Electronics and Telecommunication at SGGS College of Engineering and Technology, Nanded, Maharashtra. He has over 20 years of teaching experience, and was associated with the development of hardware and software using 8051 on acoustic transceiver system for submarines. Professor Kamthane is also the author of the bestselling book, Programming in C.



Problem Solving with C++, 6/e

Walter Savitch

ISBN : 9788131715857
Copyright : 2007
Pages :

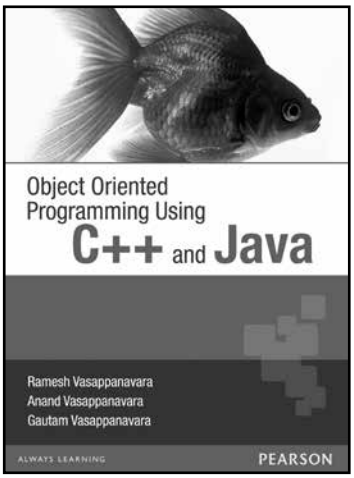
About the Book

Problem Solving with C++ is the most-widely used textbook by students and instructors in the introduction to programming and C++ language course.

Features

- Students benefit from Savitch's extensive use of practical programming examples, programming projects, exercises, case studies, tips, and pitfalls.
- Control Structures and Arrays are covered before Classes.
- Advanced topic coverage includes discussions of C++ templates, inheritance, and exception handling, and a full chapter on the Standard Template Library (STL).

Contents



Object Oriented Programming Using C++ and Java

Ramesh Vasappanavara • Anand Vasappanavara • Gautam Vasappanavara

ISBN : 9788131754559
Copyright : 2011
Pages : 672

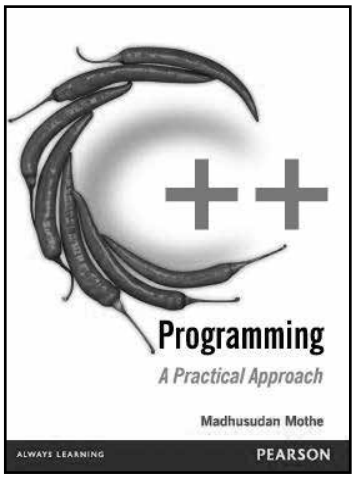
About the Book

This book offers contemporary, comprehensive and in-depth coverage of all the concepts of object-oriented technologies, with an emphasis on problem-solving approaches as applied to C++ and Java Programming paradigms. Exhaustively covering the BTech, MCAs and other PG course syllabi of all Indian universities, it explains the underlying OOP theory with diagrams and implementation examples in C++ and Java, as well as advanced topics in C++ and Java such as templates, generic programming and collection framework of Java. Engineering professionals at work will benefit greatly from its discussions of object-oriented analysis and design case studies, and its easy integration with a modelling tool such as UML. Self-taught readers will also find this book an invaluable resource on the subject.

Features

- In-depth coverage of object-oriented features with UML and their seamless integration with OOP languages, C++ and Java.
- A separate chapter on analysis and design.
- A number of fully solved programming examples.
- Assignments and objective questions at the end of each chapter.
- Web resource containing all programs and additional topics.
- Self-learning and practice-oriented approach.

Contents



C++ Programming: *A Practical Approach*

Madhusudan Mothe

ISBN : 9788131760529
Copyright : 2012
Pages : 472

About the Book

The book follows the approach of introducing a concept followed by providing an example and then brings out the intricacies of the topic by asking questions based on the example provided. The book stands out to be a complete textbook, taking care not only of the syllabi needs but also many advanced topics. The questions in the textbook are all solved, this makes it easy for students to check their understanding and also get help in questions which they can't fathom. The book exploits both, teaching and industrial experience of the author and provides various complexities that arise in the real programming scenario.

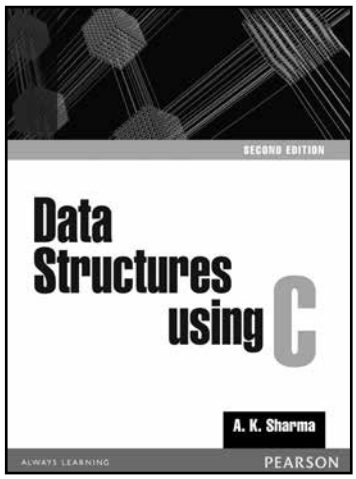
Features

- 130 solved examples
- Each concept explained with the help of examples
- Complete programs have been provided
- Wide array of questions to test the understanding of the student
- Both elementary level and advanced level topics covered
- All end-of-chapter questions solved

Contents

About the Author

Madhusudan Mothe is currently working as a Technical Manager in Infosys Ltd, Pune. He has 12 years of experience in IT in India and USA. He has done his Bachelor of Engineering from Government College of Engineering, Pune (COEP) and M.Tech. from Indian Institute of Technology Bombay. He has worked in various prestigious companies like TCS, AT&T and i-fl ex (Oracle Financial Services Ltd.). In January 2009, Infosys Pune published his interview under the heading The Rising Star of Pune Delivery Centre.



Data Structures using C, 2/e

A. K. Sharma

ISBN : 9788131792544
Copyright : 2013
Pages : 528

About the Book

A Data Structure is the logical organization of a set of data items that collectively describe an object. Using the C programming language, this book describes how to effectively choose and design a data structure for a given situation or problem. The book has a balance between the fundamentals and advanced features, supported by solved examples. This book completely covers the curriculum requirements of computer engineering courses across universities in India.

Features

- Easy to understand text coupled with simple to understand examples
- Every data-structure is supported with a pictorial representation and its possible implementations.
- Over 100 solved problems
- All programs tested using Turbo 'C'.

New to the book:

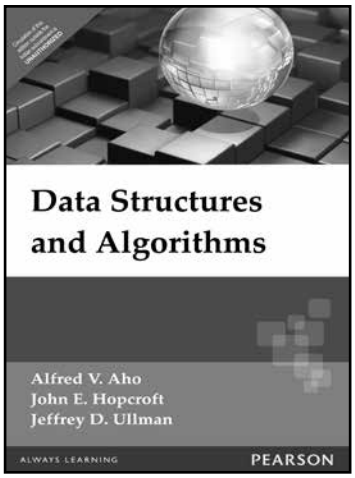
Complete sections on:

1. Sparse matrices
2. Recursion
3. Hashing
4. Weighted binary trees
   a. Huffman algorithm
5. Spanning trees, minimum cost spanning trees
   a. Kruskal algorithm
   b. Prims algorithm
6. Shortest path problems
   a. Warshall's algorithm
   b. Floyd's algorithm
   c. Dijkstra's Algorithm
7. Indexed File Organization

Contents

About the Author

A.K. Sharma is currently Chairman, Department of Computer Engineering, and Dean of Faculty, Engineering and Technology at YMCA University of Science and Technology, Faridabad. He is also a member of the Board of Studies committee of Maharshi Dayanand University, Rohtak. He has guided 10 Ph.D. theses and has published about 215 research papers in national and international journals of repute. He heads a group of researchers actively working on the design of different types of 'Crawlers'.



Data Structures & Algorithms

Alfred V. Aho • John E. Hopcroft • Jeffrey D. Ullman

ISBN : 9788177588262
Copyright : 1983

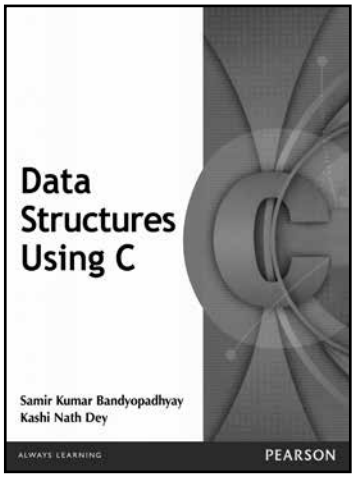
About the Book

An ideal book for first course on data structures and algorithms, its text ensures a style and content relevant to present-day programming. The only pre-requisite it assumes is familiarity with a high-level programming language like Pascal. The book spans cohesively across wide-ranging topics and serves as a comprehensive text for the undergraduate as well as the graduate student.

Features

- Use of abstract data types in the description & implimention of algorithms
- Projecting step counting and time complexity as an integral part of problem-solving
- Exercises of varying degrees at the end of each chapter

Contents



Data Structures Using C

Samir Kumar Bandyopadhyay • Kashi Nath Dey

ISBN : 9788131722381
Copyright : 2004
Pages : 324

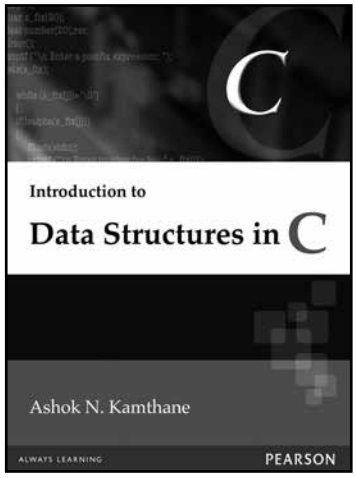
About the Book

Data Structures Using C brings together a first course on data structures and the complete programming techniques, enabling students and professionals implement abstract structures and structure their ideas to suit different needs. This book elaborates the standard data structures using C as the basic programming tool. It is designed for a one semester course on Data Structures.

Features

- Basic data representation techniques
- Concepts of implementing a data structure
- Arrays and their applications
- How and when to use pointers
- Major application areas of linked lists
- Internal and external sorting algorithms
- Searching methodologies
- Trees—binary trees, binary search trees, AVL trees, B-trees
- Fundamental graph algorithms

Contents



Introduction to Data Structures in C

Ashok Kamthane

ISBN : 9788131713921
Copyright : 2004
Pages : 512

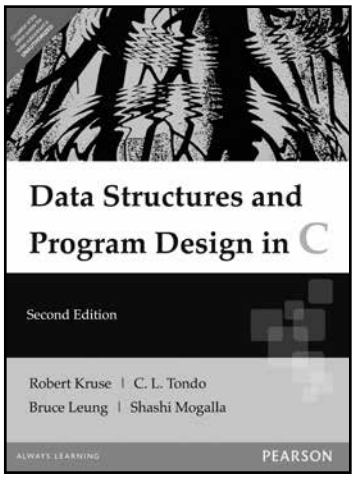
About the Book

Introduction to Data Structures in C is an introductory textbook on the subject. The contents of the book are designed as per the requirement of the syllabus and the students. This book will be useful for students of B.E. (Computer/Electronics), MCA, BCA, M.Sc., B.Sc., and also to students pursuing A-level Course of DOEACC.

Features

- Each theory is supported with programs; concepts are illustrated by excellent examples
- Algorithms are explored in detail and analysed showing step-by-step solutions to problems
- Objective type questions have been provided
- The language is lucid and easy
- About 200 programs have been solved
- Diagrams are used extensively throughout the text
- Numerous theory questions and exercises are included that vary widely in type and difficulty.

Contents



Data Structures and Program Design in C

Robert L. Kruse • Bruce P. Leung

ISBN : 9788177584233
Copyright : 2007
Pages : 624

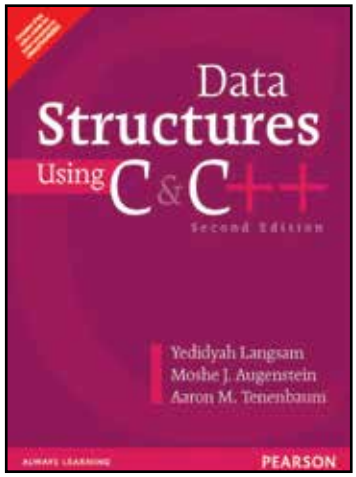
About the Book

Market: Appropriate for Computer Science II and Data Structures in departments of Computer Science. This introduction to data structures using the C programming language emphasizes problem specification and program design, analysis, testing, verification, and correctness. **Data Structures and Program Design in C** combines careful development of fundamental ideas with their stepwise refinement into complete, executable programs.

Features

- Stresses recursion through a range of applications and development of criteria for use
- Includes case studies that integrate various topics into programs of realistic size
- Discusses major principles of software engineering and applies them to large programming projects
- Emphasizes the process of data abstraction and abstract data types (ADT), separating ADTs from implementation decisions
- All programs revised to emphasize data abstraction, to develop and employ reusable code, and to strengthen uniformity and elegance of style
- Recursion treated much earlier and emphasized throughout
- New coverage of several modern topics: splay trees, red-black trees, amortized algorithm analysis

Contents



Data Structures Using C and C++, 2/e

Yedidyah Langsam • Moshe J. Augenstein • Aaron M. Tenenbaum

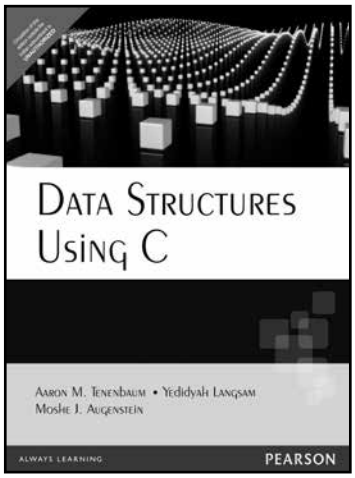
ISBN : 9789332549319
Pages : 672

NEW

About the Book

This very successful data structures text uses the standard ANSI C programming language to present the fundamentals of data structures and algorithm analysis. In addition, the authors introduce the features of C++ and show how they can be used to implement data structures. Real world problems are used to demonstrate how abstract concepts can be solved through the careful application of C and C++.

Contents



Data Structures Using C

Aaron M. Tenenbaum

ISBN : 9788131702291
Copyright : 1990
Pages : 672

About the Book

Helping readers build efficient C data structures, this handbook explains how to apply data structures to enhance program execution. With a strong emphasis on structured design and programming techniques, it features precise instructions on all the steps involved in data structure development—from theoretical conception to concrete realization.

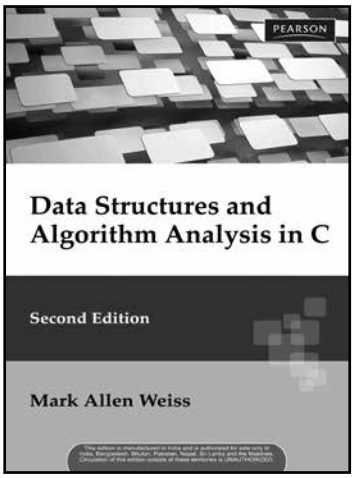
Coverage Includes

- Several alternative implementations of data structures—along with advice on choosing the one most suited to your needs at hand.
- Numerous debugged programming examples.
- Complete development of all programs.
- Graphic representation of material.
- Sorting and searching algorithms.
- Up-to-date research findings.

Features

- follows data structure development from its theoretical conception to its concrete realization.
- offers several alternative implementations of data structures and discusses tradeoffs involved in choosing a particular approach.
- contains numerous debugged programing examples.
- emphasizes structured design and programming techniques.

Contents



Data Structures and Algorithm Analysis in C, 2/e

Mark Allen Weiss

ISBN : 9788177583588
Copyright : 1997

About the Book

In the second edition of this best-selling book, the author continues to refine and enhance his innovative approach to algorithms and data structures. Using a C implementation, he highlights conceptual topics, focusing on ADTs and the analysis of algorithms for efficiency as well as performance and running time.

Features

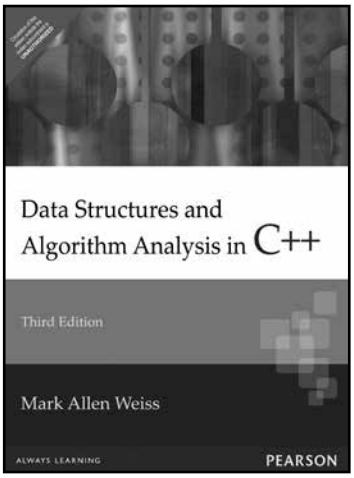
- Includes a chapter on algorithm and design techniques that cover greedy algorithms, divide and conquer algorithms, dynamic programming, randomized algorithms and backtracking.
- Presents current topics and newer data structures such as Fibonacci heaps, skew heaps, binomial queues, skip lists and splay trees.
- Incorporates new results on the average case analysis of heapsort.
- Offers source code from example programme via anonymous FTP.

Contents

- Introduction
- Algorithms Analysis
- Lists, Stacks, and Queues
- Trees
- Hashing
- Priority Queues (Heaps)
- Sorting
- The Disjoint Set ADT
- Graphs Algorithms
- Algorithm Design Techniques
- Amortized Analysis
- Advanced Data Structures and Implementation

About the Author

Mark Allen Weiss belongs to the Department of Computer Science at the Florida International University.



Data Structures and Algorithm Analysis in C++, 3/e

Mark Allen Weiss

ISBN : 9788131714744
Copyright : 2007
Pages : 606

About the Book

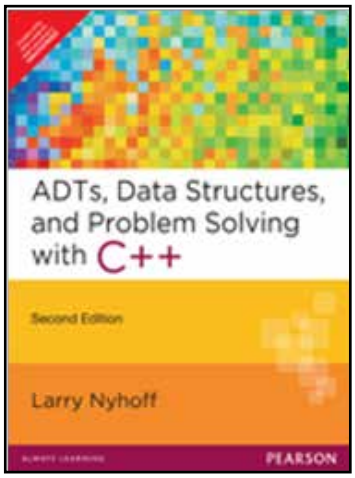
The C++ language is brought up-to-date and simplified, and the Standard Template Library is now fully incorporated throughout the text. **Data Structures and Algorithm Analysis in C++** is logically organized to cover advanced data structures topics from binary heaps to sorting to NP-completeness. Figures and examples illustrating successive stages of algorithms contribute to Weiss' careful, rigorous and in-depth analysis of each type of algorithm.

Features

- Discussion of algorithm and design techniques covers greedy algorithms, divide and conquer algorithms, dynamic programming, randomized algorithms, and backtracking.
- Covers topics and data structures such as Fibonacci heaps, skew heaps, binomial queue, skip lists and splay trees.

Contents

1. Introduction
2. Algorithm Analysis
3. Lists, Stacks, and Queues
4. Trees
5. Hashing
6. Priority Queues (Heaps)
7. Sorting
8. The Disjoint Set Class
9. Graph Algorithms
10. Algorithm Design Techniques
11. Amortized Analysis
12. Advanced Data Structures and Implementation



ADTs, Data Structures, and Problem Solving with C++

Larry R Nyhoff

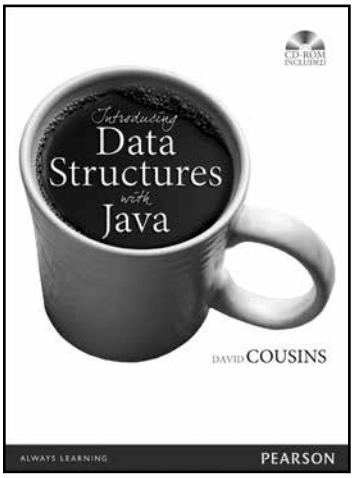
ISBN : 9788131764701
Copyright : 2011
Pages :

About the Book

This text continues to offer a thorough, well-organized, and up-to-date presentation of essential principles and practices in data structures using C++. Reflecting the newest trends in computer science, new and revised material throughout the Second Edition places increased emphasis on abstract data types (ADTs) and object-oriented design.

Features

Contents



Introducing Data Structures with Java

David Cousins

ISBN : 9788131758649
Copyright : 2011
Pages : 464

About the Book

Data structures with their associated operations form an essential component of studies in computing, and this book sets out to provide a firm understanding of them. It deals with arrays, lists, queues, stacks, binary trees and graphs, and with algorithms for operations such as searching and sorting. Practical implementation, to promote sound understanding, is a key feature, and many example programs are developed, using a clear design process; full source code listings are supplied in each chapter and all of the programs are supplied on the CD-ROM.

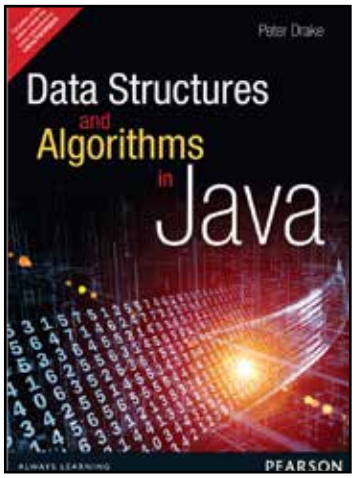
Features

- Four practical case studies that review and apply the topics covered
- Covers object-oriented software development: used to create object classes for the structures encountered
- Discusses comparative efficiency of algorithms: Big O notation
- Explains recursion: a powerful programming technique
- Self-test questions and exercises

Contents

About the Author

David Cousins retired as senior lecturer of Computing from University of Wales, Newport, UK. Earlier he worked as Head of Physics Department, at Filton College, Bristol, UK. He has written “Introducing Data Structures with Java” book for Pearson Education India



Data Structures and Algorithms in Java

Peter Drake

ISBN : 9789332535176
Copyright : 2014

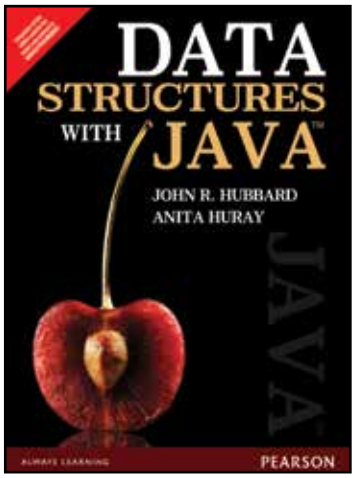
About the Book

An abundance of unique, interesting examples, use of the Unified Modeling Language throughout, and the newest Java 1.5 features characterize this text. Drake provides a concise and engaging introduction to Java and object-oriented programming, assuming familiarity with the basic control structures of Java or C and only a pre-calculus level of mathematics.

Features

- Five-part structure using the "inverted pyramid" style - Covers object-oriented programming, linear structures, algorithms, trees and collections, and advanced topics, addressing critical concepts up front.
- Extensive use of games as examples - Captures students' interest and imagination with realistic challenges involving dice, cards, and boards.
- Numerous diagrams - Illustrate key concepts, provide an instant review, and serve as a landmark when reviewing the text.
- Practical approach to real-world programming - Allows readers to compile and run a program as quickly as possible, rather than focusing on abstract software engineering techniques.
- Frequent, early examples in each chapter - Let students to absorb abstract concepts in the context of concrete problems.
- Process of crafting programs - Works through the development of each project, often providing multiple versions of the code and considering alternate designs, to give students experience in the processof crafting programs rather than just the results.
- Use of Unified Modeling Language throughout - Introduces student to the industry standard for diagrams of classes and class relationships.
- Clear, concise presentation - Addresses one data structure at a time.
- Gradual development of classes analogous to the Java Collections Framework
- Complete, working code in text and online - Provides access to code even when students are not in front of a computer. Includes complete code for B-trees.
- Strong pedagogy - Features at least one extended example in almost every chapter, in addition to exercises at the end of every section and problems and projects at the end of every chapter.

Contents



Data Structures with Java

John R. Hubbard • Anita Huray

ISBN : 9789332549395
Copyright : 2011
Pages : 700

NEW

About the Book

This text teaches the use of direct source code implementations and the use of the Java libraries; it helps students prepare for later work on larger Java software solutions by adhering to software engineering principles and techniques such as the UML and the Java Collections Framework (JCF). Using the spiral approach to cover such topics as linked structures, recursion, and algorithm analysis, this text also provides revealing illustrations, summaries, review questions, and specialized reference sections.

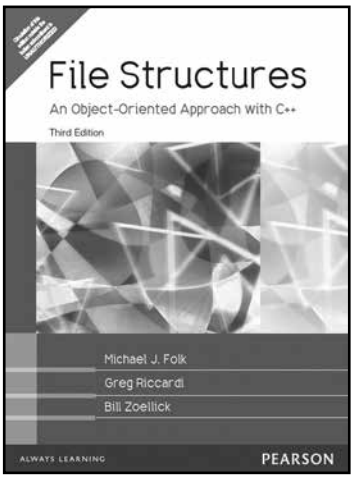
Features

- Broad use of Java interfaces—Defines and implements abstract data types (ADTs).
- Substantial treatment of algorithms—Includes their analysis and implementation.
- Unified Modeling Language (UML)—Uses UML diagrams to summarize classes, interfaces, and their relationships.
- Clear and precise illustrations of program objects.
- Explicit use of Abstract Data Types (ADTs).
- Consistent use of Java exception handling.
- Review of arrays and relevant Java support—Includes java.util.Arrays class and the System arraycopy method.
- Several complete case studies.
- Spiral approach to difficult topics—Returns to the same concept in different contexts.
- Implementations that mirror Java Collections Framework (JCF).
- Full treatment of the JCF—Enabling advanced Java applications.
- Clear exposition of abstract classes—Includes the reasons for defining them.
- Substantial chapter on recursion—Includes many examples.
- General trees, binary trees, and search trees—Developed in three separate chapters.
- Unified treatment of sorting algorithms—Simplifies their comparisons.

Contents

About the Author

John R. Hubbard is Professor- of Mathematics and Computer Science at the University of Richmond.
Anita Huray is Director of the Computer Science Laboratories at the University of Richmond.



File Structures : An Object-Oriented Approach with C++, 3/e

Michael J. Folk • Greg Riccardi • Bill Zoellick

ISBN : 9788177583731
Copyright : 1998

About the Book

File Structures: An Object-Oriented Approach with C++ presents the study of the structures through an object-oriented approach allowing students and professionals to acquire the fundamental tools need to design intelligent, cost-effective, and appropriate solutions to file structure problems. This book uses the hands-on work of constructing and running programs as the centre of the learning process in teaching design.

Features

- Presents file structures techniques, including direct access I/O, buffer packing and unpacking, indexing, consequential processing, B-trees, and external hashing.
- Includes extensive coverage of secondary storage devices, including disk, tape, and CD-ROM.
- Covers practice of object-oriented design and programming with complete implementations in C++.
- Develops a collection of C++ classes that provide a framework for solving file structure problems.
- Includes class definitions, sample applications, and programming problems and exercises.

Contents

About the Authors

Michael J. Folk manages the Scientific Data Technologies Group at the National Centre for Supercomputing Applications at the University of Illinols in Urbana. **Bill Zoellick** is director of the Document Software Strategies service at CAP Ventures, a leading strategic consulting and market research firm for document systems. **Greg Riccard** is a professor of computer science at Florida State University and an associate of the Supercomputer Computations Research

Java Programming

Hari Mohan Pandey

ISBN : 9788131733110
Copyright : 2012
Pages : 888

About the Book

Java Programming is an introductory level text that instils an understanding of basic concepts before gradually moving to advanced topics like swing, socket programming, JAVA native interface, remote method invocation and serialization. Programs are accompanied by complete explanations, and their output helps the reader better understand the logic behind them.

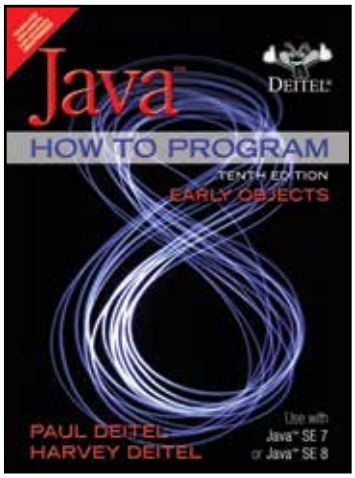
Features

- A chapter devoted to creating JAVA executables
- Illustrates the use of basic utility classes
- Detailed coverage of networking in Java with application development
- Virtual machine and API programming
- Over 300 solved programs
- Over 400 review questions
- Sample project: library management system
- Appendix on JAR tools

Contents

About the Author

Hari Mohan Pandey is currently working as a faculty member in the Department of Computing at Middle East College of Information Technology under Coventry University, UK, in Oman. His areas of interest include programming languages such as C, C++ and JAVA.



Java How To Program: Early Objects, 10/e

Paul Deitel • Harvey Deitel

ISBN : 9789332563292
Copyright : 2016
Pages : 1240

NEW

About the Book

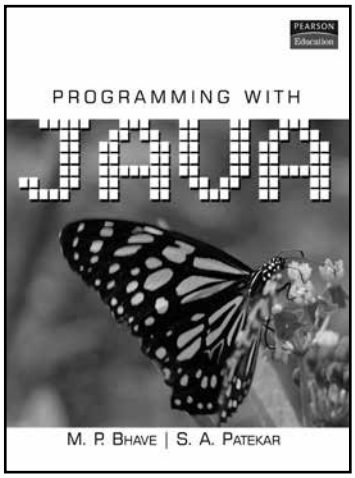
Java How to Program (Early Objects), Tenth Edition, teaches programming by presenting the concepts in the context of full working programs and takes an early-objects approach. It offers unparalleled breadth and depth of object-oriented programming concepts and intermediate-level topics for further study.

Contents

About the Author

Paul J. Deitel, CEO and Chief Technical Officer of Deitel & Associates, Inc., is a graduate of the MIT Sloan School of Management, where he studied Information Technology. He holds the Java Certified Programmer and Java Certified Developer professional certifications, and has been designated by Sun Microsystems as a Java Champion—"a prominent member of the Java community whose input is solicited by the company in order to improve the Java platform."

Dr. Harvey M. Deitel, Chairman and Chief Strategy Officer of Deitel & Associates, Inc., has 46 years of academic and industry experience in the computer field. Dr. Deitel earned B.S. and M.S. degrees from the Massachusetts Institute of Technology and a Ph.D. from Boston University. He has 20 years of college teaching experience, including earning tenure and serving as the Chairman of the Computer Science Department at Boston College.



Programming with Java

Mahesh Bhave • Sunil Patekar

ISBN : 9788131720806
Copyright : 2008
Pages : 748

About the Book

This book is designed to present a simple and user-friendly approach to understand the concepts of Java programming language.

Features

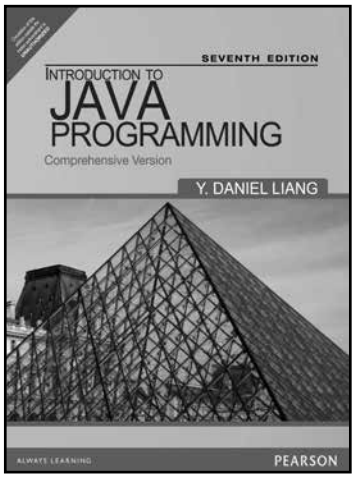
- Simple and straightforward approach used to explain the core concepts of Java.
- Comprehensive and exhaustive coverage - includes additional appendices on keywords, operators and supplementary programs.
- Contains additional Chapters on 'Collection Framework', 'Abstract Windows Toolkit', and 'Multimedia Basics' to provide an introduction to the more advanced concepts in Java.
- Collection of academic programs with programs to implement games like Chess, Bridge, & Sudoku.

Contents

About the Authors

Dr. Mahesh Bhave retired as HOD, Dept. of CSE, VJTI Mumbai, he has a total of over 20 years of teaching and professional experience in the field of Computer Engineering.

Dr. Sunil Patekar he is presently Dean, R&D, VIT, Mumbai. Previously he was the HOD, Dept. of CSE, VJTI Mumbai.



Introduction to Java Programming, Comprehensive Version, 7/e

Y. Daniel Liang

ISBN : 9788131729588
Copyright : 2009
Pages : 1328

About the Book

Regardless of major, students will be able to grasp concepts of problem-solving and programming – thanks to Liang's ground breaking fundamentals-first approach, which enables students to understand problem solving and core constructs before object-oriented programming. Liang's approach has been extended to application-rich programming examples, which go beyond the traditional math-based problems found in most texts. Although students begin using objects early, they are introduced to topics like control statements, methods, and arrays before learning to create classes Later chapters introduce advanced topics including graphical user interface, exception handling, I/O, and data structures. Small, simple examples demonstrate concepts and techniques while longer examples are presented in case studies with overall discussions and thorough line-by-line explanations.

Features

- Innovative fundamentals-first approach
- Exceptionally broad range of carefully chosen examples
- Complete coverage on Java collections framework, threads, JavaBeans, advanced GUI components, JDBC, Servlets, JSP, networking, and RMI
- Practical examples on gaming (simulating lottery, interactive quiz, Sudoku), business/financial (computing loan payments, taxes, and printing payroll statements), science (body mass index, wind chill temperature)
- Carefully chosen, easy-to-follow, representative examples

Contents

About the Author

Dr. Liang earned his Ph.D. in Computer Science from the University of Okalahoma in 1991, and an MS and BS in Computer Science from Fudan University in Shanghai, China, in 1986 and 1983. Prior to joining Armstrong, he was an associate professor in computer science at Purdue University in Fort Wayne, where he twice received the Excellence in Research award.

The class of JAVA

Pravin Jain

ISBN : 9788131755440
Copyright : 2011
Pages : 492

About the Book

JAVA is an object-oriented and platform independent language. With the internet becoming popular, JAVA became the language of choice for web developers, and has remained so ever since.

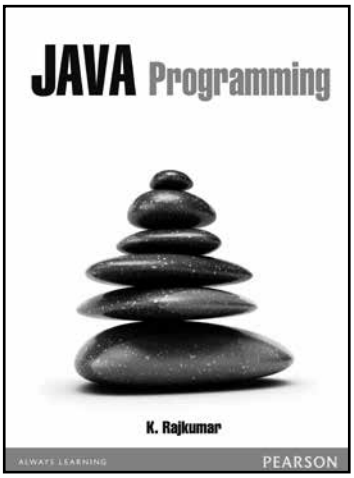
Features

- Large number of solved programs and program snippets
- End-of-chapter summary
- Over 300 review questions
- Appendix on Unicode

Contents

About the Author

Mr. Pravin Jain is an expert in the field of JAVA programming and has a teaching experience of over 10 years. He was the first Sun Certified Java programmer in Baroda. Mr Jain has worked on many prestigious projects including those of ONGC and ISRO and is also on the board of studies of Gujarat University.



JAVA Programming

K Rajkumar

ISBN : 9788131799093
Copyright : 2013
Pages : 400

About the Book

This textbook is a fundamental resource for undergraduate computer science students for learning all the essential concepts and programming techniques of JAVA. Spread across seventeen chapters the contents are designed according to the UGC curriculum starting with basics of JAVA, object oriented programming, threads and IO streams and finally GUI programming. The text is enhanced with end of chapter exercises, key terms and multiple choice questions which would make this book an ideal student's course companion.

Features

- In-depth coverage of basics of JAVA and JAV containers for holding objects.
- Detailed explanation of conditional and looping statements and arrays

- Over 200 solved examples
- Over 200 multiple choice questions
- 300 end of chapter exercises

Contents

Part I – JAVA Basics

1. Data types, Operators and Console I/O Statements
2. Conditional and Looping Statements
3. Arrays in JAVA
4. JAVA methods

Part II – Object oriented JAVA programming

5. Classes and objects
6. Inheritance and polymorphism
7. More on objects and exceptions

Part III – JAVA containers and holding objects

8. Sequence containers
9. Map containers
10. Set containers
11. Sorting and Searching

Part IV – JAVA Threads and IO Streams

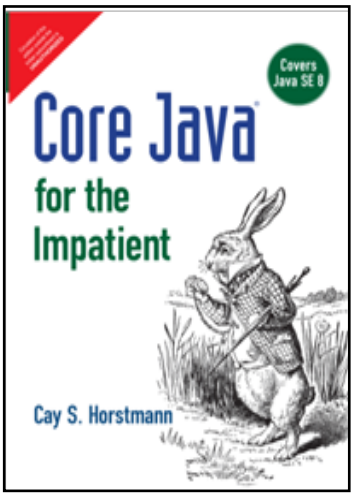
12. Concurrency using threads
13. Processing bytes and object streams
14. Processing character streams and NIO

Part V – GUI Programming

15. GUI Programming
16. GUI development using JFrame
17. GUI development using JApplet

About the Author

K Rajkumar is the Head of the Department for Department of Computer Science, Bishop Heber College, Tiruchchirappalli, Tamil Nadu.



Core Java for the Impatient

Cay S. Horstmann

ISBN : 9789332552425
Copyright : 2015
Pages : 528

NEW

About the Book

This book covers all aspects of Java that a modern developer needs to know, including the powerful lambda expressions that have been introduced in Java 8. It also tells how to find out more about old-fashioned concepts that might still be seen in legacy code, but doesn't dwell on them. This book also provides fresh coverage of concurrent programming topics, showing how to use the powerful streams library features in Java 8 instead of tedious and error-prone manual locking.

Features

- A fresh approach to mastering concurrent programming with Java's powerful library features
- • Includes a full chapter on the effective use of inheritance and interfaces
- • Thoroughly explains how to use Java's powerful, widely-anticipated Lambda expressions
- • By Cay Horstmann, co-author of the classic Java best-seller Core Java

Contents

Chapter 1: Fundamental Programming Structures
Chapter 2: Object-Oriented Programming
Chapter 3: Interfaces and Lambda Expressions
Chapter 4: Inheritance and Reflection
Chapter 5: Exceptions, Assertions, and Logging
Chapter 6: Generic Programming
Chapter 7: Collections
Chapter 8: Streams
Chapter 9: Processing Input and Output
Chapter 10: Concurrent Programming
Chapter 11: Annotations
Chapter 12: The Date and Time API
Chapter 13: Internationalization
Chapter 14: Compiling and Scripting

Introduction to Java Programming: Brief Version, 9/e

Y. Daniel Liang

ISBN : 9789332535213
Copyright : 2015
Pages : 800

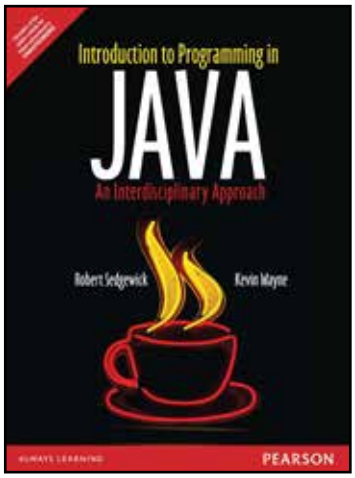
About the Book

Daniel Liang teaches concepts of problem-solving and object-oriented programming using a fundamentals-first approach. Beginning programmers learn critical problem-solving techniques then move on to grasp the key concepts of object-oriented, GUI programming. The Brief version is comprised of Chapters 1-20 of the Comprehensive.

Features

- Unified Modeling Language graphical notations throughout - Describes classes and their relationships; teaches students design and development of Java programs using the industry standard modeling technique.
- Practical examples on gaming (simulating lottery, interactive quiz, Sudoku), business/financial (computing loan payments, taxes, and printing payroll statements), science (body mass index, wind chill temperature) - Replaces pure mathematical examples such as computing deviations and matrix multiplications.
- Superior pedagogical design - Reinforces key concepts with objectives lists, introduction and chapter overviews, easy-to-follow examples, chapter summaries, review questions, programming exercises, and interactive self-tests.
- Case studies — Offer additional examples for learning the fundamentals of programming, such as writing loops.
- Carefully chosen, easy-to-follow, representative examples — Include: description of the example, source code, sample run, and example review.
- Notes and tips throughout - Offer valuable advice and insight on important aspects of program development.
- Sample exams - Include multiple-choice questions, correct programming errors, trace programs, and write programs.

Contents



Introduction to Programming in Java: An Interdisciplinary Approach

Robert Sedgewick

ISBN : 9789332535121
Copyright : 2015
Pages : 448

About the Book

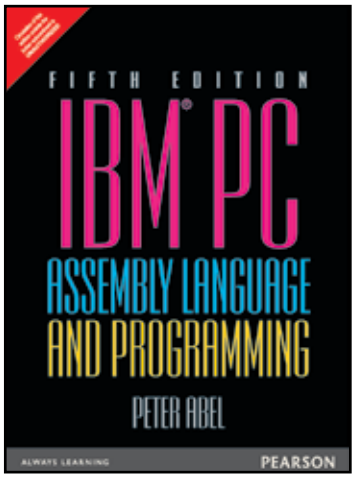
By emphasizing the application of computer programming not only in success stories in the software industry but also in familiar scenarios in physical and biological science, engineering, and applied mathematics, Introduction to Programming in Java takes an interdisciplinary approach to teaching programming with the Java&trade programming language. Interesting applications in these fields foster a foundation of computer science concepts and programming skills that students can use in later courses while demonstrating that computation is an integral part of the modern world.

Ten years in development, this book thoroughly covers the field and is ideal for traditional introductory programming courses. It can also be used as a supplement or a main text for courses that integrate programming with mathematics, science, or engineering.

Features

- Students learn basic computer science concepts in the context of familiar applications from their college preparatory mathematics and science background, creating an appreciation that computer programming is often at the heart of other scientific genres and research.
- The book takes an “objects in the middle” approach where students learn basic control structures and functions, then how to use, create, and design classes.
- The book features a full programming model that includes standard libraries for input, graphics, sound, and image processing that students can apply and use from the beginning.

Contents



IBM PC Assembly Language and Programming, 5/e

Peter Abel

ISBN : 9789332549302
Pages : 545

NEW

About the Book

Abel has designed the text to serve as both tutorial and reference, covering a full range of programming levels so as to learn assembly language programming. Coverage starts from scratch, discussing the simpler aspects of the hardware and the language, then introduces technical details and instructions as they are needed.

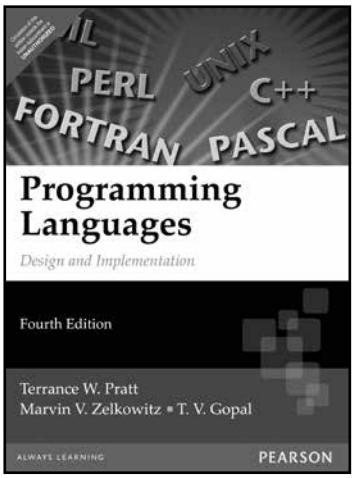
Features

- NEW - More features of the Intel Pentium Processor.
- NEW - Additional program examples and exercises.
- NEW - Earlier introduction to interrupt operations.
- NEW - Additional material on protected mode, passing parameters, the use of the stack, addressing modes, video systems and INT 10H functions, array handling, subprograms and ports.
- Step-by-step introduction to Intel microprocessors, machine language, and assembly language.
- Tracing execution of elementary programming in machine language.
- Hands-on approach through the text.
- DEBUG used in early examples.
- Many short examples and full program examples provided.

Contents

About the Author

Peter Abel, North Vancouver, BC, Canada



Programming Languages 4/e

Terrence W. Pratt • Marvin V. Zelkowitz • T.V. Gopal

ISBN : 9788177586886
Copyright : 2006
Pages : 608

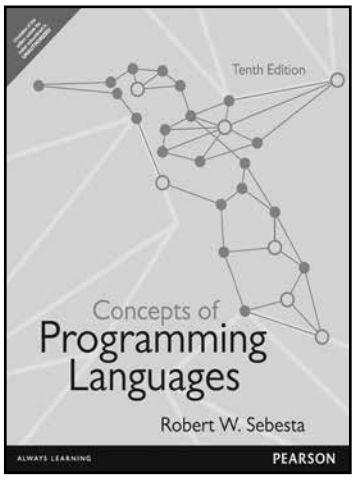
About the Book

This book continues the tradition of considering the software and hardware architecture when describing the features of a programming language. It provides programmers with the perspective to develop correct and efficient software. It lays emphasis on the World Wide Web and its impact on programming. More information is included on distributed computing and client/server algorithms. New topics include Java, HTML web page design, CGI scripts, and the PERL and Postscript languages.

Features

- Brief summaries are given of 11 languages: Ada, C, C++, FORTAN, Java, LISP, ML, Pascal, Postscript, Prolog, and Smalltalk. There is also additional information on HTML and PERL.
- The text is not oriented to any one language. Examples of language constructs are given in several languages to demonstrate their universality. All examples have been tested on an appropriate translator.
- Many different models of program design are covered: algebraic procedural language, applicative programming, logic programming, object-oriented programming, distributed and client/server programming, web page development, and text processing applications.
- The text is comprehensive. Chapters 1 and 2 provide a review of background material, and sections on language semantics, compilers and parallel programming provide additional topics for the advanced student.
- The primary focus of this book is on Software Development.

Contents



Concepts of Programming Languages, 10/e

Robert W. Sebesta

ISBN : 9789332518872
Copyright : 2008
Pages : 752

About the Book

Now in its Tenth Edition, Concepts of Programming Languages introduces students to the main constructs of contemporary programming languages and provides the tools needed to critically evaluate existing and future programming languages. Readers gain a solid foundation for understanding the fundamental concepts of programming languages through the author's presentation of design issues for various language constructs, the examination of the design choices for these constructs in some of the most common languages, and critical comparison of the design alternatives. In addition, Sebesta strives to prepare the reader for the study of compiler design by providing an in-depth discussion of programming language structures, presenting a formal method of describing syntax, and introducing approaches to lexical and syntactic analysis.

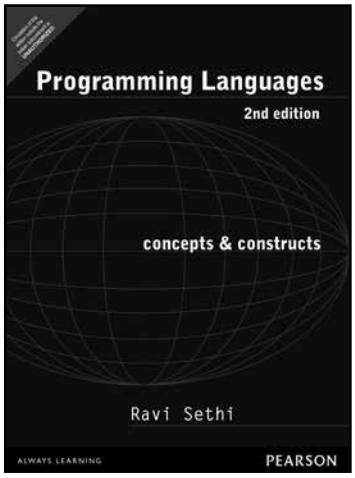
Features

- An examination of related topics is coupled with the fundamental concepts of programming languages:
  o Formal methods of describing the syntax and semantics of programming languages are described in Chapter 3.
  o Implementation techniques for various language constructs are discussed in chapter 4 using lexical and syntax analysis, and in chapter 10 using the implementation of subprogram linkage.
- Coverage of advanced object-oriented topics and languages is integrated throughout.
- Historical boxes and interviews with James Gosling, Larry Wall, Alan Cooper, Bjarne Stroustrup, and others set the material into context.
- Valuable historical foundations are presented early, outlining the origins, purposes, and contributions of the most important languages discussed in the rest of the text.
- In-depth discussions of the design issues for the primary constructs of the imperative languages are presented in later chapters.
- Two alternative programming paradigms include coverage of functional programming and logical programming.

Contents

About the Author

Robert Sebesta is an Associate Professor in the Computer Science Department at the University of Colorado, Colorado Springs. Professor Sebesta received a BS in applied mathematics from the University of Colorado, Boulder, and MS and PhD degrees in computer science from the Pennsylvania State University. His professional interests are the design and evaluation of programming languages, compiler design, and software testing methods and tools. He is the author of Addison-Wesley's Concepts of Programming Languages and Programming the World Wide Web.



Programming Languages: Concepts & Constructs, 2/e

Ravi Sethi • K. V. Viswanatha

ISBN : 9788177584226
Copyright : 2007
Pages : 496

About the Book

The second edition of **Programming Languages—Concepts & Constructs** retains the "character" of the original emphasizing concepts and how they work together. This book has been thoroughly revised and updated to stay current with advances in programming languages. With an excellent exposition, the core concepts of imperative programming in languages like C flows smoothly into object-oriented programming in C++ and Smalltalk. The charm of functional languages is illustrated by the Scheme dialect of Lisp while logic programming is introduced using Prolog. Novices, who have been introduced to programming in some language, will learn to create simple programs and utilize the power of each language, while designers and implementers will be exposed to major programming paradigms.

Features

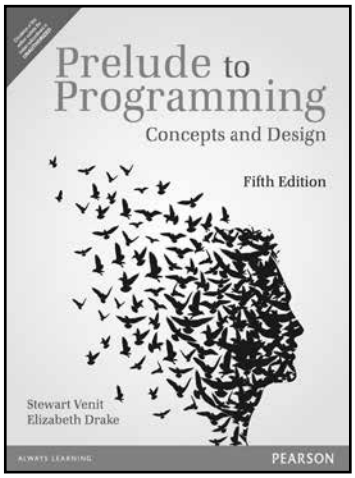
- Organized into parts with self-contained coverage of major programming paradigms
- Expanded discussion of object-oriented programming
- Thorough revision of imperative and functional programming with new chapters on data types

Contents

About the Authors

Ravi Sethi, director of Computing Science Research, has been at AT&T Bell Laboratories in Murray Hill, New Jersey since 1976. He has held teaching positions at Pennsylvania State University and the University of Arizona, and has taught at Princeton University and Rutgers. Dr. Sethi is co-author of the "dragon book", Compilers: Principles, Techniques and Tools and has written numerous articles. His books have been translated in Japanese, German, French, Italian, Spanish, and Korean.

K. V. Viswanatha is Professor in Computer Science Department, Rashtriya Vidhyalaya College of Engineering (RVCE), Bangalore, India. He received his Ph.D in device simulation in 1975 from I.I.Sc., Bangalore, India. His research areas include programming languages, algorithms, and operating systems.



Prelude to Programming: Concepts and Design, 5/e

Stewart Venit • Elizabeth Drake

ISBN : 9789332518766
Copyright : 2014
Pages : 540

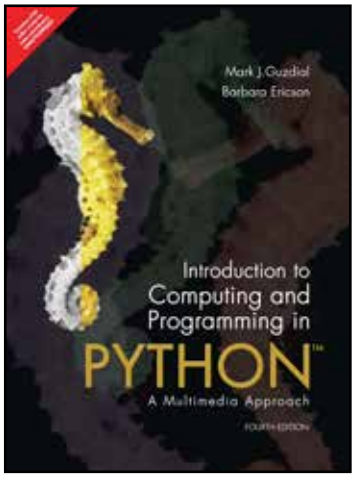
About the Book

Prelude to Programming provides beginning students with a language-independent framework for learning core programming concepts and effective design techniques. This approach gives students the foundation they need to understand the logic behind program design and to establish effective programming skills.
The Fifth Edition offers students a lively and accessible presentation as they learn core programming concepts - including data types, control structures, data files and arrays, and program design techniques such as top-down modular design and proper program documentation and style. Problem-solving skills are developed when students learn how to use basic programming tools and algorithms, which include data validation, defensive programming, calculating sums and averages, and searching and sorting lists. A copy of the RAPTOR flow-charting software is included with the Fifth Edition.

Features

- Flexible presentation:
  - A language-independent introduction to programming.
  - Appropriate for Pre-Programming and Introductory Programming courses in community colleges, 4-year colleges, and universities
- Presentation of program design techniques, such as top-down modular design and proper program documentation and style
- Introduction of basic programming tools and algorithms - Includes data validation, defensive programming, calculating sums and averages, and searching and sorting lists
- Focus on Problem Solving sections - Present a programming problem, analyze it, design a program to solve it, discuss coding considerations, and describe how the program could be tested
- A wealth of in-chapter exercises that test immediate understanding of concepts just covered
- A variety of end-of-chapter exercises for further reinforcement of concepts studied

Contents



Introduction to Computing and Programming in Python, 4/e

Mark J Guzdial

ISBN : 9789332556591
Copyright : 2016
Pages : 425

NEW

About the Book

Social Computing and Programming with Python
Introduction to Computing and Programming in Python is a uniquely researched and up-to-date volume that is widely recognized for its successful introduction to the subject of Media Computation. Emphasizing creativity, classroom interaction, and in-class programming examples, Introduction to Computing and Programming in Python takes a bold and unique approach to computation that engages students and applies the subject matter to the relevancy of digital media. The Fourth Edition teaches students to program in an effort to communicate via social computing outlets, providing a unique approach that serves the interests of a broad range of students.

Also Available with MyProgrammingLab®
This title is also available with MyProgrammingLab — an online homework, tutorial, and assessment program designed to work with this text to engage students and improve results. Within its structured environment, students practice what they learn, test their understanding, and pursue a personalized study plan that helps them better absorb course material and understand difficult concepts.
Students, if interested in purchasing this title with MyProgrammingLab, ask your instructor for the correct package ISBN and Course ID. Instructors, contact your Pearson representative for more information.

Features

- Brief JavaScript introduction helps ease students into learning a second programming language.
- Learning objectives at the start of each cover media learning objectives and computer science learning objectives to acquaint students with the importance of both sides of chapter concepts.
- REVISED! End-of-chapter questions have been added and enhanced to provide solid review for students.
- Four types of boxed Items throughout the text Include CS Key Ideas, Common Bugs, Debugging Tips, and "Making It Work" tips on how to study and be successful at computer science.

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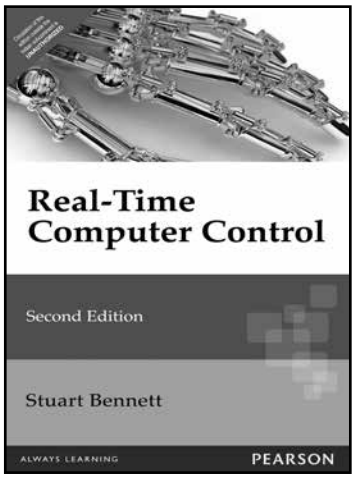


Real-Time Computer Control: An Introduction, 2/e

Stuart Bennett

ISBN : 9788131713884
Copyright : 1994

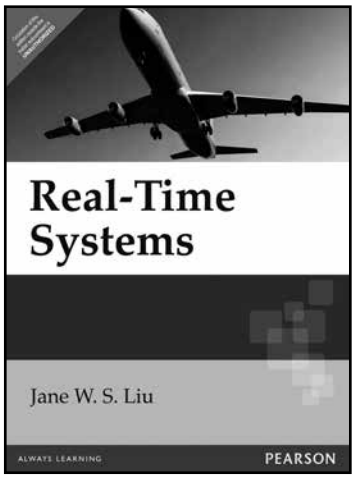
About the Book

This fully updated textbook deals with techniques relating to the use of embedded computers in complex engineering systems. The emphasis is on practical techniques for specifying, designing and implementing real-time computer control systems. It is suitable for advanced undergraduate and postgraduate courses and for practising engineers.

Features

- Survey of computer control strategies and an overview of the hardware and software available for their implementation.
- An introduction to the practicalities of implementing control algorithms on a digital computer.
- Introduction to a range of methodologies for specifying and designing real-time systems : these include the Yourdon, MASCOT and PAISLey methodologies.
- Detailed consideration of concurrency problems and of multi-tasking features of real-time languages.
- Consideration of scheduling problems and real-time operating systems.
- An introduction to fault tolerance.
- In-text examples and end-of-chapter exercises.

Contents



Real-Time Systems

Jane W. S. Liu

ISBN : 9788177585759
Copyright : 2000

About the Book

Written by a renowned expert, **Real-Time System** provides professionals and students with a comprehensive treatment of real-time computing and communication systems. The book covers the most recent advances in real-time operating systems and communications networks. Thus, this book serves as a vehicle for technology transition within the real-time system community of systems architects, designers chief scientists and technologists, and systems analysts. Jane Liu's subject mater and adept treatment provides an engaging learning environment for students as well. With real-time systems, the technologies at play include telecommunication, signal processing, command and control, and digital control. Their applications have particular relevance to day-to-day operations, such as engine and break mechanisms in cars, traffic light operations, flight control and air-traffic control and heartbeat and blood pressure monitoring. This text describes not only how, but also why, through insightful illustrative examples. Real-Time Systems is both a valuable reference for professionals and an advanced text for Computer Science and Computer Engineering students.

Features

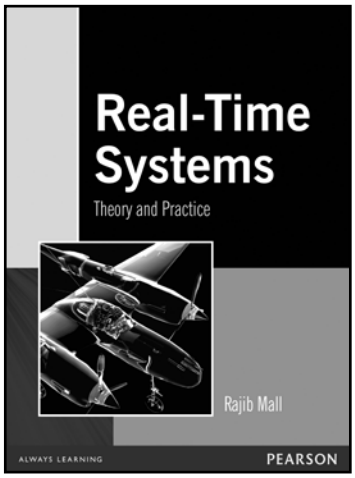
- Real world real-time applications based on research and practice
- State-of-the-art algorithms and methods for validation
- Methods for end-to-end scheduling and resource management
- More than 100 illustrations to enhance understanding
- Comprehensive treatment of the technology known as RMA (rate-monotonic analysis) method
- A supplemental Companion Website www.prenhall.com/liu the chapters

Contents

- Typical Real-Time Applications
- Hard Versus Soft Real-Time Systems
- A Reference Model of Real-Time Systems
- Commonly Used Approaches to Real-Time Scheduling
- Clock Driven Scheduling
- Priority-Driven Scheduling of Periodic Tasks
- Scheduling Aperiodic and Sporadic Jobs in Priority-Driven Systems
- Resources and Resource Access Control
- Multiprocessor Scheduling, Resources Access Control, and Synchronization
- Scheduling Flexible Computations and Tasks with Temporal Distance Constraints
- Real-Time Communication
- Operating Systems

About the Author

Jane W.S. Liu received her M.S. And Sc.D. in Electrical Engineering from Massachusetts Institute of Technology, before joining the University of Illinois, where she currently teaches, Jane worked with industry. She serves on numerous program committees and on symposia and workshops on real-time systems. She is currently a member of ACM and a Fellow of IEEE. Dr. Liu's current research is concerned with the means to provide an open environment to real-time applications.



Real-Time Systems: Theory and Practice

Rajib Mall

ISBN : 9788131700693
Copyright : 2007
Pages : 242

About the Book

Although real-time systems are becoming increasingly important they are often so embedded that we fail to notice them even while interacting with them. An important characteristic of real-time systems is that their correctness is time- dependent. Examples of such systems range from safety-critical ones, such as nuclear reactors and automotive controllers, to entertainment software such as games and graphics animations. The growing importance of real-time systems has made it a core area for computer science, electronics and communication, as well as electrical engineering students. This book is designed to serve as a textbook for both graduate and post-graduate level courses on real-time systems. It can also serve as a reference for practising engineers.

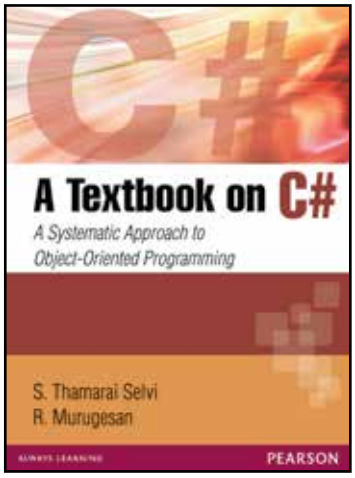
Features

- Thorough coverage of real-time databases, operating systems and communications
- Concepts explained through real-life applications
- Numerous worked-out examples and practice problems

Contents

About the Author

Rajib Mall received his BE, ME, and Ph.D. from the Indian Institute of Science Bangalore. He has worked in a number of industries dealing with real-time system applications. He joined the faculty of the Department of Computer Science and Engineering at the Indian Institute of Technology Kharagpur in 1994, where he is now Professor. His research interests are software engineering, real-time systems, and sensor networks, in which fields he has published more than one hundred refereed papers.



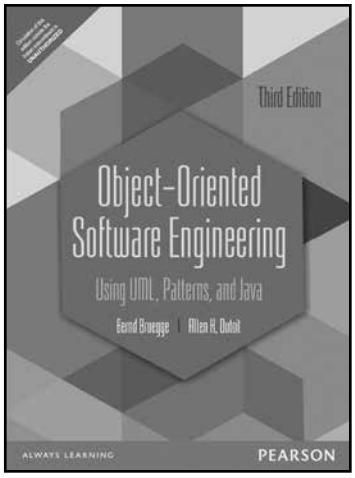
A TextBook on C#

S. Thamarai Selvi • R. Murugesan

ISBN : 9788131764923

About the Book

C# is a modern object-oriented programming language designed specifically to work with Microsoft .NET Platform. The objective of this book is to introduce OOP concepts in a systematic manner and to explain the key features of C#. An invaluable textbook for beginners and a reference for the experienced programmers, it does not assume a prior knowledge of the programming language. The systematic approach followed in this book will help readers easily understand the concepts.



Object-Oriented Software Engineering: Using UML, Patterns and Java, 3/e

Bernd Bruegge • Allen H. Dutoit

ISBN : 9789332518681
Copyright : 2014
Pages : 722

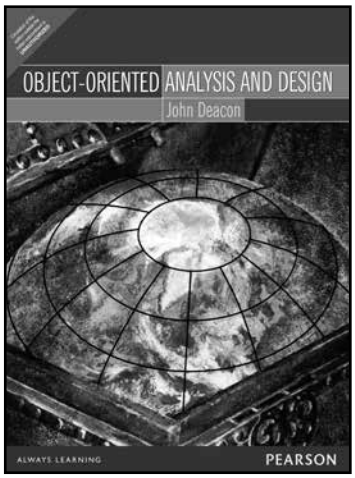
About the Book

Using a step-by-step case study to illustrate the concepts and topics in each chapter, Bruegge and Dutoit emphasize learning object-oriented software engineer through practical experience: readers can apply the techniques learned in class by implementing a real-world software project.

Features

- NEW! A comprehensive upgrade to the latest version of UML and OCL. All diagrams were checked and revised to take advantage of the latest development in UML. Chapters on System Design and Object Design now include new material on component diagrams and modeling of services
- NEW! Material on agile methods. The chapter on "Configuration Management" describes continuous integration; the chapter on "Project Management" covers Scrum; the chapter on "Methodologies" contrasts agile methodologies--such as XP, Scrum, and Rugby--with traditional methodologies based on the Unified process
- NEW! Material on U2TP. The chapter on "Testing" includes new material on modeling the test system, test automation, and the UML2 Testing Profile
- UPDATED! Examples. The examples in the new edition are updated and improved based on feedback from many readers and students.

Contents



Object-Oriented Analysis and Design

John Deacon

ISBN : 9788131726068
Copyright : 2009
Pages : 636

About the Book

John Deacon's in-depth, highly pragmatic approach to object-oriented analysis and design, demonstrates how to lay the foundations for developing the best possible software. Students will learn how to ensure that analysis and design remain focused and productive. By working through the book, they will gain a solid working knowledge of best practices in software development. The focus of the text is on typical development projects and technologies, showing exactly what the different development activities are, and emphasising what they should and should not be trying to accomplish. This fresh, comprehensive examination of object-oriented analysis and design in the context of today's systems and technologies will be a valuable addition to the bookshelves of undergraduates and graduates on systems analysis and design courses.

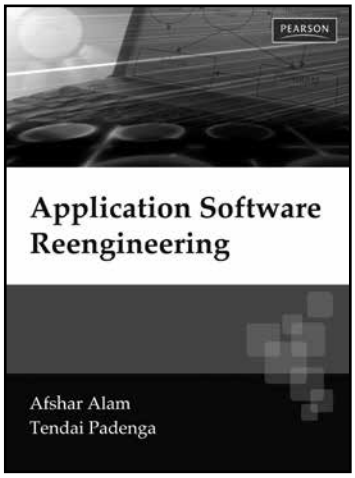
Features

- Gives a modern interpretation of techniques with valuable insights and suggestions, known only to folklore and newsnet, given prominence
- Three case studies: a criminal investigation support system providing the illustrations that support the text; a restaurant administration system providing the worked example that is developed throughout the book; and a third case study and worked example that is provided as a supplement - healthcare (general practice and clinics).
- Code examples are provided both as Java/C# and C++
- Several appendices provide summaries of key points and checklists for projects

Contents

About the Author

John Deacon has over twenty years' teaching experience. He currently teaches commercial training courses in analysis and design and in object technology to organizations including CERN, the high-energy physics institute and creator of the web, as well as companies such as banks and telecommunication providers.



Application Software Re-engineering

M. Afshar Aalam • Tendai Padenga

ISBN : 9788131731857
Copyright : 2010
Pages : 239

About the Book

The book is about reorganizing and modifying existing software systems to make them more maintainable and user friendly. It also powerfully dwells on the aspects of general Application Software Reengineering across various fields

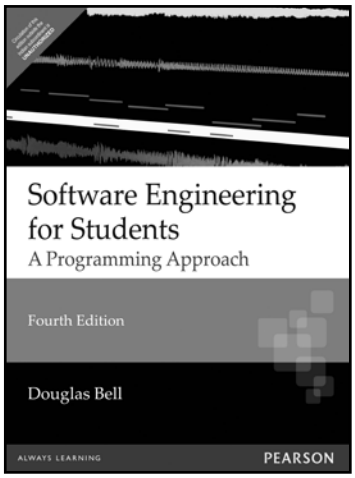
Features

- It has two case studies each on Code Slicing and Code Refactoring.
- Comprehensive and exhaustive coverage - Includes the latest developments in Application software Reengineering
- This is going to be the first text on Software Re-engineering in the Indian market.
- Chapter objectives, keywords, and ample problem questions in each chapter to effectively explain the concepts

Contents

About the Authors

Dr. M. Afshar Alam is the Dean, Faculty of Management and Information Technology and Head, Computer Science Department at Jamia Hamdard University. He is also a member of AICTE for Assessment & Monitoring. **Tendai Padenga** is presently involved in research at Jamia Hamdard University.



Software Engineering for Students, 4/e

Douglas Bell

ISBN : 9788131716052
Copyright : 2007
Pages : 448

About the Book

Software Engineering for Students presents a range of current techniques and tools for people who have experienced the pleasures of writing programs and who want to see how things change in the scale up to large programs and software systems.

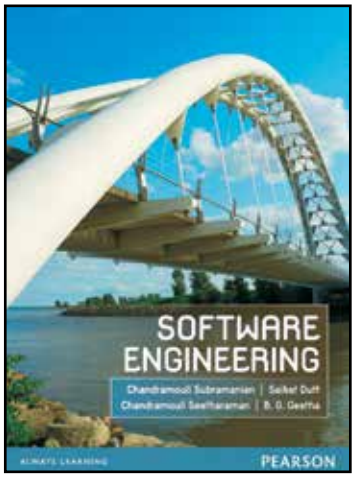
The students' familiarity with programming gives them relevant background and the confidence to grasp the fundamentals of this subject.

The book starts by explaining the challenges that large software projects present, moving on to cover the current principles, techniques and tools that are used in software development throughout the industrialised world.

Features

- Throughout the text, UML is used as appropriate as a design notation and an idealized language similar to Java and C# is used as an illustrative programming language.
- Cases studies are used throughout to clarify the explanations. - examples are chosen from familiar applications, including a computer game, and the software for an ATM
- The approach enables the reader to use, understand its rationale, review, assess and compare each technique, and select an appropriate collection of techniques for a given project

Contents



Software Engineering

Chandramouli Subramanian • Saikat DuttChandramouli Seetharaman • B. G. Geetha

ISBN : 9789332537293
Copyright : 2015
Pages : 672

NEW

About the Book

This book addresses basic and advanced concepts in software engineering and is intended as a textbook for an undergraduate-level engineering course. In addition to covering important concepts in software engineering, this book also addresses the perspective of decreasing the overall effort of writing quality software. It covers the entire spectrum of the software engineering life cycle starting from the requirement analysis until the implementation and maintenance of the project.

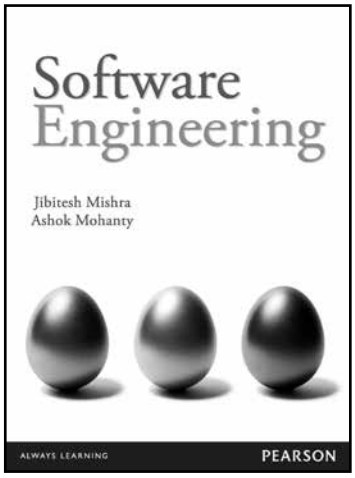
Features

- Covers important software engineering topics with a special focus
- Covers important software engineering topics with a special focus on Software Testing, Software Project Management and Agile Concepts
- Features such as Discussion Points and Points to Ponder help in clarifying concepts and promoting critical thinking
- Includes five case studies on software engineering practices
- Includes a model solved question paper
- Includes more than 700 exercise and examples

Contents

About the Authors

S. Chandramouli , Senior Manager in Cognizant Technology Solutions, Chennai
Saikat Dutt, Director in Cognizant Technology Solutions, Kolkata
Chandramouli Seetharaman is currently the Founder-Director of CATALYSTS
Dr B. G. Geetha , Professor and Head, Department of Computer Science, K. S. Rangasamy College of Technology,Tiruchengode



Software Engineering

Jibitesh Mishra • Ashok Mohanty

ISBN : 9788131758694
Copyright : 2011
Pages : 400

About the Book

Our new Indian original book on software engineering covers conventional as well as current methodologies of software development to explain core concepts, with a number of case studies and worked-out examples interspersed among the chapters. Current industry practices followed in development, such as computer aided software engineering, have also been included, as are important topics like 'Widget based GUI' and 'Windows Management System'. The book also has coverage on interdisciplinary topics in software engineering that will be useful for software professionals, such as 'quality management', 'project management', 'metrics' and 'quality standards'.

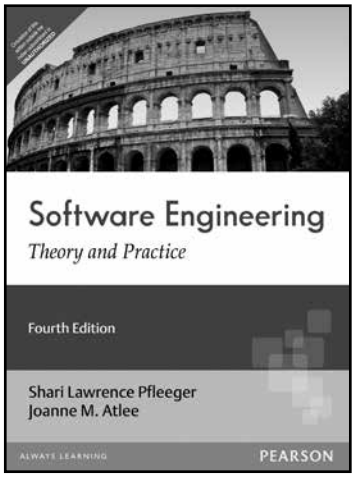
Features

- Covers both function oriented as well as object oriented (OO) approach
- Emphasis on emerging areas such as 'Web engineering', 'software maintenance' and 'component based software engineering'
- A number of line diagrams and examples
- Case Studies on the ATM system and milk dispenser
- Includes multiple-choice, objective-type questions and frequently asked questions with answers

Contents

About the Authors

Dr Jibitesh Mishra is Associate Professor and Head, Department of Computer Science and Engineering, College of Engineering and Technology, Bhubaneswar, a constituent college of Biju Patnaik University of Technology, Orissa. He has more than 16 years of teaching experience in various universities throughout the world. He has authored four books of repu



Software Engineering

Jibitesh Mishra • Ashok Mohanty

ISBN : 9788131760628
Copyright : 2011
Pages : 400

About the Book

Our new Indian original book on software engineering covers conventional as well as current methodologies of software development to explain core concepts, with a number of case studies and worked-out examples interspersed among the chapters. Current industry practices followed in development, such as computer aided software engineering, have also been included, as are important topics like 'Widget based GUI' and 'Windows Management System'. The book also has coverage on interdisciplinary topics in software engineering that will be useful for software professionals, such as 'quality management', 'project management', 'metrics' and 'quality standards'.

Features

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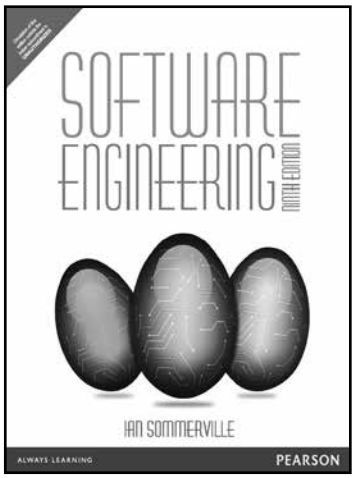
Contents

About the Authors

Dr Jibitesh Mishra is Associate Professor and Head, Department of Computer Science and Engineering, College of Engineering and Technology, Bhubaneswar, a constituent college of Biju Patnaik University of Technology, Orissa. He has more than 16 years of teaching experience in various universities throughout the world. He has authored four books of repute. His research interests are fractal graphics, software engineering and Web engineering.

Ashok Mohanty is Reader, Department of Mechanical Engineering, College of Engineering and Technology, Bhubaneswar. He is a graduate in mechanical engineering from BHU-IT and a post graduate in Industrial Management. He has more than eight years of industrial experience in a PSU and about 15 years of teaching experience in a government engineering college. His areas of specialization include project management, quality engineering and management information system.



Software Engineering: Theory and Practice, 4/e

Shari Lawrence Pfleeger • Joanne M Atlee

ISBN : 9788131760628
Copyright : 2009
Pages : 784

About the Book

For introductory courses in Software Engineering. This introduction to software engineering and practice addresses both procedural and object-oriented development. The book applies concepts consistently to two common examples — a typical information system and a real-time system. It combines theory with real, practical applications by providing an abundance of case studies and examples from the current literature. This revision has been thoroughly updated to reflect significant changes in software engineering, including modeling and agile methods.

Features

- System Level — Chapter 5 has been significantly revised to focus just on architectural design.
- Component Level — Chapter 6 has been entirely rewritten to focus on design advice in the modeling and designing of software modules (e.g., components, objects). There is extensive coverage of general design principles, object-oriented design principles, and design patterns.
- Extensive coverage of object-oriented development, a programming perspective being implemented by many companies.
- Integrated treatment of concepts such as reuse, risk management, and quality engineering.
- Discussion of measurement issues as an integral part of software engineering strategy.
- Examination of legal and ethical issues in software engineering.
- The Companion Website http://wps.prenhall.com/esm_pfleeger_softengtp_4 provides additional materials to be used with the text. This site also links to additional resources, real world examples, and articles related to many topics in the book

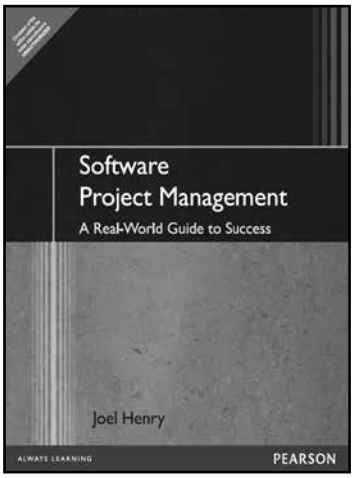
Contents

About the Authors

Shari Lawrence Pfleeger (Ph.D., Information Technology and Engineering, George Mason University; M.S., Planning, The Pennsylvania State University; M.A., Mathematics, The Pennsylvania State University; B.A., Mathematics with high honors, Harpur College, Binghamton, NY) is a senior researcher at RAND's Arlington, VA office where she helps organizations and government agencies understand whether and how information technology supports their mission and goals.

Joanne M. Atlee is an Associate Professor in the School of Computer Science at the University of Waterloo. Her research program focuses on software modeling, documentation, and analysis, with a particular emphasis on what she calls practical formalisms: specification and design notations that are practitioner-friendly but have a precise semantics suitable for automated analysis. More recently, she has been working on configurable model-driven development, whereby modeling notations, analysis tools, and code generators can be configured via semantics parameters.

Atlee was the founding Director of Waterloo's Software Engineering degree program. She served on the Steering Committee for the Computing Curricula Software Engineering volume, co-sponsored by IEEE-CS and ACM. She is the vice chair of the International Federation for Information Processing (IFIP) Working Group 2.9 on software requirements engineering. Atlee was the program-committee chair for the International Conference on Requirements Engineering in 2005 (RE'05), and will be co-chair of the program committee for the International Conference on Software Engineering in 2009 (ICSE'09).



Software Engineering, 9/e

Ian Sommerville

ISBN : 9789332518858
Copyright : 2014
Pages : 703

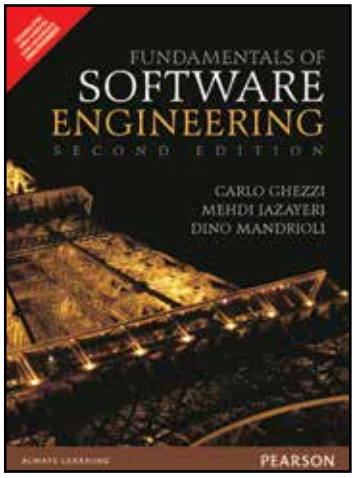
About the Book

The ninth edition of this best-selling introduction presents a broad perspective of software engineering, focusing on the processes and techniques fundamental to the creation of reliable, software systems. Increased coverage of agile methods and software reuse, along with coverage of 'traditional' plan-driven software engineering, gives readers the most up-to-date view of the field currently available. Practical case studies, a full set of easy-to-access supplements, and extensive web resources make teaching the course easier than ever.

Features

- Covers the latest, key developments in software engineering. The core structure of the text is built around the key software engineering activities of specification, design, development, verification, validation, and management.
- Two integrated, contrasting case studies flow through the text, continuously giving practical context and examples for topics discussed.
- Management issues such as project planning are introduced early, allowing them to be used in a project-based course.
- Significant coverage of requirements and architectural design emphasizes their importance in the overall SE process.
- Graphical system models in standard UML.

Contents



Fundamentals of Software Engineering, 2/e

Carlo Ghezzi
Mehdi Jazayeri
Dino Mandrioli

ISBN : 9789332555396
Copyright : 2016
Pages : 499

NEW

About the Book

Appropriate for both undergraduate and graduate introductory software engineering courses found in Computer Science and Computer Engineering departments.
This text provides ive, in-depth coverage of the fundamentals of software engineering by stressing principles and methods through rigorous formal and informal approaches. The authors emphasize, identify, and apply fundamental principles that are applicable throughout the software lifecycle, in contrast to other texts which are based in the lifecycle model of software development. This emphasis enables students to respond to the rapid changes in technology that are common today.

Features

- NEW - Deeper analysis and explanation of object-oriented techniques.

- Teaches students about this established and widely adopted methodology.
- NEW - Use of Unified Modeling Language (UML).
- Encourages students to learn about graphical method of description that is widely used for requirements descriptions.
- NEW - Coverage of requirements analysis and software architecture.
- Teaches students about these two areas that have become better understood and more standard.
- NEW - Revised and updated case studies.
- Better demonstrate the principles discussed in the text.
- NEW - Model checking—A technique that provides automatic support to the human activity of software verification.
- Exposes students to this powerful new verification technique.

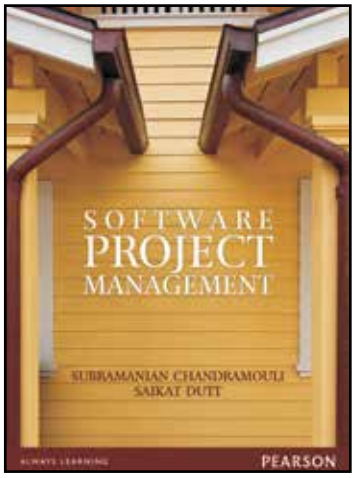
Contents

About the Authors

Carlo Ghezzi is a professor of computer science at the Politecnico di Milano, where he holds the chair of software engineering. He was named a Fellow of the Association for Computing Machinery in 2000 for his contributions to software engineering research.

Mehdi Jazayeri is a professor of computer science at the Technische Universität Wien, where he holds the chair of distributed systems. He spent many years in software development at several Silicon Valley companies, including 10 years at Hewlett-Packard Laboratories, Palo Alto, CA.

Dino Mandrioli is a professor of computer science at the Politecnico di Milano, where he holds the chair of theoretical computer science. His research interests are centered on the application of formal methods in the practice of software engineering.



Software Project Management

S. Chandramouli • Saikat Dutt

ISBN : 9789332542143
Copyright : 2015
Pages : 520

NEW

About the Book

Software Project Management is a comprehensive textbook designed for the students of Computer Science and Information Technology. All the topics are explained with a large number of practical examples and case studies.

Features

- Practical approach used to explain the subject
- Based on the widely accepted Project Management Body of Knowledge (PMBOK®) guidelines
- Exclusive chapter on Agile Methodology
- Case studies discussed online

Contents

About the Authors

S.Chandramouli PMP, PMI ACP is an alumnus of the Indian Institute of Management, Kozhikode (IIM-K), and a prolific writer of business management articles dealing with delivery management, competitiveness, IT, organizational culture and leadership. He was an active member in PMI OPM3 and PMCDF project works. He is a certified "Green Belt" in six sigma methodology and is also ITIL (F) Certified. He is actively associated with academia & various research professional bodies in India.

Saikat Dutt is 'Project Management Professional (PMP)' and 'PMI Agile Certified Professional' certified by Project Management Institute (PMI) USA and a Certified Scrum Master (CSM). Saikat has more than Seventeen years of IT industry experience and has expertise in managing large scale multi-location and mission critical projects.

Software Project Management : A Real-World Guide to Success, 1/e

Joel Henry

ISBN : 9788131717929
Copyright : 2004
Pages : 739

About the Book

Software Project Management provides insight to the importance of careful project management. Topics are presented in the same order that they appear in the progression of actual projects. The author utilizes his creative writing background to teach these topics with the tone of a friend sitting beside each student, rather than as a general lecture on the material. The text considers the culture of a software project team and the leadership technique needed to make a project successful. It adds to this foundation the importance of the process itself. Current software development tools such as Rational Suite, Microsoft Project, and PSP Studio are also addressed. Basic measurements are presented with examples

from real-world projects, which show how a project can be monitored, controlled and assessed. Precise directions and examples are given to illustrate this hands-on method as well as the techniques a student will need to actually perform project management in a real-life situation.

Features

- Presents material in the same order as it progresses in a project.
- Includes insight from the author's 10 years of experience working on project terms.
- Focuses on applications rather than topics.
- Includes "steps" and "guideline" boxes that provide summary checklists of chapter material.
- Provides reference to those tools supporting software project management.
- Carries a case study through parts two and three of the book.
- Uses real world stories of teams taken from both academic and professional situations, some taken from the author's personal experience.

Contents

Software Testing

PMI- Agile Certified Practioner, 3/e

Chandramouli, Dutt

ISBN : TBA
Copyright : 2016
Pages : 480 (T)

Coming Soon

About the Book

Agile, a topic of growing importance in project management, is an iterative and incremental software developmental methodology that helps organizations to be more flexible to change and to deliver workable software in a short span of time. PMI-ACP is the new credential offered by the Project Management Institute that validates a practitioner's ability to understand and apply agile principles and practices.

This self-study guide is essential reading for all PMI-ACP aspirants to clear the certification exam. Following an easy and a step-by-step learning approach, this book presents not only the basic agile concepts but also the latest developments in the field, based entirely on the guidelines from the Project Management

Features

- More than 1000 practical questions
- Fully solved question papers following the PMI-ACP exam pattern
- Significant details for revision encapsulated in 400 important points
- Tips and tricks on the PMI-ACP certification exam
- PMI-ACP watch snippets highlighting important information
- Covers all 43 Knowledge Areas, 10 Tools and Techniques and Six Domains as per PMI

Contents

About the Authors

S. Chandramouli has been actively involved with the Project, Program management discipline and has a good record of delivering large-scale, mission-critical projects on time and within budget with Customer Satisfaction. He got "Most Valuable Player of the Year 2004" award from Birla Soft Management for his initiatives on Project management. He is an alumnus of Indian Institute of Management , Kozhikode (IIM K). He presented papers on Project Management in various international forums. He is a Project Management Professional (PMP) certified by Project Management Institute (PMI) USA. He was an active member in PMI's OPM3 and PMCDF Project Works. He is the author of the book titled "Virtual Project Management Office". He is certified "Green Belt" in six sigma methodology. He is also ITIL(F) Certified.

Saikat Dutt is a project management professional certified by the Project Management Institute (PMI), USA, and a Certified Scrum Master. He has 14 years of IT industry experience, managing large-scale multi-location and mission-critical project.

Foundations of Software Testing, 2/e

Aditya P. Mathur

ISBN : 9788131794760
Copyright : 2013
Pages : 798

About the Book

The Second Edition of **Foundations of Software Testing** is aimed at the undergraduate, the graduate students and the practicing engineers. This book presents sound engineering approaches for test generation, selection, minimization, assessment, and enhancement. Using numerous examples, it offers a lucid description of a wide range of simple to complex techniques for a variety of testing-related tasks.

Features

- Mathematical and algorithmic approach followed to describe a wide range of simple to complex techniques for test generation.
- Detailed treatment of topics such as test generation from finite state models, combinatorial designs and test selection and minimization for regression testing.
- Test adequacy assessment using criteria mandated by the FAA and other agencies; data-flow based adequacy and mutation-based adequacy which are the most powerful of the available test adequacy criteria.
- Step-by-step algorithms to generate tests.
- Comparative analyses of commercially available testing tools to facilitate tool selection.

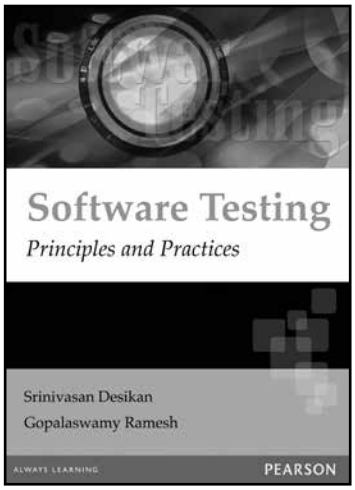
New to this edition:

1. Two new chapters on cover testing (and tools). These chapters include unit testing, integration testing and system testing.
2. A chapter on Test Management, covering topics like test planning, management, software test automation, scope of automation, design and architecture for automation.
3. New sections on Software defect tracking, differences between white box and black box testing, domain testing, principles of testing and Transaction flow testing
4. A section on tools related to the techniques described in the chapter

Contents

About the Author

Aditya Mathur is a Professor of Computer Science at Purdue University, West Lafayette, Indiana, USA and also the Head of Pillar Information Systems Technology and Design at the Singapore University of Technology and Design. He is a founding member of the Department of Computer Science at the Birla Institute of Technology and Science, Pilani. He has taught courses in Computer Sciences at all levels since 1972. His book titled Introduction to Microprocessors was the first text of its kind in India published in 1980. This book continues to a favorite of thousands of students. Aditya is a prolific researcher and has published extensively in quality international journals and conferences in the area of software engineering.



Software Testing: Principles and Practices

Srinivasan Desikan • Gopalaswamy Ramesh

ISBN : 9788177581218
Copyright : 2006
Pages : 480

About the Book

Software Testing: Principles and Practices is a comprehensive treatise on software testing. It provides a pragmatic view of testing, addressing emerging areas like extreme testing and ad hoc testing

Features

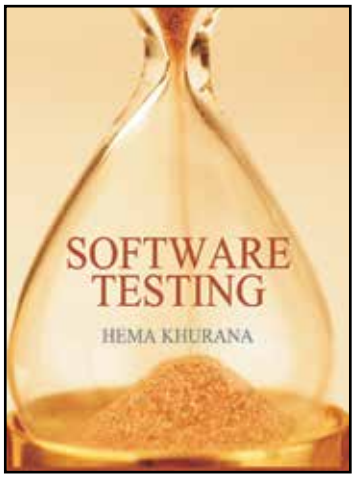
- Focuses on geographically distributed teams. Software Testing addresses people, orgizational structures and models for global teams.
- Showcases India's rich experience in testing. An increase amount of product testing is being done in India. However, not many books examine this experience or the India Business Model. This book showcases the best of these practices.
- Emphasizes pratical experience while retaining comprehensive theoretical rigor. This book addresses pratical aspects of testing like internationalization and regression testing while preserving traditional approaches like equivalence pratitioning and cyclomatic complexity.

Contents

About the Authors

Srinivasan Desikan is Senior Systems Architect at HP, System Technology and Software Division (STSD), Bangalore, India, and has worked as Director of Quality Assurance and Testing at Talisma, Siebel and Agile Software. He has contributed to several technical and management positions at Novell Inc, Wipro Infotech, and C-DOT and was part of large testing and product development teams. He has been in the field of testing since 1989 and some of those products enjoyed several million customers worldwide. He is well known to the testing community around the world and has vast experience in test automation, test management, test processes, test lab maintainance and in setting up test teams from scratch. He presented papers on testing in the international testing conferences such as QAI-India, ASIASTAR-2002 (Melbourne), PSQT/PSTT-2003 (Washington), SPIN (Chennai) and STeP-IN (Bangalore). A post gradute in computer applications from Pondicherry Engineering College, the author is currently the convener of the quality forum at the Bangalore Chamber of Industries and Commerce (BCIC). He is serving as adjunct professor at several colleges/universities/institutes to promote Software Testing as a subject.

Gopalaswamy Ramesh is an independent consultant and an adjunct professor at Loyola Institute of Business Management, SSN School of Management and Computer Applications, Great Lakes Institute of Management in Chennai and International Institute of Information Technology, Bangalore. He has over 25 years of industry experience in India and abroad, and has held various technical and management positions. He started his career with Tata Burroughs Limited (now Tata Infotech), working in UK and then moved to Far East Computers, Singapore, heading pre-sales and post-sales operations for Oracle products in the ASEAN region in the early 1980s. While at Singapore, he was instrumental in launching Oracle in ASEAN countries, including China, before moving over to Oracle's headquarters in California. In India, he played a key role in starting Oracle's India Development Center (IDC) from scratch, and has contributed to its growth and development. He is the author of the best-selling, national-award-winning ,Managing Global Software Projects,which was translated into Chinese. He is the co-author of Software Maintainence and is currently co-authoring books on soft skills and software quality. He has delivered lectures in several international forums and institutions, and currently consults on project management and related areas to several companies, in India and abroad.



Software Testing, 1/e

Hema Khurana

ISBN : 9789332543652
Copyright : 2015
Pages : 399

NEW

About the Book

This book dispels such myths with a systematic approach starting from definitions, static testing and reviews, dynamic testing(Orthogonal Array Technique and MC/DC Coverage included), testing throughout the lifecycle and management of testing projects illustrated with numerous examples, multiple choice questions and exercises

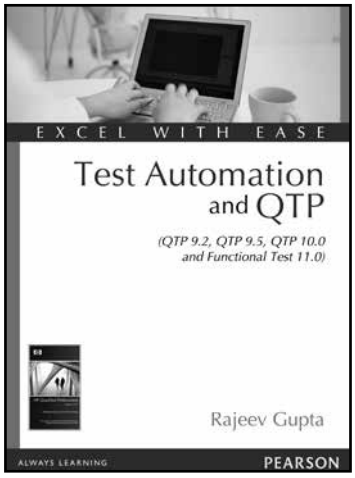
Features

- • Covers a chapter on Standards relevant to software testing (Software lifecycle Standard ISO12207, Software testing Standard ISO29119 and other product standards relating to safety and usability).
- • Describes 4 case studies on the application of Standards and methods to non- functional testing such as usability, reliability and safety besides a case study on bench marking software products based on their quality characteristics
- • It covers Dynamic Testing in detail with relevant examples
- • A chapter on Test Management new concepts like Use case based test effort estimation, People issues in software testing an Test laboratory accreditation
- • Includes around 150 exercises(Objectives and real time exercises)

Contents

About the Authors

Dr.Hema Khurana was Head of Bangalore, Centre of Electronics Testing and Development Centre under the Department of Electronics and Information Technology, Government of India



Test Automation and QTP

Rajeev Gupta

ISBN : 9788131764510
Copyright : 2012
Pages : 672

About the Book

This book is a one-stop resource that explains all concepts, features, and benefits of test automation and QTP with real-time examples. This book has been designed to be a beginner's guide for new users, a companion guide for experienced users and a reference guide for professionals appearing for interviews or certification exams on test automation and QTP.

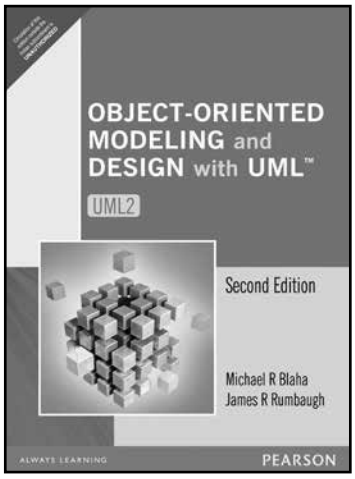
Features

- Describes in detail how to start, execute, maintain and manage a test automation project
- Describes in detail test automation life cycle—need analysis, ROI analysis, tool analysis, framework design, script development and maintenance
- Detailed coverage of advanced topics such as smart object identification, object repository design, regular expressions, descriptive programming, recovery scenarios and automation object model
- Contains various templates specifically for meeting client requirements

Contents

About the Author

Rajeev Gupta has over five years of experience in test automation. He has worked on several multi-national companies automation projects and has been instrumental in setting up and guiding many core technical automation departments.



Object - Oriented Modeling and Design With UML, 2/e

Michael Blaha • James Rumbaugh

ISBN : 9788131711064
Copyright : 2007
Pages : 504

About the Book

This revision offers a crisp, clear explanation of the basics of object-oriented thinking via UML models, then presents a process for applying these principles to software development, including C++, Java, and relational databases. An integrated case study threads throughout the book, illustrating key ideas as well as their application.

Features

- Compliant with Unified Modeling Language 2
- Substantially updated content
- More robust process
- Extensive exercises with solution
- Instructor's on-line solutions manual

Contents

About the Authors

Rumbaugh and **Michael Blaha** are two of the "founding fathers" of UML. They invented UML, the basis for UML, along with Booch notation. Their first edition was crucial to the development and adoption of Object-Oriented methods when they were in their infancy. Blaha is a worldwide consultant and is a partner with Modelsoft Consulting, and SentientPoint Corporation. He is active in the IEEE Computer Society. Rumbaugh is a Distinguished Engineer with the Rational brand of IBM and is one of the original co-designers of UML. He is a highly influential author.

Object-Oriented Analysis and Design with Applications, 3/e

Grady Booch • Jim Conallen • Michael W. Engel • Kelli A. Houston
Robert A. Maksimchuk • Bobbi J. Young

ISBN : 9788131722879
Copyright : 2009
Pages : 724

About the Book

Object-Oriented Analysis and Design with Applications has long been the essential reference to object-oriented technology—a technology that has evolved and become the de facto paradigm in mainstream software development. With this highly anticipated third edition, readers can learn to apply object-oriented methods using the Unified Modeling Language (UML) 2.0. The authors including UML founder Grady Booch draw upon their rich and varied experience to offer improved methods for object development that tackle the complex problems faced by system and software developers. Using numerous examples, they illustrate essential concepts, explain the method, and show successful applications in a variety of fields, including systems architecture, data acquisition, cryptoanalysis, control systems, and Web development. Readers will also find pragmatic advice on a host of important issues, including classification, implementation strategies, and cost-effective project management.

Features

- An extensive introduction to UML 2.0 from the notation's most fundamental and advanced elements, with an emphasis on key changes.
- A greatly enhanced focus on modeling—eagerly requested by readers—with five chapters that each emphasize a particular phase in the overall development lifecycle.
- Fresh approaches to reasoning about complex systems, including a new treatment of system architecture using OOAD and UML.
- An examination of the conceptual foundation of the widely misunderstood fundamental elements of the object model such as abstraction, encapsulation, modularity, and hierarchy
- Advice on how to allocate the resources of a team of developers and manage the risks associated with developing complex software systems
- An appendix on key object-oriented programming languages such as Java and C++

About the Authors

Grady Booch is an IBM fellow and author of six best-selling books on object-oriented programming. He is world-renowned as an originator of OO and the founder of UML.

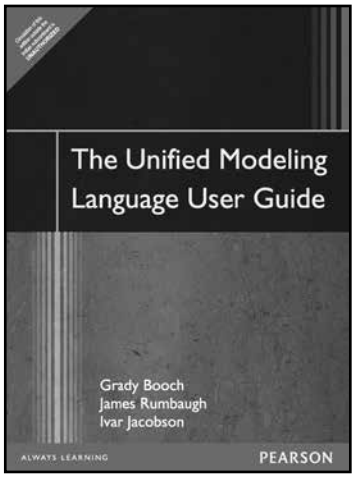
Robert A. Maksimchuk is a Director of Research in the Unisys Chief Technology Office, focusing on emerging modeling technologies. He is coauthor of the books UML for Database Design and UML of Mere Mortals.

Michael W. Engle is a principal member of the engineering staff with the Lockheed Martin Corporation. He has extensive technical and management experience across the complete system development lifecycle, from project initiation through deployment and support, in a variety of application domains.

Bobbi J. Young is a Director of Research for the Unisys Chief Technology Office. She has many years of experience in the IT Industry, working with commercial companies and Department of Defense contractors.

Jim Conallen is a software engineer in IBM Rational's Model Driven Development Strategy team, where he is actively involved in applying the Object Management Group's (OMG) Model Driven Architecture (MDA) initiative to IBM Rational's model tooling.

Kelli A. Houston is a consulting IT Specialist at IBM Rational. She is the method architect for IBM's internal method and is part of the team responsible for integrating IBM's methods.



The Unified Modeling Language User Guide

Grady Booch • Ivar Jacobson • James Rumbaugh

ISBN : 9788177583724
Copyright : 1999

About the Book

Introduced in 1997, the **Unified Modeling Language (UML)** has been rapidly accepted throughout the software industry as the standard graphical language for specifying, constructing, visualizing, and documenting software-intensive systems.

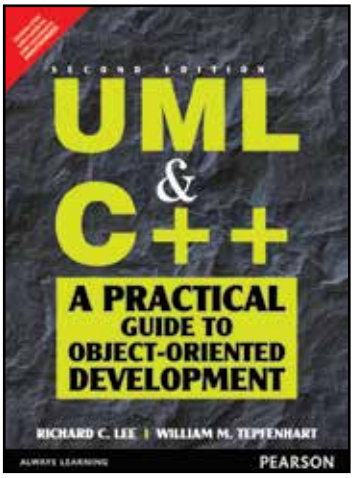
Features

- Understand what the UML is, what it is not, and why it is relevant to the development of software-intensive systems
- Master the vocabulary, rules, and idioms of the UML in order to "speak" the language effectively
- Learn how to apply the UML to a number of common modeling problems
- See illustrations of the UML's use interspersed with use cases for specific UML features
- Gain insight into the UML from the original designers of the UML

Contents

About the Authors

Grady Booch, James Rumbaugh, and **Ivar Jacobson** are the original designers of the Unified Modeling Language and three of the most widely known names in the field of software engineering.



UML and C++: A Practical Guide to Object-Oriented Development, 2/e

Richard C. Lee • William M. Tepfenhart

ISBN : 9789332551930
Pages : 557

NEW

About the Book

For courses in Object-Oriented Programming or Object Oriented C++ courses offered in Computer Science and Computer Engineering programs at both the undergraduate and graduate levels.
This practical book teaches readers how to actually do object-oriented modeling using UML notation and implementing the model using C++. The authors introduce all of the basic object-oriented fundamentals necessary to start applying and understanding the object-oriented paradigm without being an expert.

Features

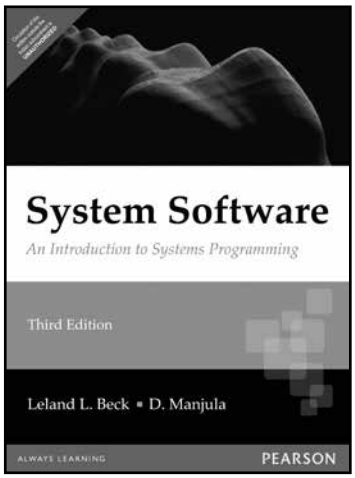
- NEW - Chapter 4 on use case development—As a means to scope the domain of a problem.
- Gives students a basic introduction to the key concepts of use cases, and offers a simple approach to developing a use case description. Ex.___
- NEW - Coverage of C++.
- Reflects changes in the programming language that resulted during ANSI/ISO standardization. Ex.___
- NEW - Chapter 15 C++ libraries, including the standard template libraries—Empasizes their use rather than theory by identifying the commonly used libraries and those that should only be used in special circumstances.
- Allows students to look at those elements which a developer is likely to use in an initial project. Ex.___
- NEW - Updated chapter on implementing associations and aggregations—Reflects use in the Standard Template Libraries.
- Offers students additional attention to detail in one of the most useful chapters. Ex.___
- NEW - Suggestions for a class project—Challenges students to develop a game as they cover material in the book.
- Allows students to apply concepts as they learn them as they follow the whole OOAD process. Ex.___
- Expanded use of UML notation for documentation—A combination of the most popular design methodologies of Grady Booch and Jim Rumbaugh.
- Provides students with an understanding and mastery of the current generation of Software Engineering Diagrams. Ex.___
- Use Cases.
- Supply students with ample guidelines for avoiding common mistakes. Ex.___
- Two case studies presented in the last three chapters illustrate all of the major concepts—A simple Microwave oven and a simple, well-known game, Breakout, as the example applications.
- Allow students to understand how all of the concepts, techniques, and methods fit together to assist in the development of an Object-Oriented application. Ex.___
- Wide range of techniques—Explains why they are used.
- Enables students to accommodate the methodology used in real-world development sites. Ex.___
- Fundamental concepts.
- Offers students enough knowledge to start working as team members, able to contribute at every stage of object-oriented development. Ex.___
- End of chapter step-by-step guides.
- Provide summaries of techniques in chapters.

Contents

About the Authors

RICHARD LEE has more than 35 years of experience developing and managing software projects. He has worked and/or managed leading-edge development in electronic publishing, embedded systems, large IMS projects, multi-media, operating support systems, process control, transaction processing, and switching. Being one of the earlier adopters of object-oriented technology, his current interest is making more object-oriented projects successful.

WILLIAM TEPFENHART is currently an Associate Professor in the Software Engineering Department at Monmouth University. He has eighteen years of experience developing manufacturing, military, and telecommunications applications as a programmer, developer, and technologist. He has developed object-oriented systems over the past 17 years. He is one of the developers of a compiler for R++ (a programming language that adds rules to C++).



System Software: An Introduction to Systems Programming, 3/e

Leland L. Beck

ISBN : 9788177585551
Copyright : 1997

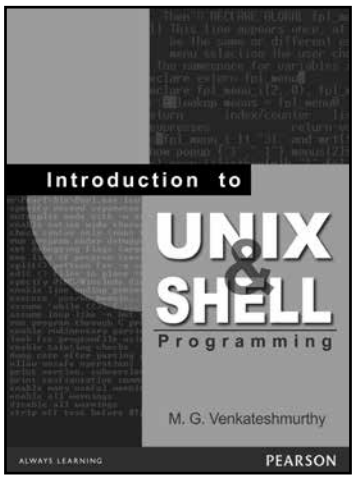
About the Book

In this third edition of his classic title, Leland Beck provides a complete introduction to the design and implementation of various types of system software. A core text for undergraduate/graduate software students, it stresses on the relationship between system software and the architecture of the machine it is designed to support, presenting the fundamental concepts of each type of software lucidly.

Features

- Updated architecture & Software examples, including the Intel x86 family, IBM PowerPC, Sun SPARC, CRAY T3E
- Introduction to object-oriented programming & design
- New material on finite automata & shift-reduce parsing
- Exercises at the end of each chapter

Contents



Introduction to Unix and Shell Programming

M. G. Venkateshmurthy

ISBN : 9788177587456
Copyright : 2005
Pages : 392

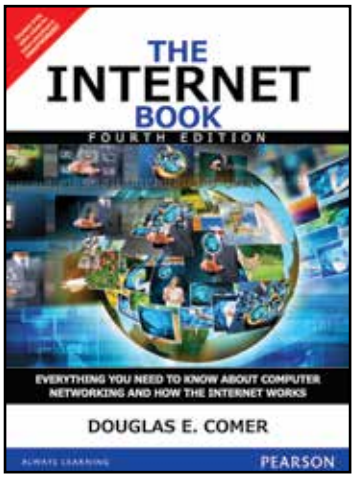
About the Book

Introduction to Unix and Shell Programming is designed to be an introductory first level textbook for a course on Unix. Organised into twelve simple chapters the book guides the students from the basic introduction to the Unix operating system and extends upto Unix system administration.

Features

- Simple and concise presentation
- Rich in peadagogy with lucid style of writing.
- Chapter objectives provided for all the chapters
- An Introduction to Perl programming provided.

Contents



The Internet Book: Everything You Need to Know About Computer Networking and How the Internet Works, 4/e

Douglas E Comer

ISBN : 9789332549784
Copyright : 2012
Pages : 416

NEW

About the Book

Fully revised and updated throughout, this text explains – in non-technical language – the technology of how computers communicate, what the Internet is, how the Internet works, and what the Internet can do for people. Students connect to the material through Comer's solid overview that focuses on the "big picture," rather than the minute details. No background in computer networking or the Internet is assumed.

Features

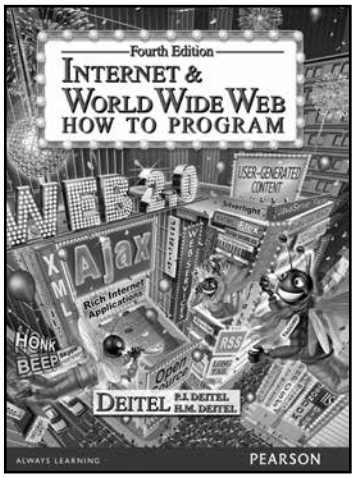
- Written by a leading computer networking teacher, researcher and former member of the Internet Architecture Board.
- An abundance of analogies and everyday examples used to explain difficult concepts.
- Flexible organization in four fairly independent sections:

– Part I begins with fundamental concepts such as digital and analog communication. It also introduces packet switching and explains the Local Area Network technologies that are used in most businesses.
– Part II gives a short history of the Internet research project and the development of the Internet.
– Part III explains how the Internet works, including a description of the two fundamental protocols used by all services: the Internet Protocol (IP) and the Transmission Control Protocol (TCP).
– Part IV examines services available on the Internet. In addition to covering browsers, web documents, and search engines used with the World Wide Web, chapters discuss email, bulletin boards, file transfer, remote desktops, wikis, blogs, and audio and video communication. In each case, the text explains how the service operates and how it uses facilities in the underlying system.

Contents

About the Author

Douglas E. Comer is a professor at Purdue University, where he teaches popular computer networking courses. He consults for industry and teaches hundreds of professionals and diverse audiences around the world about the Internet at professional conferences and in onsite presentations. His series of books on networking and TCP/IP protocols receives high acclaim; his books are popular worldwide. One of the researchers who contributed to the formation of the Internet in the late 1970s and 1980s, he has served on the Internet Architecture Board, and is a Fellow of the ACM.



Internet & World Wide Web: How to Program, 4/e

Harvey M. Deitel • Paul J. Deitel

ISBN : 9788131725221
Copyright : 2009
Pages : 1424

About the Book

Internet and World Wide Web How to Program, 4e introduces students with little or no programming experience to the exciting world of Web-Based applications. The book has been substantially revised to reflect today's Web 2.0 rich Internet application-development methodologies. A comprehensive book that teaches the fundamentals needed to program on the Internet, this text provides in-depth coverage of introductory programming principles, various markup languages (XHTML, Dynamic HTML and XML), several scripting languages (JavaScript, PHP, Ruby/Ruby on Rails and Perl); AJAX, web services, Web Servers (IIS and Apache) and relational databases (MySQL/Apache Derby/ Java DB) -- all the skills and tools needed to create dynamic Web-based applications. The text contains comprehensive introductions to ASP.NET 2.0 and JavaServer Faces (JSF). Hundreds of live-code examples of real applications throughout the book available for download allow readers to run the applications and see and hear the outputs. The book provides instruction on building Ajax-enabled rich Internet applications that enhance the presentation of online content and give web applications the look and feel of desktop applications. The chapter on Web 2.0 and Internet business exposes readers to a wide range of other topics associated with Web 2.0 applications and businesses After mastering the material in this book, students will be well prepared to build real-world, industrial strength, Web-based applications.

Features

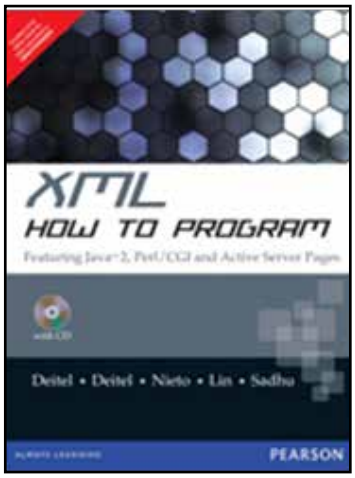
- New focus on Web 2.0 technologies and concepts
- New focus on building Rich Internet Applications with the look-and-feel of desktop applications
- New chapter on building Ajax-enabled web applications
- New chapter on rapidly developing building database-driven web applications with Ruby on Rails
- New chapter on web services
- New chapter on Web 2.0 and Internet Business
- Updated and enhanced PHP chapter
- Updated ASP coverage to ASP.NET 2.0
- New JavaServer Faces (JSF) coverage replaces Servlets and JavaServer Pages

Contents

About the Authors

Paul J. Deitel, CEO and Chief Technical Officer of Deitel & Associates, Inc., is a graduate of MIT's Sloan School of Management, where he studied Information Technology. He holds the Java Certified Programmer and Java Certified Developer certifications, and has been designated by Sun Microsystems as a Java Champion. Through Deitel & Associates, Inc., he has delivered Java, C, C++, C# and Visual Basic courses to industry clients, including IBM, Sun Microsystems, Dell, Lucent Technologies, Fidelity, NASA at the Kennedy Space Center, the National Severe Storm Laboratory, White Sands Missile Range, Rogue Wave Software, Boeing, Stratus, Cambridge Technology Partners, Open Environment Corporation, One Wave, Hyperion Software, Adra Systems, Entergy, CableData Systems, Nortel Networks, Puma, iRobot, Invensys and many more. He has also lectured on Java and C++ for the Boston Chapter of the Association for Computing Machinery. He and his father, Dr. Harvey M. Deitel, are the world's best-selling programming language textbook authors.

Dr. Harvey M. Deitel, Chairman and Chief Strategy Officer of Deitel & Associates, Inc., has 45 years of academic and industry experience in the computer field. Dr. Deitel earned B.S. and M.S. degrees from the MIT and a Ph.D. from Boston University. He has 20 years of college teaching experience, including earning tenure and serving as the Chairman of the Computer Science Department at Boston College before founding Deitel & Associates, Inc., with his son, Paul J. Deitel. He and Paul are the co-authors of several dozen books and multimedia packages and they are writing many more. With translations published in Japanese, German, Russian, Spanish, Traditional Chinese, Simplified Chinese, Korean, French, Polish, Italian, Portuguese, Greek, Urdu and Turkish, the Deitels' texts have earned international recognition. Dr. Deitel has delivered hundreds of professional seminars to major corporations, academic institutions, government organizations and the military.



XML : How to Program

H. M. Deitel • P. J. Deitel • T. M. Lin • Tem R. Nieto • P. Sadhu

ISBN : 9788131716854
Copyright : 2001

About the Book

This new book by the world's leading programming-language textbook authors carefully explains XMLâ€"based system developments, including programming multi-tier, client/server, database-oriented, Internet and World-Wide-Web-based applications IN XML, How to Program, the Deitels and their colleagues, Tem R. Nieto, Ted Lin and Praveen Sadhu Discuss.

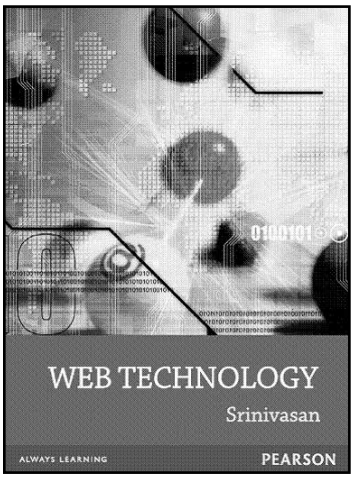
Features

- Hundreds of â€œlive-codeâ€ programs with screen captures that show exact outputs.
- Extensive World Wide Web and Internet resources to encourage further research.
- Programming tips, recommended practices and cautionsâ€"all marked with icons.

Contents

About the Author

Dr. Harvey M. Deitel and Paul. J. Deitel are the principals of Deitel & Associates, Inc., the internationally recognized corporate training and content-creation organization specializing in Javaâ„¢, C+, C, C#, Visual Basic, XML, Python, Perl, ASP, Internet, World Wide Web and object technologies. The Deitels are also authors of the world's #1 Java and C++ textbooks, Java How to Program, 3/e and C++ How to Program, 3/e.



Web Technology

Srinivasan M

ISBN : 9788131774199
Copyright : 2012
Pages : 500

About the Book

This book introduces the keyset technologies that are currently used to create applications on web. It explains the principal HTML concept, the client-side used JavaScript and the server-side used JSP with relevant coding examples. Emphasis is given on XML with examples including XML Transformations (XSTL). Apart from this, the book also dwells into the alternatives to XML such as the JSON.

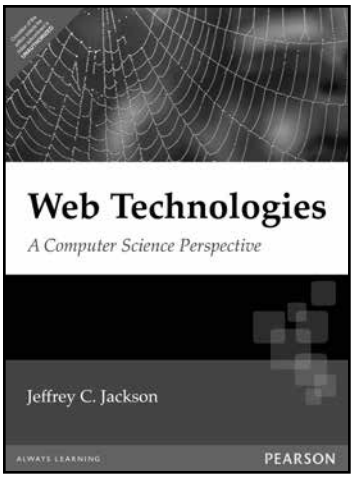
Features

- Ajax, Web services, Java basics and Java EE are covered in detail, with codes.
- Technologies such as HTML, CSS, JavaScript, Java, Java Servlets, and Web/App servers are discussed.
- Includes real-time case studies.
- 150 examples and 260 exercises.

Contents

About the Author

Mr. Srinivasan is a Vice President of Coextrix Technologies in Bangalore. He has 22 years of experience in industry and teaching.



Web Technologies: A Computer Science Perspective

Jeffrey C. Jackson

ISBN : 9788131717158
Copyright : 2007
Pages : 592

About the Book

This text introduces the key technologies that have been developed as part of the birth and maturation of the World Wide Web. It provides a consistent, in-depth treatment of technologies that are unlikely to receive detailed coverage in non-Web computer science courses. Students will find an ongoing case study that integrates a wide spectrum of Web technologies, guidance on setting up their own software environments, and a variety of exercises and project assignments.

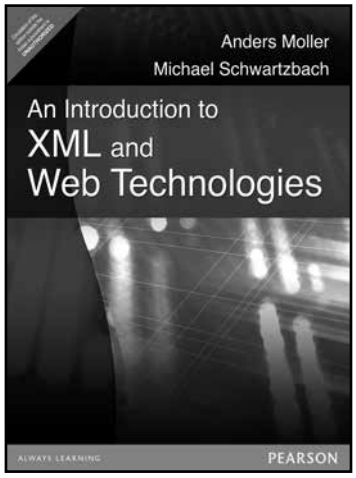
Features

- Standards-first approach in both text and exercises - Encourages students tdevelop standards-compliant software.
- Java-based representatives - Chosen tdetail Web capabilities that can be provided by several competing technologies, enabling students tfocus on the concepts rather than on learning new languages.
- All software used in examples and needed for exercises and projects is available via free download for multiple platforms - Enables students trun examples and develop assignments on their own machines rather than in a lab.
- Web Services coverage includes several technologies such as SOAP, WSDL, and Java-based development tools that are likely tincrease in importance in coming years.
- Multiple types of exercises in each chapter - Includes exercises, research/exploration problems, and projects.
- Numerous examples illustrate nearly every concept covered - Examples are often small, illustrating a single concept, with larger examples provided as needed tdemonstrate how concepts can be integrated and/or tprovide motivation.

Contents

About the Author

Jeff Jackson began his computing career as a software engineer in 1978. After a number of years in industry and a brief stint teaching undergraduate computer science, he entered the graduate computer science program at Carnegie Mellon, earning his Ph.D. in 1995. Subsequently, he joined the faculty at Duquesne University, where he is now a professor of computer science. From 1996 through 2000, in addition to his affiliation with Duquesne, Jeff worked for a dot-com in various positions, including Director of Research. He also has a number of journal publications to his credit and is currently a director of the Association for Computational Learning.



An Introduction to XML and Web Technologies

Anders Moller • Michael Schwartzbach

ISBN : 9788131726075
Copyright : 2009
Pages : 568

About the Book

This thoroughly class tested text and online tutorial gives a complete introduction to the essentials of the XML standard. It will teach students how to apply web technologies to develop XML based web applications. Through the book, the student will build applications that work together to construct interesting and workable web applications.

Features

- Relies exclusively on open source Java software, and will be tied closely to the online material.
- Contains a finely tuned progression of ideas, examples and details.
- Shows how to use XML in modern web applications.
- Backs up a thorough treatment of its key points with clear, practical examples.
- Offers insight and understanding of the concepts, their importance and their application.
- Offers a rigorous look at existing standards.

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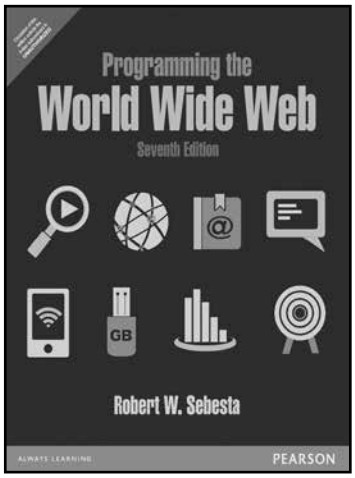


Programming the World Wide Web, 7/e

Robert W. Sebesta

ISBN : 9789332518827
Copyright : 2014
Pages : 688

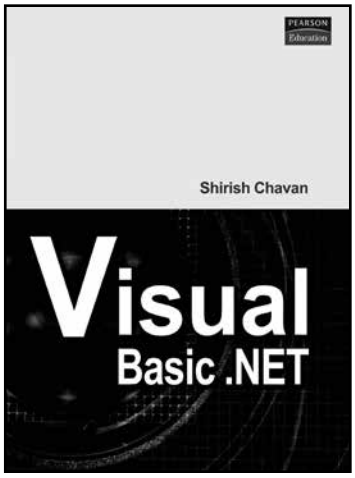
About the Book

Programming the World Wide Web provides a comprehensive introduction to the tools and skills required for both client- and server-side programming, teaching students how to develop platform-independent sites using the most current Web development technology. Essential programming exercises are presented using a manageable progression: students begin with a foundational XHTML Web site and employ new languages and technologies to add features as they are discussed in the course. Readers with previous experience programming with an object-oriented language are guided through concepts relating to client-side and server-side programming.

Features

- Client-side and server-side technologies are covered in two distinct sections, client-side in Chapters 2-7 and server-side in Chapters 8-16
  o Client-side technology is covered using HTML, XHTML, CSS, JavaScript, Java applets, and XML
  o Server-side technology is covered using Flash, Faces, Java servlets, and JSP, PHP, ASP.NET, Ruby, Ruby on Rails, Rails 2.0, and Ajax
- JavaScript is introduced in Chapter 4 using students' knowledge of other programming languages to leverage the discussion
- Building XHTML documents is presented in Chapter 5
- Chapter 8 on Flash Programming includes examples of drawing graphics figures, animation using both motion and shape tweening, and adding a sound track on a movie
- Chapter 10 on Ajax contains sections on return document forms, Ajax toolkits, and Ajax security
- Chapter 11 on Java Web Programming includes sections on NetBeans, JavaBeans, and JavaServer Faces
- Chapter 12 is a complete introduction to ASP.NET, beginning with a brief introduction to C# and continuing with discussions of ASP.NET controls and Web service construction with ASP.NET. It includes a section on ASP.NET Ajax and a brief introduction to Visual Studio 8
- Chapter 13 covers Web access to relational databases, including SQL and MySQL, and Web access to databases using Perl, PHP, and Java JDBC
- A brief, accessible Introduction to Java Appendix is included for C++ programmers, including coverage of Java applets, servlets, JSP, and JDBC
- World Wide Web Consortium (W3C) Validation Program: All of the markup documents in the book are valid on the W3C validation program

Contents



Visual Basic.NET

Shirish Chavan

ISBN : 9788131713914
Copyright : 2004
Pages : 600

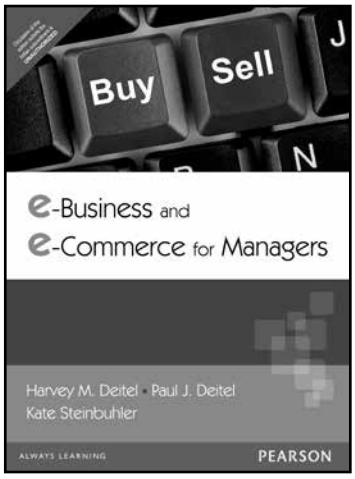
About the Book

For courses in Visual Programming offered in B.E./B.Tech, BSc - Computer Science, IT BCA, MCA, and Professional Courses.This book is ideally designed for the beginner to the intermediate level readers of Visual Basic.NET. The book is divided into 16 chapters followed by 4 useful appendices the book providing the reader a complete and clear insight into VB.NET. The book is highly illustrated and filled with examples, exercises and case studies to make learning a joyful experience.

Features

- Every concept is explained with an example. The simplest possible example is always chosen to describe a programming construct or a control from the tool box. This is intentionally done so that the concepts don't get lost in unnecessary detail.
- A complete project "Typist : The Text Editor" is provided to give the reader a taste of real life projects.
- The book covers all beginner and intermediate topics judiciously in roughly similar sized chapters and provides a curtain raiser on advanced topics like MDI, OOP and toolbars.
- Important controls like timer, invisible controls (during run-time), scrollbars etc covered in adequate depth.
- 4 useful appendices on 'A quick tour of Windows XP', 'Installation notes', 'tables of operators' and FAQ [Frequently asked questions] packed at the end of the book brings the complete learning resource on VB.Net into a single comprehensive volume.
- The book follows a lesson based approach and is loaded with numerous illustrations, examples, case studies, screen shots, dialog boxes, icons and symbols giving the book a good visual appeal.

Contents



e-Business & e-Commerce for Managers

Harvey M. Deitel • Paul J. Deitel • Kate Steinbuhler

ISBN : 9788131760680
Copyright : 2001
Pages : 794

About the Book

e-Business & e-Commerce for Managers is a comprehensive overview of building and managing an e-business. This innovative new text explores topics such as the decision to bring a business online, choosing a business model, accepting payment, marketing strategies and security, as well as many other important issues. Features, Web resources and online demonstrations supplement the text and direct students to additional information. The book also includes a substantial appendix that develops a complete Web-based storefront e-business using a real programming application explained patiently and in depth for a non-programming audience.

Features

- Identifying the e-Business model that offers the greatest potential for profit.
- Covers every element of a successful e-Business: infrastructure, site design, marketing, security, legal and ethical issues, and much more.
- Includes a detailed presentation of online marketing, customer relations, and affiliate programs.

Contents

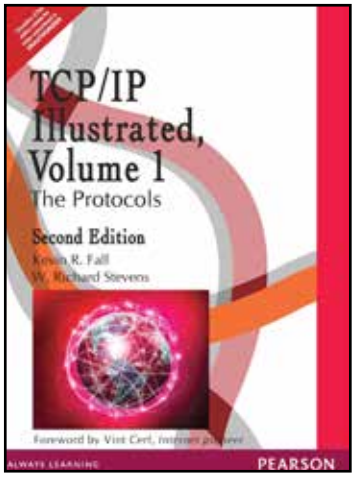
About the Authors

Harvey M. Deitel, CEO of Deitel & Associates, Inc., has 40 years in the computing field including extensive industry and academic experience. He is one of the world's leading computer science instructors and seminar presenters. Dr. Deitel earned B.S. and M.S. degrees from the Massachusetts Institute of Technology and a Ph.D. from Boston University. He has 20 years of college teaching experience including earning tenure and serving as the Chairman of the Computer Science Department at Boston College before founding Deitel & Associates, Inc. with Paul J. Deitel. He is author or co-author of several dozen books and multimedia packages and is currently writing many more. With translations published in Japanese, Russian, Spanish, Elementary Chinese, Advanced Chinese, Korean, French, Polish and Portuguese, Dr. Deitel's texts have earned international recognition. Dr. Deitel has delivered professional seminars internationally to major corporations, government organizations and various branches of the military.

Paul J. Deitel, Executive Vice President of Deitel & Associates, Inc., is a graduate of the Massachusetts Institute of Technology's Sloan School of Management where he studies Information Technology. Through Deitel & Associates, Inc. he has delivered Internet and World Wide Web courses and programming language classes for industry clients including Compaq, Sun Microsystems, White Sands Missile Range, Rogue Wave e Software, Computervision, Stratus, Fidelity, Cambridge Technology Partners, Lucent Technologies, Adra Systems, Entergy, CableData Systems, NASA at the Kennedy Space Center, the National Severe Storm Laboratory, IBM and many other organizations. He has lectured on for the Boston Chapter of the Association for Computing Machinery, and has taught satellite-based courses through a cooperative venture of Deitel & Associates, Inc., Prentice Hall and the Technology Education Network. He and his father, Dr. Harvey M. Deitel, are the world's best-selling Computer Science textbook authors.

Kate Steinbuhler, Editorial Director at Deitel & Associates, Inc. and a graduate of Boston College with majors in English and communications, served as project manager and primary author of Chapters 3, 11, 12, 17 and 20. She co-authored Chapters 1, 4, 12 and 14, and served as project manager and co-author for six business

chapters in e-Business and e-Commerce for Managers' sister book, e-Business and e-Commerce How To Program. She would like to acknowledge the other members of the PACK (the PACK consists of Paul Brandano, Abbey Deitel, Christy Connolly and Kate Steinbuhler) for their hard work and devotion to the project, and extend a special thank you to Greg Friedman and Alyssa Clapp for their support. She would like to thank Dale Herbeck, Chair and Associate Professor of Communications at Boston College, who provided insights for Chapter 11.



TCP/IP Illustrated, Volume 1: The Protocols, 2/e

Kevin R. Fall • W. Richard Stevens

ISBN : 9789332535954
Copyright : 2014
Pages : 532

About the Book

More than 162,000 networking professionals have relied on W. Richard Stevens' classic TCP/IP Illustrated, Volume 1 to gain the detailed understanding of TCP/IP they need to be effective. Now, the world's leading TCP/IP best-seller has been thoroughly updated to reflect a new generation of TCP/IP-based networking technologies. TCP/IP Illustrated, Volume 1, Second Edition doesn't just describe protocols: it enables readers to observe how these protocols operate under different conditions, using publicly available tools, and explains why key design decisions were made. The result: readers gain a deep understanding of how TCP/IP protocols function, and why they function that way. Now thoroughly updated by long-time networking expert Kevin Fall, this brand-new second edition's extensive new coverage includes: " Remote procedure call " Identity management (access control / authentication) " Network and transport layer security (authentication / privacy) " File access protocols, including NFS and SMB/CIFS " Host initialization and DHCP " NAT and firewalls " E-mail " Web and web services " Wireless and wireless security " New tools, including Ethereal, nmap and netcat

Features

- W. Richard Stevens' legendary TCP/IP guide, now updated by top network protocol developer and instructor Kevin Fall
- Shows how each protocol actually operates, and explains why they work that way
- New coverage includes RPC, access control, authentication, privacy, NFS, SMB/CIFS, DHCP, NAT, firewalls, email, Web, web services, wireless, wireless security, and much more

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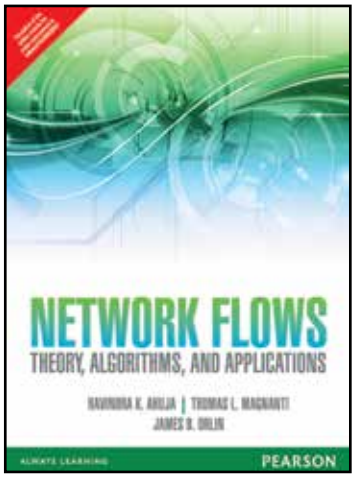
About the Authors

Kevin R. Fall, Ph.D., has worked with TCP/IP for more than twenty-five years, and served on the Internet Architecture Board. He co-chairs the Internet Research Task Force's Delay Tolerant Networking Research Group (DTNRG), which explores networking in extreme and performance-challenged environments. He is an IEEE Fellow.

W. Richard Stevens, Ph.D. (1951-1999), was the pioneering author who taught a generation of network professionals the TCP/IP skills they've used to make the Internet central to everyday life. His best-selling books included all three volumes of TCP/IP Illustrated (Addison-Wesley), as well as UNIX Network Programming (Prentice Hall).



Network Flows: Theory, Algorithms, and Applications

Ravindra K. Ahuja • Thomas L. Magnanti • James B. Orlin

ISBN : 9789332535152
Copyright : 2014
Pages : 864

About the Book

A comprehensive introduction to network flows that brings together the classic and the contemporary aspects of the field, and provides an integrative view of theory, algorithms, and applications.

Features

- Presents in-depth, self-contained treatments of shortest path, maximum flow, and minimum cost flow problems, including descriptions of polynomial-time algorithms for these core models.
- Emphasizes powerful algorithmic strategies and analysis tools such as data scaling, geometric improvement arguments, and potential function arguments.
- Provides an easy-to-understand descriptions of several important data structures, including d-heaps, Fibonacci heaps, and dynamic trees.
- Devotes a special chapter to conducting empirical testing of algorithms.
- Features over 150 applications of network flows to a variety of engineering, management, and scientific domains.
- Contains extensive reference notes and illustrations.

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About the Authors

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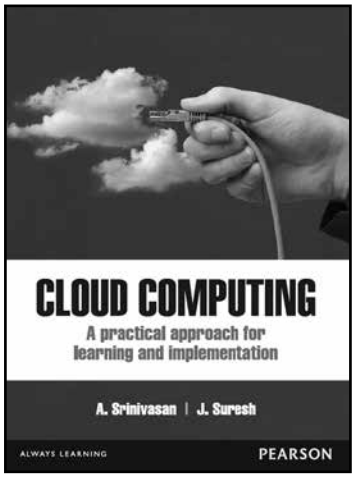
James B. Orlin, Massachusetts Institute of Technology



Cloud Computing, A Practical Approach for Learning and Implementation

Srinivasan, Suresh Jagannathan

ISBN : 9788131776513
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Pages : 440

NEW

About the Book

This book lays a good foundation to the core concepts and principles of cloud computing, walking the reader through the fundamental ideas with expert ease. The book advances on the topics in a step-by-step manner and reinforces theory with a full-fledged pedagogy designed to enhance students' understanding and offer them a practical insight into the subject

Features

- Student friendly and easy to understand
- Fourteen case studies devoted to showcase the implementation of the cloud
- Provides pertinent insights into the future applications of the cloud
- In-depth analysis of service-oriented architecture in explicit text spanning three chapters
- Over 630 exercises

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About the Authors

Dr. Srinivasan is Senior Professor and Head, Department of Information Technology, at MNM Jain Engineering College, Chennai. He has over 30 years of teaching experience.

Dr.Suresh Jagannathan is Associate Professor, Department of Computer science, at SSN college of Engineering, Chennai.

AUTHOR INDEX

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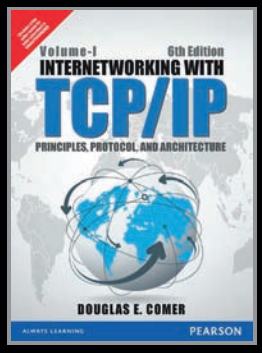

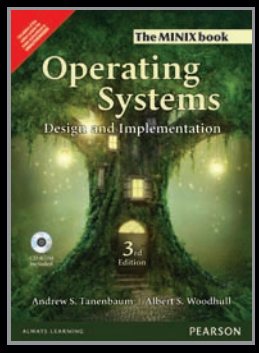

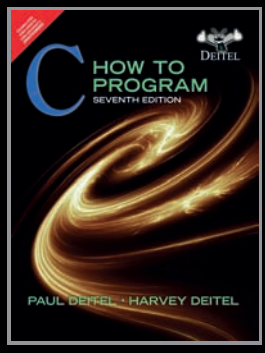

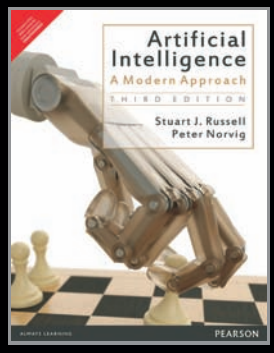

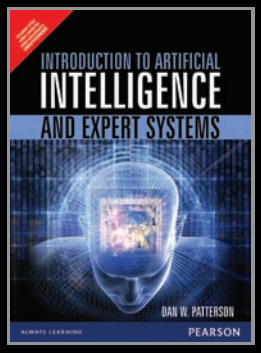

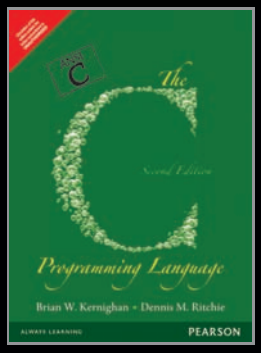

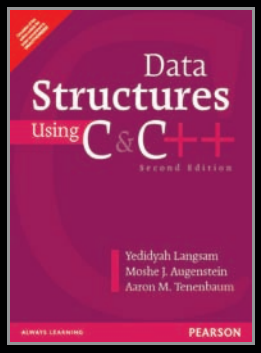

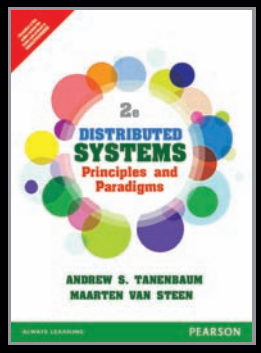

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