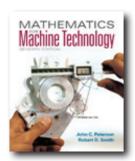


## Transforming Learning. Transforming Lives.



## APPLIED MATHEMATICS FOR CAREERS

### MATH FOR MACHINE TRADES



NEW EDITION!

## MATHEMATICS FOR MACHINE TECHNOLOGY, 7E

John C. Peterson, Chattanooga State Technical Community College (retired); Robert D. Smith, Chattanooga State Technical Community College (retired)

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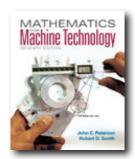
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## **AUTOMOTIVE**

### **AUTOMOTIVE SYSTEMS**





## **AUTOMOTIVE SERVICE, 5E**

Inspection, Maintenance, Repair

Tim Gilles, Santa Barbara City College, Santa Barbara, California

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#### NEW EDITION!

## TODAY'S TECHNICIAN, 5E

Basic Automotive Service and Systems, Classroom Manual and Shop Manual

Chris Hadfield, Central Lakes College

The 5th edition of BASIC AUTOMOTIVE SERVICE & SYSTEMS is a comprehensive Classroom Manual/ Shop Manual set provides an accessible overview of automotive systems to prepare you for all aspects of work in the field. Now fully updated to align with the new NATEF accreditation model introduced in 2012, the Fifth Edition features a new full color design, more coverage of hybrid vehicles and emerging technologies, and revised and updated coverage of electronic engine controls. The content is current and relevant to the industry today, and includes state-of-the-art information on the global automotive industry and the role of the technician within it. The Classroom Manual explores the basic theories of operation behind each automotive system, while the Shop Manual covers the hands-on diagnostic, testing, and repair procedures that relate to them. Assuming no prior knowledge of automotive technology, this clear and engaging book addresses fundamental skills and maintenance and the application of key theories.

#### **NEW TO THIS EDITION**

- Fully updated to align with the new NATEF accreditation model introduced in 2012, the Fifth Edition is primarily coordinated with NATEF's Maintenance and Light Repair program option.
- This edition's full color design with new photographs and updated line art helps readers better visualize processes and procedures.
- Coverage of hybrid vehicles and emerging technologies, along with revised and updated coverage of electronic engine controls, prepares students for today's workplace.

- Includes all new Job Sheets that are focused on skill building.
- Content cross references current industry practices to help the student understand and practice real-world workplace competencies.
- Employer focused soft skills are integrated into each topic.
- The text features in depth basic and preventative maintenance information with a focus on skill building, with expanded coverage on electrical theory and diagnosis.

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### **BASIC TECHNICIAN TRAINING**



### NEW EDITION!

## TODAY'S TECHNICIAN, 5E

Basic Automotive Service and Systems, Classroom Manual and Shop Manual

Chris Hadfield, Central Lakes College

The 5th edition of BASIC AUTOMOTIVE SERVICE & SYSTEMS is a comprehensive Classroom Manual/ Shop Manual set provides an accessible overview of automotive systems to prepare you for all aspects of work in the field. Now fully updated to align with the new NATEF accreditation model introduced in 2012, the Fifth Edition features a new full color design, more coverage of hybrid vehicles and emerging technologies, and revised and updated coverage of electronic engine controls. The content is current and relevant to the industry today, and includes state-of-the-art information on the global automotive industry and the role of the technician within it. The Classroom Manual explores the basic theories of operation behind each automotive system, while the Shop Manual covers the hands-on diagnostic, testing, and repair procedures that relate to them. Assuming no prior knowledge of automotive technology, this clear and engaging book addresses fundamental skills and maintenance and the application of key theories.

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- This edition's full color design with new photographs and updated line art helps readers better visualize processes and procedures.
- Coverage of hybrid vehicles and emerging technologies, along with revised and updated coverage of electronic engine controls, prepares students for today's workplace.

- Includes all new Job Sheets that are focused on skill building.
- Content cross references current industry practices to help the student understand and practice real-world workplace competencies.
- Employer focused soft skills are integrated into each topic.
- The text features in depth basic and preventative maintenance information with a focus on skill building, with expanded coverage on electrical theory and diagnosis.

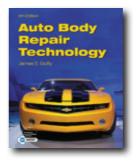
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### **COLLISION REPAIR**





#### **AUTO BODY REPAIR TECHNOLOGY, 6E**

James E. Duffy, Indiana State University, President, Beneficial Books and Video

AUTO BODY REPAIR TECHNOLOGY, Sixth Edition, features extensive new and updated material reflecting the latest automotive technology and current industry best practices. In addition to incorporating the current NATEF Collision Repair and Refinish Program Standards and Task Lists, this market-leading text provides detailed information on working with hybrid and electric vehicles, using environmentally friendly water-based paints, and other cutting-edge methods and materials. Celebrated for its clear, reader-friendly explanations and detailed, accurate information, this proven text also includes abundant full-color photos and illustrations to make even complex concepts easier to understand and apply. Available supplements include a tech manual with shop assignments and job sheets, as well as interactive online resources ideal for today's courses and learners. Providing comprehensive coverage of collision repair—from initial evaluation and estimating, to structural and mechanical repairs, to repainting and refinishing—this trusted text helps readers quickly and confidently learn the skills and procedures they need to succeed as professional automotive technicians.

#### **NEW TO THIS EDITION**

- This trusted guide has been thoroughly updated and expanded to cover the latest industry trends, technology, and practices, including the current NATEF Collision Repair and Refinish Program Standards and Task Lists.
- A new chapter devoted to hybrid technology service and safety provides detailed information on servicing today's high-tech hybrid and electric vehicles, including vital safety considerations when working

- with electric circuits and assemblies that can carry deadly levels of voltage and current.
- The Sixth Edition describes safe, effective procedures for using high-voltage equipment (such as protective clothing and insulated plastic and carbon-fiber hand tools) when working on electric drivelines during major structural repairs to hybrid and electric vehicles.
- Chapter review materials now feature new and revised activities and exercises to reinforce essential math, critical thinking, and problem-solving skills that today's technicians need for success in this fastpaced field.
- The text explores the special procedures required for effective mixing and application of water-based paints, preparing students for a smooth transition from oil-based paints as more states mandate the use of these materials to reduce VOC emissions into the atmosphere.

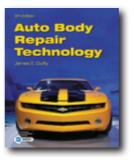
- Vibrant, full-color photos and illustrations throughout the text help bring key concepts to life and illustrate important repair, repainting, and refinishing techniques in vivid detail, making even complex concepts easier for students to understand and apply.
- The author devotes particular attention to information on software and hardware used in many modern collision repair shops, preparing students to use the tools and processes they will encounter as working professionals when accessing service information and specifications.
- Known for its comprehensive coverage and detailed, accurate information, the text complements material on traditional collision repair topics with useful information on mechanical components, wheel alignment, and restraint system operation.
- In addition to helping students develop the knowledge and skills they need to master their trade, the text features information on ASE certification and entrepreneurship to prepare students for lasting, successful careers as professional automotive technicians.
- Resources available to complement the text include a tech manual with hands-on shop assignments and job sheets, as well as a variety of interactive resources to enhance teaching and learning, including lecture slides, an electronic test bank with hundreds of questions, and a library of full-color digital images.

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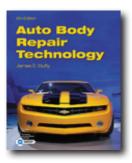
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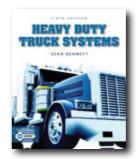
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### **DIESEL TECHNOLOGY**



### NEW EDITION!

### **HEAVY DUTY TRUCK SYSTEMS, 6E**

Sean Bennett

Comprehensive, technically accurate, and up-todate, HEAVY DUTY TRUCK SYSTEMS, 6E is the best-selling introduction to servicing medium- and heavy-duty trucks. Now in striking full color, the sixth edition helps users develop a strong foundation in electricity and electronics, power train, steering and suspension, brakes, and accessories systems and presents introductory material on servicing, safety, tools, and preventive maintenance. This edition is updated with full coverage of NATEF competencies and the latest technology, including 2014 | 1939 updates and access tools, Wingman radar, CMS, and Allison TC10 transmissions (introduced in 2013). The book's proven pedagogy is enhanced by extensive sets of review questions; over 1700 full-color photographs and pieces of art that help readers visualize key concepts and servicing procedures; and an accompanying workbook by the author that provides additional review material. Internet research exercises, and NATEF task-oriented iob sheets.

#### **NEW TO THIS EDITION**

- Expanded coverage of hydraulics, oxyacetylene, and electric welding safety; fastener identification; emerging trends in trucking heading for EPA 2017 load efficiency/CO2 dump requirements; and CSA 2010.
- Updated electricity and electronics chapters, including J1939 electronics (2014 access including J1962), and new content on Wingman radar, collision mitigation systems (CMS), new electronic service tools (ESTs), ultracapacitors, and battery information management systems.
- Introduction to Delco Remy 33/40 alternator diagnostics and reconditioning, smart ignition switches, internal mag solenoid switches (IMSS),

overcrank protection, and highway grid hotel loads for trucks and trailers.

- Updated chapters on clutches (DM centrifugal and AW wet) and transmissions, including hybrid transmissions, as well as detailed coverage of the Allison TC10 for Class 8 trucks.
- Revision of tires and wheel end chapters, including new balancing methods; expanded coverage of air disc brakes; and a significantly revised chapter on hydraulic/hydraulic power-boost brakes.
- New generation trailers (load efficiency), pintle and ball hooks, and a revised HVAC chapter that includes hermitic seal and vane compressors.
- Full color throughout.

#### **FEATURES**

- Provides an unparalleled suite of instructor and student resources, including a comprehensive test bank, PowerPoint® slides for every chapter, 58 new videos that cover basic service procedures (via MindTap™), a Student Workbook, and more.
- Includes standard-to-metric values (metric in brackets) throughout except CVSA and FMVSS compliance specs.
- Focuses on prognostic maintenance, reflecting current trucking industry practices.

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1. Introduction to Servicing Heavy-Duty Trucks. 2. Shop Safety and Operations. 3. Tools and Fasteners. 4. Maintenance. 5. Fundamentals of Electricity. 6. Fundamentals of Electronics and Computers. 7. Batteries. 8. Charging Systems. 9. Cranking Systems. 10. Chassis Electrical Circuits. 11. Diagnosis and Repair of Electronic Circuits. 12. Multiplexing. 13. Hydraulics Fundamentals. 14. Clutches. 15. Standard Transmissions. 16. Standard Transmission Servicing. 17. Torque Converters. 18. Automatic Transmissions. 19. Automatic Transmission Maintenance. 20. Automated Manual Transmissions (AMTs) and Hybrids. 21. Electronically Controlled Automatic Transmissions (ECATs). 22. Driveshaft Assemblies. 23. Heavy-Duty Truck Axles. 24. Heavy-Duty Truck Axle Service and Repair. 25. Steering and Alignment. 26. Suspension Systems. 27. Wheels and Tires. 28. Truck Brake Systems. 29. Hydraulic and Air-over-Hydraulic Braking Systems. 30. ABS and EBS Braking Systems. 31. Air Brake Servicing. 32. Vehicle Chassis Frame. 33. Heavy Duty Truck Trailers. 34. Fifth Wheels and Coupling Systems. 35. Heavy-Duty HVAC systems. Acronyms. Glossary. Index.

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## CAD/DRAFTING/ENGI-NEERING GRAPHICS

### **ARCHITECTURAL DRAFTING**



NEW EDITION!

## COMMERCIAL DRAFTING AND DETAILING, 4E

Alan Jefferis, Clackamas Community College; Kenneth D. Smith

The only book of its kind on the market today, COMMERCIAL DRAFTING AND DETAILING, 4E will give you everything you need to teach effectively and with ease. You won't have to spend time pulling together pieces of various trade publications and supplementing them with your notes because it's all here, in one comprehensive resource. The fourth edition maintains the winning features of its previous editions; clear explanations and professional, practical examples that walk students through the architectural and structural drawings required in a complete set of commercial plans. It then builds on these successes by increasingly integrating design components into each chapter, replacing free-hand sketches with CAD skeleton drawings, and updating the information to reflect the 2015 International Building Code. The end result: you can spend less time preparing to teach and more time teaching, and your students get a valuable tool for staying current with industry trends and preparing to succeed in the classroom and beyond.

#### **NEW TO THIS EDITION**

- Updated code material complies with the 2015 International Building Code to ensure students are learning tools and techniques that are current, safe, and effective.
- Revit Boxes are provided for each drawing chapter to provide an overview of how Revit can be used to generate a model of the material presented in the chapter.
- Team projects provide experience in planning a project, researching needed product information, completing and coordinating drawings components with other team members, evaluating drawings and the performance of other team members, and planning changes in procedures that would be implemented when completing future projects.
- Enhanced artwork brings the fourth edition up-todate with industry trends and standards, like CAD skeleton drawings that replace free-hand sketches.
- Noteboxes are provided throughout the text to draw attention to valuable information related to key drawing procedures, safety precautions, and office skills needed for advancement.
- CAD boxes list the basic CAD skills that should be mastered prior to attempting specific projects in each chapter so that students can get prepared for the material ahead of them.
- Updated listings of relevant construction websites appear throughout each chapter, providing access to up-to-the-minute information on contemporary construction materials and techniques and experimental energy efficient products.

- "Easy Being Green" boxes emphasize key materials available to aid in sustainable building and feature methods to earn LEED's credits.
- Electronic base drawings are provided for most projects, giving students experience with drawings similar to what they will encounter in the workforce.
- Drawing standards are based on the National CAD standards, exposing students to the common drawing standards found in professional offices.

#### **CONTENTS**

Part I. CAD DRAFTING AND DESIGN CONSIDERATIONS OF COMMERCIAL STRUCTURES. 1. Professional Careers and Commercial CAD Drafting. 2. The CAD Drafters Role in Office Practice and Procedure. 3. Applying

CAD Tools to Commercial Drawings. 4. Introduction to International Building Codes. 5. Access Requirements for People with Disabilities. Part II. BUILDING METHODS AND MATERIALS OF COMMERCIAL CONSTRUCTION. 6. Making Connections. 7. Wood and Timber Framing Methods. 8. Engineered Lumber Products. 9. Steel Framing Methods and Materials. 10. Unit Masonry Methods and Materials. 11. Concrete Methods and Materials, 12. Fire-Resistive Construction, Part III. PREPARING ARCHITECTURAL AND CIVIL DRAWINGS. 13. Structural Considerations Affecting Construction. 14. Project Manuals and Written Specifications. 15. Land Descriptions and Drawings. 16. Floor Plan Components, Symbols and Development. 17. Orthographic Projection and Elevations. 18. Roof Plan Components and Drawings. 19. Drawing Sections. 20. Interior Elevations. 21. Ramp, Stair, and Elevator Drawings. Part IV. PREPARING STRUCTURAL DRAWINGS. 22. Drawing Framing Plans. 23. Drawings Structural Elevations, Sections and Details. 24. Foundation Systems and Components.

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## TECHNICAL DRAWING FOR ENGINEERING COMMUNICATION, 7E

David E. Goetsch, Northwest Florida State College; Raymond L. Rickman, Northwest Florida State College; William S. Chalk

TECHNICAL DRAWING FOR ENGINEERING COMMUNICATION, 7E offers a fresh, modern approach to technical drawing that combines the most current industry standards with up-to-date technologies and software, resulting in a valuable, highly relevant resource you and your students won't want to be without. The book builds on features that made its previous editions so successful: comprehensive coverage of the "total technical drawing experience"

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that explores both the basic and advanced aspects of engineering and industrial technology and reviews both computer modeling and more traditional methods of technical drawing. Enhancements for the seventh edition include updates based on industry trends and regulations, an all-new chapter on employability skills, and additional content on SolidWorks 3D modeling software for drafting technicians. The end result is a tool that will prepare students with the real-world skills they need for a successful career in CAD, drafting, or design.

#### **NEW TO THIS EDITION**

- All-new chapters on employability skills, sketching and lettering, and drafting tools modernize the content and provide students with skills and knowledge they can apply immediately.
- Updated photographs and artwork create a true-tolife experience, illustrating what students will see on the job.
- Compliance with the latest ANSI standards ensures that you are teaching to the most current industry rules and regulations.
- Additional content on SolidWorks 3D modeling software as well as related drawings and photographs increase the versatility and usability of the book as a resource for a variety of settings.
- A new section on "rapid prototyping" rounds out the book's already comprehensive coverage.

#### **FEATURES**

- In-depth coverage of mechanical, architectural, and civil drafting is featured, with discipline-specific icons that quickly and clearly denote drawing and math problems that pertain to a student's specific area of study.
- Modern design practices, standards, and examples are used throughout, giving you confidence you're providing students with a relevant tool they can use.

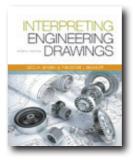
#### **CONTENTS**

Preface. Part I: BASICS. Introduction. 1. Employability Skills for Drafting and Design Technician. 2. Drafting Tools: Conventional, CAD, and Solid Modeling. 3. Sketching and Lettering for Engineering Communication. 4. Geometric Construction. Part II: TECHNICAL DRAWING FUNDAMENTALS. 5. Spatial Visualization and Multiview Drawings. 6. Dimensioning and Notation.

7. Sectional Views. 8. Auxiliary Views. 9. Descriptive Geometry. 10. Patterns and Developments. 11. Solid/3D Modeling: Computational Design and Analysis. Part III: DESIGN DRAFTING APPLICATIONS. 12. Geometric Dimensioning and Tolerancing. 13. Fasteners. 14. Springs. 15. Cams. 16. Gears. 17. Assembly and Detail Drawings for Design. 18. Pictorial Drawings. Part IV: RELATED TECHNOLOGIES, APPLICATIONS AND PROCESSES. 19. Welding. 20. Modern Manufacturing: Materials, Processes, and Automation. 21.The Design and Advanced Concepts. Appendix A: Tables. Glossary. Index.

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### **MECHANICAL DRAFTING**



NEW EDITION!

## INTERPRETING ENGINEERING DRAWINGS, 8E

Ted Branoff, North Carolina State University; Cecil H. Jensen, McLaughlin Collegiate and Vocational Institute; Dr. Jay D. Helsel, California University of Pennsylvania

INTERPRETING ENGINEERING DRAWINGS, 8th EDITIONoffers comprehensive, state-of-the-art training that shows users how to create professional-quality engineering drawings that can be interpreted with precision in today's technology-based industries. This flexible, user-friendly textbook offers unsurpassed coverage of the theory and practical applications that students need to communicate technical concepts in an international marketplace. All material is developed around the latest ASME drawing standards, helping readers keep pace with the dynamic changes in the field of engineering graphics.

#### **NEW TO THIS EDITION**

• New Author North Carolina State University

ProfessorTed Branoff's experience brought to each chapter.

- All drawings and illustrations conform to the latest ASME drawing standards.
- Expanded sketching practice throughout the textbook prepares students for more efficient and successful computer-aided drawing techniques
- New materials related to extracting 2D documentation from 3D models.
- Revised material on geometric dimensioning and tolerancing.

#### **FEATURES**

- Extensive sketching techniques for communicating technical information aid readers transition from board drafting to CAD.
- Assignments and Internet resource listings broaden and reinforce basic concepts.
- Carefully-developed color illustrations provide a clear understanding of the material.
- Test questions and answers are provided in each unit of the textbook.
- Complete Instructor's Manual packaged on CD for faster access to review tests and solutions, assignment solutions, test generator, PowerPoint presentations, and other teaching materials.

#### CONTENTS

Unit 1: Introduction: Line Types and Sketching. Unit 2: Lettering and Title Blocks. Unit 3: Basic Geometry: Circles and Arcs. Unit 4: Working Drawings and Projection Theory. Unit 5: Introduction to Dimensioning. Unit 6: Inclined Surfaces. Unit 7: Pictorial Sketching. Unit 8: Machining Symbols and Revision Blocks. Unit 9: Chamfers, Undercuts, Tapers and Knurls. Unit 10: Sectional Views. Unit 11: One-and-Two-View Drawings. Unit 12: Surface Texture. Unit 13: Introduction to Conventional Tolerancing. Unit 14: Inch Fits. Unit 15: Metric Fits. Unit 16: Threads and Fasteners. Unit 17: Oblique Surfaces. Unit 18: Auxiliary Views. Unit 19: Sheet Metal Drawings. Unit 20: Selection and Arrangement of Views. Unit 21: Piping Drawings. Unit 22: Bearings. Unit 23: Manufacturing Materials. Unit 24: Casting Processes. Unit 25: Violating True Projection: Conventional Practices. Unit 26: Pin Fasteners. Unit 27: Drawings for Numerical Control. Unit 28: Assembly Drawings. Unit 29: Structural Steel. Unit 30: Welding Drawings. Unit 31: Groove Welds. Unit 32: Other Basic Welds. Unit 33: Spur Gears. Unit 34: Bevel Gears and Gear Trains. Unit 35: CAMs. Unit 36: Bearings and Clutches. Unit 37: Ratchet Wheels. Unit 38: Introduction to Geometric Dimensioning and Tolerancing. Units 38 through approximately 48 will cover GD&T.

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## TECHNICAL DRAWING FOR ENGINEERING COMMUNICATION. 7E

David E. Goetsch, Northwest Florida State College; Raymond L. Rickman, Northwest Florida State College; William S. Chalk

TECHNICAL DRAWING FOR ENGINEERING COMMUNICATION, 7E offers a fresh, modern approach to technical drawing that combines the most current industry standards with up-to-date technologies and software, resulting in a valuable, highly relevant resource you and your students won't want to be without. The book builds on features that made its previous editions so successful: comprehensive coverage of the "total technical drawing experience" that explores both the basic and advanced aspects of engineering and industrial technology and reviews both computer modeling and more traditional methods of technical drawing. Enhancements for the seventh edition include updates based on industry trends and regulations, an all-new chapter on employability skills, and additional content on SolidWorks 3D modeling software for drafting technicians. The end result is a tool that will prepare students with the real-world skills they need for a successful career in CAD, drafting, or design.

#### **NEW TO THIS EDITION**

 All-new chapters on employability skills, sketching and lettering, and drafting tools modernize the content

- and provide students with skills and knowledge they can apply immediately.
- Updated photographs and artwork create a true-tolife experience, illustrating what students will see on the job.
- Compliance with the latest ANSI standards ensures that you are teaching to the most current industry rules and regulations.
- Additional content on SolidWorks 3D modeling software as well as related drawings and photographs increase the versatility and usability of the book as a resource for a variety of settings.
- A new section on "rapid prototyping" rounds out the book's already comprehensive coverage.

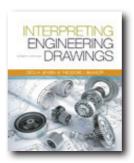
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### **PRINT READING**



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## **COMPUTER CONCEPTS**

### **COMPUTER CONCEPTS**





#### **TECHNOLOGY NOW**

#### **Your Companion to SAM Computer Concepts**

Corinne Hoisington, Central Virginia Community College

TECHNOLOGY NOW: YOUR COMPANION TO SAM COMPUTER CONCEPTS helps students learn computer concepts that are essential for success in the workplace today. Technology Now aligns perfectly with the SAM Computer Concepts tasks; this 1:1 correspondence of book topics to SAM content provides a streamlined learning experience for all students, no matter what their learning style or level of experience. Adapted for print (or digital e-book) by technology expert and author Professor Corinne Hoisington, Technology Now not only compliments and reinforces the online experience, but also provides additional material beyond what is in SAM to help students learn; hands-on activities let students try new technologies and ethical issues scenarios, critical thinking activities, and team projects help to elevate their thinking and keep them engaged and motivated. Technology Now is written in simple language with fun and interesting examples that today's students can relate to; information is current, concise and presented visually in bite-sized chunks with key terms highlighted and defined. Customize the printed book to include just the chapters that meet your course's learning objectives, and set up your SAM course so it contains only the SAM tasks covered in the book. Use the e-book version with SAM for a 100% digital course.

#### **FEATURES**

 Computer Concepts text aligns perfectly with SAM Concepts tasks: Book content is adapted from the SAM Computer Concepts tasks to provide SAM users a streamlined, consistent learning experience on important computer concepts topics such as hardware and software, operating systems, the World

Wide Web, Safety and Security and more. Can be used as either as a 100% digital solution (as an e-book available in SAM), or as a print companion text.

- Customizable to provide just the content you want. Choose the print chapters you want to meet your course learning outcomes. SAM lets you pick just the SAM Concepts tasks from your chosen chapters to provide your students with a streamlined learning experience.
- Elevates Learning with hands-on activities that engage and inspire students: A wide variety of additional end-of-chapter hands-on activities (beyond what is covered in SAM), including critical thinking exercises, team projects, and ethics scenarios provide opportunities to engage students in meaningful and relevant ways to reinforce key concepts and inspire students to incorporate technology at school, on the job, and in their lives.
- Designed to appeal to today's students: Content is presented efficiently for today's visual learners with streamlined text and appealing illustrations and graphics. Tips on emerging technologies ("Hot Technology Now"), Twitter-type message feed, careers ("On the Job Now"), and relevant statistics ("By the Numbers Now") speak to the interests of today's students to keep them engaged and motivated.
- Award-winning author-Well-known author, popular speaker, and respected technology professor Corinne Hoisington provides contemporary expertise as well as practical insights throughout this book that go beyond the SAM content. A recipient of the Microsoft Most Valuable Professional in Computer Programming award, Ms. Hoisington applies her expertise in emerging technology to keep students engaged and inspire them to use and explore technology to help them succeed in school and in their careers.

#### **CONTENTS**

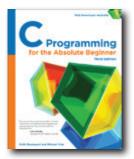
Your Companion to SAM Computer Concepts. Getting Started. Getting Started with Computing. Getting Started with SAM. 1. INTRODUCTION TO COMPUTER HARDWARE. Computers in History. Types of Computers. Input Devices. Using the Keyboard. Using Pointing Devices. Output Devices. Central Processing Unit. Digital Data Representation. Memory. Storage. 2. INTRODUCTION TO COMPUTER SOFTWARE. What is Software? Software Development. Types of Software. Purchasing Software. Licensing

Software. Software Problem. 3. SYSTEM SOFTWARE. Introduction to System Software. Operating Systems. Common Operating System Tasks. Managing Your Computer's Windows. Common Operating System Features. PC Operating System Head to Head. Mobile Operating System Head to Head. File Basics. Working with Folders and Libraries. File Management. Customizing Windows. 4. APPLICATION SOFTWARE. Word Processing. Spreadsheets. Software. Databases. Graphics Software. Mobile Applications. 5. THE WORLD WIDE WEB. What is the Web? The Browser. Web Page Development. Using the Web to Find Information. Web Site Structure. Types of Web sites. Web Applications. Electronic Commerce. The Internet of Things. 6. PURCHASING AND MAINTAINING A COMPUTER. Buying a Computer. Protecting Computer Hardware. Safeguarding Your Computer. Troubleshooting Common Hardware problems. Keeping Your Computer in Working Condition. Using Software to Maintain Your Computer. The Connected Computer. 7. THE CONNECTED COMPUTER. Introduction to Networks. Connecting to a Network. How Networks Work. Types of Networks. The Internet. The Networked World. Network Risks. Network Security Basics. 8. SAFETY AND SECURITY Personal Health Risks. Data Risks. E-mail and Internet Risks. Financial risks. Privacy Risks. Electronics and the Environment, Personal Information Security. 9. COMMUNICATION. Digital Communication. Electronic Mail. Messaging. Podcasts and Online Conferences. Blogs and Wikis. Social Networks. Internet Etiquette. 10. INFORMATION LITERACY. Online Information. Searching For Information. Evaluating Online Information. Search Tools. Ethical Use of Information. 11. INTRODUCTION TO MEDIA. Graphics. Audio. Video. Animation. Gaming. Social Media. 12. A CHANGING WORLD. Embedded Computers. Connected Homes. Intelligent Workplaces and Classrooms. Artificial Intelligence. A Helping Hand. Green Computing. Careers.

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### **COMPUTER SCIENCE**

CS1 INTRODUCTION TO PROGRAMMING





## C PROGRAMMING FOR THE ABSOLUTE BEGINNER, 3RD, 3E

Keith Davenport; Michael Vine

Many students of C will rightly admit that it's not an easy language to learn, but the professional insight, clear explanations, examples, and pictures in the Cengage Learning for the Absolute Beginner series make learning C easy and fun. Programming is not a skill you can acquire by reading; you have to write programs to learn. That's why each chapter in this book contains programming challenges, a chapter review, and a complete program that uses chapter-based concepts to construct an easily built application. With the guidance in this book, you'll learn how to create algorithms and pseudocode to think through and design programs; translate your designs and plans into working C programs; write, compile, test, and debug your code; use data types, arrays, pointers, strings, file operations and more to create robust programs.

#### **FEATURES**

- Each chapter features a simple game project that reinforces chapter concepts.
- Uses a C compiler that is available free on the web.
- Covers looping structures, arrays, pointers, and more.

#### **CONTENTS**

1. Getting Started with C Programming. 2. Primary Data Types. 3. Conditions. 4. Looping Structures. 5. Structured Programming. 6. Arrays. 7. Pointers. 8. Strings. 9. Introduction to Data Structures. 10. Dynamic Memory Allocation. 11. File Input and Output. 12. The C Preprocessor. 13. Common UNIX Commands. 14. Vim Quick Guide. 15. Nano Quick Guide. 16. TCC Quick Guide. 17. ASCII Character Codes. 18. Common C Library Functions.

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## JAVASERVER FACES 2.0 Essential Guide for Developers

Deepak Vohra

JavaServer Faces is one of the world's most commonly used frameworks for building user interfaces on the Web. In JavaServer Faces 2.0: Essential Guide for Developers, expert Java programmer and Web developer Deepak Vohra covers all the new features of lavaServer Faces 2.0 using examples in Oracle |Developer and the integrated Oracle WebLogic Server. The book covers all aspects of Web application development with ISF 2.0, including setting up the environment for an application, using the IDeveloper wizards and the Component palette, and running a sample application Code examples used in the book are available for download from the book's companion website. Additionally, the book is suitable for preparing for the Java EE 6 JavaServer Faces Developer Certified Expert Exam (Exam Number: 1Z1-896). Ideal for prolevel developers and intermediate trainees, this book covers everything from Facelets and Ajax to resource handling, client behaviors, system events, and more. Build your expertise with JavaServer Faces 2.0 today, with JAVASERVER FACES 2.0: ESSENTIAL GUIDE FOR DEVELOPERS.

#### **FEATURES**

- Covers new features of JavaServer Faces 2.0.
- Includes coverage of enhanced navigation and enhanced validation.
- Covers system events and exception handling.

#### **CONTENTS**

1. What's New in ISF 2.0. 2. Templating with Facelets. 3.

Ajax. 4. Creating Composite Components. 5. Enhanced Navigation. 6. Enhanced Validations. 7. View Parameters. 8. Client Behaviors. 9. Scopes. 10. Resource Handling. 11. Event Handling and Exception Handling.

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#### **PYTHON PROGRAMMING FOR TEENS**

Kenneth A. Lambert, Washington and Lee University

If you want to learn how to program in Python, one of today's most popular computer programming languages, PYTHON PROGRAMMING FOR TEENS is the perfect first step. Written by teacher, author, and Python expert Kenneth Lambert, this book will help you build a solid understanding of programming and prepare you to make the jump to other languages and more advanced instruction. In PYTHON PROGRAMMING FOR TEENS, you will learn problem solving, program development, the basics of using classes and objects, and more. Special topics include 2-D geometry, fractals, animations, and recursion. The book's topics are illustrated using turtle graphics, a system that provides graphical output from programs and makes learning more fun. Get started programming today with PYTHON PROGRAMMING FOR TEENS.

#### **FEATURES**

- Includes instruction on working with Turtle Graphics.
- Covers controls structures, defining functions, and much more.
- Covers user interaction with mouse and keyboard.

#### **CONTENTS**

1. Getting Started with Python. 2. Getting Started with Turtle Graphics. 3. Control Structures: Sequencing, Iteration, and Selection. 4. Composing, Saving, and

Running Programs. 5. Defining Functions. 6. User Interaction with the Mouse and the Keyboard. 7. Recursion. 8. Objects and Classes. 9. Animations. Appendix A: Turtle Graphics Commands. Appendix B: Solutions to Exercises.

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## COSMETOLOGY

### **COSMETOLOGY**



NEW EDITION:

## PROFESSIONAL BEAUTY THERAPY, 2E Australia and New Zealand Edition

Lorraine Nordmann, Hugh Baird College; Andrea Day, Victoria University of Technology

Building upon Lorraine Nordmann's classic text, this second Australian edition of Professional Beauty Therapy will equip students with the knowledge and skills required to successfully practice beauty therapy. Combining theory and practice in one easy-to-use book, Professional Beauty Therapy covers the core competencies in the new SIB10 Beauty Training Package, including health and safety, beauty sciences, treatments and professional practice. Comprehensive, easy-to-use and up-to-date with the latest industry trends, Professional Beauty Therapy will provide your students with the specialist skills and underpinning knowledge you need to give your learning that professional edge.

#### **NEW TO THIS EDITION**

- Web links in the textbook for 'supplementary' information
- More on prosthetic make-up application/paramedical; more on sustainability; artificial tanning; cosmetic

25

- tattooing; Laser/IPL
- More on Spa, waxing techniques, microdermabrasion, and cavitation therapies
- Assessment of Knowledge and Understanding questions to better reflect the training package

- Expanded instructors manual with comprehensive information on advanced treatments
- Increased task based learning activities and assessments online
- Includes the key competencies of the Australian Qualifucations Framework; instructors can be confident that coverage is contexxtualised to the Australian scope of practice
- Some material on advanced treatments moved online to allow for greater coverage of core competencies in text
- Incorporates expanded content on Sustainability and completely rewritten chapter on Business Management

#### **CONTENTS**

Part 1: The beauty professional 1. The beauty professional 2. Health and safety 3. Client assessment and advice Part 2: The science of beauty 4. Body structures and systems 5. Skin science and biology 6. Nail science 7. Nutrition 8. Cosmetic chemistry 9. Electricity Part 3: The practice of beauty 10. Nails 11. Basic hair treatment and removal 12. Make-up 13. Facial treatments 14. Body treatments 15. Spa 16. Electrolysis and diathermy Part 4: Beauty business 17. Reception 18. Promotional activities 19. The beauty business

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# CULINARY, HOSPITALITY, TRAVEL & TOURISM

**CULINARY, HOSPITALITY** 



### FOOD AND BEVERAGE SERVICE, 9E

COUSINS/LILLICRAP/WEEKES

#### **FEATURES**

- Covers all of the essential industry knowledge, from personal skills, service areas and equipment, menus and menu knowledge, beverages and service techniques, to specialised forms of service, events and supervisory aspects
- Supports a range of professional food and beverage service qualifications, including foundation degrees or undergraduate programmes in restaurant, hotel, leisure or event management, as well as in-company training programs
- Aids visual learners with over 200 photographs and illustrations demonstrating current service conventions and techniques

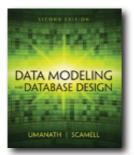
#### **CONTENTS**

1. The foodservice industry 2. Staff attributes, skills and knowledge 3. Food and beverage service areas and equipment 4. The menu, menu knowledge and accompaniments 5. Beverages: non-alcoholic and alcoholic 6. The service sequence: table service 7. The service sequence: self service, assisted service and single-point service 8. The service of breakfast and afternoon tea 9. Specialised forms of service 10. Enhanced service techniques 11. Events 12. Supervisory aspects of food and beverage service Annex A: Glossary of cuisine and service terms Annex B: Cocktail and mixed drink listing and recipes Annex C: Cigars Index

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## **DATABASES**

### **CONCEPTS**



NEW EDITIONS

## DATA MODELING AND DATABASE DESIGN, 2E

Dr. Narayan S. Umanath; Richard Scamell, University of Houston

DATA MODELING AND DATABASE DESIGN presents a conceptually complete coverage of indispensable topics that each MIS student should learn if that student takes only one database course. Database design and data modeling encompass the minimal set of topics addressing the core competency of knowledge students should acquire in the database area. The text, rich examples, and figures work together to cover material with a depth and precision that is not available in more introductory database books.

#### **NEW TO THIS EDITION**

 There are now 13 chapters instead of 12, and there will be a Bibliography at the end of the book, rather than a separate endnotes section in each chapter. Appendix C and D have been deleted.

#### **FEATURES**

- Updated diagrams, boxes, and tables that visually reinforce key concepts.
- Offers substantial coverage of higher degree relationships and other complex relationships in the entity-relationship diagram.
- Presents unique features under the topic of normalization rarely found in business database books.
- Includes in-depth coverage of relational algebra supported by a significant number of examples of their operationalization in ANSI/ISO SQL.
- Provides an extensive discussion of conceptual data modeling.

 Features challenging end-of-chapter exercises that provide opportunity to learn and assimilate through practice.

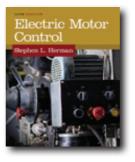
#### **CONTENTS**

1. Database Systems: Architecture and Components. Part I: CONCEPTUAL DATA MODELING. 2. Foundation Concepts. 3. Entity-Relationship Modeling. 4. Enhanced Entity-Relationship (EER) Modeling. 5. Modeling Complex Relationships. Part II: LOGICAL DATA MODELING. 6. The Relational Data Model. Part III: NORMALIZATION. 7. Functional Dependencies. 8. Normal Forms Based on Functional Dependencies. 9. Higher Normal Forms. Part IV: DATABASE IMPLEMENTATION USING THE RELATIONAL DATA MODEL. 10. Database Creation. 11. Relational Algebra. 12. Structured Query Language (SQL). 13. Advanced Data Manipulation Using SQL. Appendix A. Appendix B.

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## **ELECTRICAL TRADES**

## INDUSTRIAL ELECTRICITY & MOTOR CONTROL



NEW EDITION!

### **ELECTRIC MOTOR CONTROL, 10E**

Stephen Herman, Retired, Lee College, Baytown, Texas

Updated with the latest technology, machines, and controls in the industry, ELECTRIC MOTOR CONTROL, 10E delivers comprehensive coverage and practical insight for anyone who will install, monitor, and/or maintain motor controls. Concise, self-contained units provide ultimate flexibility, making it easy to match content with teaching and learning needs. Units begin by introducing the simplest of equipment and then

help readers build upon their knowledge step by step as they learn how to draw and interpret motor control schematic diagrams. Subsequent units offer detailed coverage of motor control components and how they are connected to form complete control circuits, and the text ends with troubleshooting techniques for real-world practice. New for the Tenth Edition, the instructor companion website offers a wealth of online resources.

#### **NEW TO THIS EDITION**

- Completely up to date and more comprehensive than ever, the new Tenth Edition includes expanded coverage of push-buttons and selector switches, relays, contactors pressure switches, temperature switches, temperature sensing devices, hand-off-auto switches, and much more.
- The new edition uses a detailed schematic diagram to more clearly illustrate how a circuit is connected.
- Updated schematics provide thorough explanations of part winding starting.
- Coverage of direct current motors has been expanded.
- Additional discussions of control transformers are now included.
- Dynamic braking for AC squirrel cage motors is explained in detail.
- In addition, ELECTRIC MOTOR CONTROL now includes an instructor companion website that provides a PDF of the IML, PowerPoint slides, an image gallery, and a test bank-all at your fingertips.

#### **FEATURES**

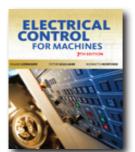
- Succinct, self-contained units remain a signature feature of this popular text. At about 4-10 pages each, the units are easily matched up with teacher and learner needs-offering instructors optimum flexibility to meet your students' unique needs.
- A wealth of up-to-date photos, line illustrations, artwork, and schematic diagrams vividly illustrate chapter concepts.
- Extremely reader friendly, the text provides stepby-step instructions on how to use the voltmeter, ammeter, and ohmmeter when troubleshooting a control circuit.

#### **CONTENTS**

1. General Principles of Electric Motor Control. 2. Fractional and Integral Horsepower Manual Motor Starters. 3. Magnetic Line Voltage Starters. 4. Symbols.

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#### NEW EDITION!

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Diane Lobsiger, Delta College

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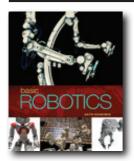
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## ELECTRONIC TECHNOL-OGY

# INDUSTRIAL ELECTRONICS/MANUFACTURIN NUFACTURING TECHNOLOGY





#### **BASIC ROBOTICS**

Keith Dinwiddie, Ozarks Technical Community College

Providing an excellent introduction, BASIC ROBOTICS equips students with a solid foundation in the

industrial robot system and establishes a framework of understanding that is essential for entering the robotics industry. The text begins with an exploration of the fascinating technological history that led to the modern robot, starting with events from Before the Common Era and ending with a glimpse of what the robots of tomorrow might become. From there the text explores safety, various parts of the robot, tooling, power transmission systems, the basics of programming, troubleshooting, maintenance, and much more. Engaging photos highlight various robotic systems and their parts, while stories of real-world events bring text concepts to life. This innovative First Edition incorporates many of the initiatives of STEM and is the culmination of lessons learned from Keith Dinwiddie's years of teaching robotics in various formats-from the traditional classroom to the industrial production floor with systems ranging from the LEGO Mindstorms NXT to the FANUC robot.

#### **FEATURES**

- BASIC ROBOTICS spurs student interest in robotics while preparing them with the framework of understanding that will be necessary to enter either the maintenance or engineering robotics field.
- Combining teaching experience with real-world practice, Keith Dinwiddie brings a refreshing classroom style to his writing, which draws students in with its conversational tone and walks them step by step through the world of robotics.
- The comprehensive table of contents follows the guidelines for both PLTW and the TEKS.
- Early in the text, the author presents a comprehensive historical timeline of the technology behind robots.
- Countless photos and numerous real-life stories and experiences shared throughout the text help students better understand the subject matter, while giving the reader access to the years of experience of the author.
- An entire chapter is devoted to troubleshooting, followed by a full chapter on maintenance of the robot.
- Chapter 8 "Robot Operation" and Chapter 9
   "Programming and File Management" are designed
   to cover the basic steps necessary to run or program
   any system, allowing instructors to add specialized
   information for their specific systems after covering
   the basics.
- The Activities Manual accompanying the text enables

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students to demonstrate what they have learned, practice using equations from the text, do research on their own and write reports on topics covered. Instructors can pick and choose which writing assignments, research projects and suggested labs will give their students the best hands-on experience putting chapter concepts into practice.

 Helping students maximize their study time, each chapter ends with a list of key terms, any formulas introduced and review questions highlighting key points.

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## MICROPROCESSORS/MICROCONT ROLLERS



#### NEW EDITION!

#### MICROCONTROLLERS, 2E

From Assembly Language to C Using the PIC24 Family

Robert B. Reese; J.W. Bruce; Bryan A. Jones

This completely updated second edition of MICROCONTROLLERS: FROM ASSEMBLY LANGUAGE TO C USING THE PIC24 FAMILY covers assembly language, C programming, and hardware interfacing for the Microchip PIC24 family, a recently updated microcontroller family from Microchip. Hardware interfacing topics include parallel port usage, analogto-digital conversion, digital-to-analog conversion, the serial peripheral bus (SPI), the inter-integrated circuit bus (I2C), asynchronous serial communication, and timers. Assembly language programming is covered in the context of the PIC24 instruction set, and no initial knowledge of assembly language programming is assumed. Specific hardware interfacing topics covered are parallel IO, analog-to-digital/digital-to-analog conversion, pulse width modulation, timer usage for IO polling, and industry standard serial interface standards. Interfacing examples include external devices such as pushbutton switches, LEDs, serial EEPROMs, liquid crystal displays (LCDs), keypads, rotary encoders, external digital-to-analog converters, DC motors, servos, temperature sensors, and IR receivers. Master the PIC24 family with MICROCONTROLLERS: FROM ASSEMBLY LANGUAGE TO C USING THE PIC24 FAMILY.

#### **FEATURES**

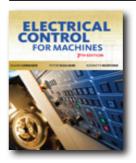
- Covers both assembly language and C programming.
- The book's website contains lecture notes, video lectures, homework problems, sample tests, and more.
- All hardware interfacing examples are presented as C language examples, reducing their complexity and emulating real-world applications.

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## GAME DESIGN & DEVEL-OPMENT

### **GAME PROGRAMMING**





## BEGINNING C++ THROUGH GAME PROGRAMMING, 4E

Michael Dawson, UCLA

When it comes to game programming, C++ is the name of the game. If you aspire to move from game player to game creator, it all starts with learning the fundamentals of C++ and game-programming basics. With BEGINNING C++ THROUGH GAME PROGRAMMING, FOURTH EDITION, you will find an up-to-date and thorough introduction to everything you need to get started—with no previous programming experience required. In the new fourth edition of this popular guide to learning C++, you will work with a complete program while learning each new concept and a game program at the end of each chapter. A final game project at the end of the book draws together everything you've learned. Written with the beginning programmer in mind, BEGINNING C++ THROUGH GAME PROGRAMMING, FOURTH EDITION is a great way to get started in game programming.

#### **NEW TO THIS EDITION**

- This edition brings full updates and approximately 25% new material.
- Text and programs have been updated to work with the new Microsoft Visual Studio.

#### **FEATURES**

· Written for the beginner, this book assumes no

- previous programming experience.
- Includes projects to emphasize what has been learned.
- Comes complete with Q&As, extensive end-ofchapter exercises, and web downloads to reinforce self-practice and learning.

#### **CONTENTS**

Introduction. 1. Types, Variables, and Standard I/O: Lost Fortune. 2. Truth, Branching, and the Game Loop. 3. For Loops, Strings, and Arrays: Word Jumble. 4. The Standard Template Library: Hangman. 5. Functions: Mad Lib. 6. References: Tic-Tac-Toe. 7. Pointers: Tic-Tac-Toe 2.0. 8. Classes: Critter Caretaker. 9. Advanced Classes and Dynamic Memory. 10. Inheritance and Polymorphism: Blackjack. Appendix A: Creating Your First C++ Program. Appendix B: Operator Precedence. Appendix C: Keywords. Appendix D: ASCII Chart. Appendix E: Escape Sequences. Index.

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### BEGINNING GAME PROGRAMMING, 4E

Jonathan S. Harbour, The University of Advancing Technology

This completely updated fourth edition of the popular BEGINNING GAME PROGRAMMING will introduce you to the fascinating world of game programming for Windows using Visual Studio 2013 and DirectX. The book requires only a basic understanding of the C++ language and provides a solid introduction to DirectX programming. You'll learn the basics of making sprite-based games without getting bogged down in complex 3D rendering. The instruction is step-by-step, building as you go. Even if you're new to the subject, you will be able to follow along, learning how to take your game ideas from concept to reality using today's standard professional game-creation tools. At the end of the

book, you will put your new skills to use creating your own complete, fully functional game. Get started in game programming today, with BEGINNING GAME PROGRAMMING, FOURTH EDITION.

#### **FEATURES**

- Introduces readers to the industry-standard tools for game creation.
- Step-by-step instruction leads readers into the world of game programming.
- Includes a complete game project at the end of the book.
- Includes a complete game project at the end of the book.

#### **CONTENTS**

PART I. INTRODUCTION TO WINDOWS AND DIRECTX.

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Input. 7. Drawing and Animating Sprites. 8. Transforming
Sprites. 9. Detecting Sprite Collisions. 10. Printing
Text. 11. Scrolling the Background. 12. Playing Audio.
13. Rendering 3D Models. PART III. GAME PROJECT. 14.
Creating the Anti-Virus Game. PART IV: APPENDICES.
Appendix A. Configuring Visual C++ 2012. Appendix B.
Resources for Further Study

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NEW EDITION!

### GAME DEVELOPMENT WITH UNITY, 2E

Michelle Menard; Bryan Wagstaff

The Unity engine game development tool is a multiplatform engine and editor rolled into one. It is an ideal development tool for independent developers and students, and many pro studios turn to it for fast prototyping. Unity allows developers to create a single game and release it on many platforms including Android, iOS, and the web. This completely updated edition of GAME DEVELOPMENT WITH UNITY is a tutorial-style guide that provides a complete overview of the Unity editor along with step-by-step projects covering every basic functional aspect, from asset importing to publishing. Each chapter includes tutorials and small assignments geared toward making a larger game. You will learn the basics of design and level theory and prototyping concepts in the virtual world. You will also learn how to polish and publish your finished game. A companion website features software, sample levels, source code and more. Start learning Unity today with GAME DEVELOPMENT WITH UNITY, SECOND EDITION.

#### **NEW TO THIS EDITION**

- Updated through Unity version 4.3.
- Covers targeting platforms such as Android and iOS mobile devices.
- Covers advanced AI features, and more.

#### **FEATURES**

- A companion website features software, sample levels, source code and more.
- Covers basic Unity debugging and optimization.
- Includes all asset files and stages of development.

#### **CONTENTS**

1. Preface. 2. Introduction. 3. Overview of the Unity Engine. 4. Designing Concepts. 5. Environments – Setting the Stage. 6. Assets. 7. Characters. 8. Props. 9. 2D assets living in a 3D world. 10. Scripting. 11. Character and State Controller Scripts. 12. Animations. 13. Triggers and Environment Interactions. 14. Adversaries and Al. 15. Graphical User Interface (GUI). 16. Lights and Shadows. 17. Particle Systems. 18. Sound and Music. 19. Basic UNITY debugging and Optimization. 20. Making Builds. 21. Building for mobile devices.

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## HELP DESK/DESKTOP SUP-PORT

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### **HELP DESK**





# A GUIDE TO COMPUTER USER SUPPORT FOR HELP DESK AND SUPPORT SPECIALISTS, 6E

Fred Beisse, Lane Community College

Equip current and future user-support professionals with the critical people skills and exceptional technical abilities necessary to provide outstanding support with Fred Beisse's A GUIDE TO COMPUTER USER SUPPORT FOR HELP DESK AND SUPPORT SPECIALISTS, 6E, This useful guide focuses on the information resources and technical tools students need most to function effectively in a support position. Students develop the skills to handle troubleshooting and problem solving, successfully communicate with clients, determine a client's specific technology needs, train end-users, and handle budgeting and other management priorities. Clear, balanced coverage in this fully revised new edition highlights the latest trends and developments, from Web and email-based support to new features in Microsoft Windows, cloud computing, and ethical challenges. Engaging special features such as Tips, roleplaying scenarios, and On the Web Pointers provide important insights, while Discussion Questions and Case Projects encourage active participation in the learning process.

#### **NEW TO THIS EDITION**

- A new section on ethical challenges in help desk work provides readers with a realistic view of an important and challenging aspect of employment in information technology.
- New examples illustrate the growing importance of tablet PCs and mobile technology in user support.
- Expanded coverage of ITIL guidelines illustrates

- how best practices are implemented in information technology.
- A new section on conflict resolution highlights the importance of working effectively on a project team as well as with difficult users.
- Examples of the kinds of questions asked on certification exams helps readers prepare to meet the expectations of exam providers.
- A new help desk software tool, LBE Desktop Helpdesk, is featured, including an appendix with hands-on activities using the software.

#### **FEATURES**

- PRACTICAL, STRAIGHTFORWARD APPROACH
  TO TECHNICAL ISSUES HELPS STUDENTS BUILD
  CRITICAL SKILLS WITH CONFIDENCE. The book's
  technical practicality and straightforward tone
  help students build and strengthen today's most
  critical skills, from decision making and successfully
  communicating with a client to determining a client's
  specific needs, writing for the end-user, and handling
  ethical challenges.
- COMPELLING ROLE-PLAYING SCENARIOS SPUR DYNAMIC CLASS DISCUSSION. Now you can put your students into actual, challenging customer support situations, as the book's role-playing scenarios illustrate both strong and weak examples of customer service situations.
- NUMEROUS CASE STUDIES ILLUSTRATE TROUBLESHOOTING AND PROBLEM-SOLVING SKILLS AT WORK IN REAL SITUATIONS. A wide variety of Case Studies drawn from actual incidences demonstrate how to most effectively apply troubleshooting and problem-solving skills to real business and support situations.
- PROFESSIONAL SOFTWARE ENABLES HANDS-ON, REAL BUSINESS PRACTICE. This edition incorporates freely downloadable versions of LBE Helpdesk software and Microsoft® Office Project Professional 2010.

#### **CONTENTS**

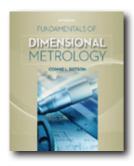
Preface. Chapter 1: Introduction to Computer User Support. Chapter 2: Customer Service Skills for User Support Agents. Chapter 3: Writing for End Users. Chapter 4: Skills for Troubleshooting Technology Problems. Chapter 5: Common Support Problems. Chapter 6: Help Desk Operation. Chapter 7: User

Support Management. Chapter 8: Product Evaluation Strategies and Support Standard. Chapter 9: End-User Needs Assessment Projects. Chapter 10: Installing and Managing End-User Technology. Chapter 11: Technology Training for Users. Chapter 12: A User Support Utility Tool Kit. Appendix A: Answers to Check Your Understanding Questions. Appendix B: LBE Helpdesk Evaluation Edition. Appendix C: User Support Presentations and Meetings.

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## INDUSTRIAL TECHNOL-OGY

## **MECHANICAL TECHNOLOGY**



NEW EDITION!

## FUNDAMENTALS OF DIMENSIONAL METROLOGY, 6E

Connie L. Dotson

Reflecting the latest changes in standards and technology, market-leading FUNDAMENTALS OF DIMENSIONAL METROLOGY, 6e combines handson applications with authoritative, comprehensive coverage of the principles, techniques, and devices used within today's dimensional metrology field. The Sixth Edition has been thoroughly revised and updated in direct response to reviewer feedback. The new edition features an easier to understand presentation, a new lab manual/workbook, updated photos and illustrations and updated references to measurement standards.. The text continues to use both metric and imperial systems but emphasizes metric measurement devices and concepts in all examples for greater consistency with the latest industry trends.

#### **NEW TO THIS EDITION**

- More reader-friendly than ever, FUNDAMENTALS OF DIMENSIONAL METROLOGY, 6e includes easier to understand language, and expanded end-of-chapter questions.
- An all-new lab manual/workbook includes lab projects as well as workbook questions that correspond with each chapter in the book.
- The revised table of contents provides comprehensive coverage along with more effective content flow.
- New web resources link learners with the latest developments from the field as well as provide opportunities for further exploration of chapter content.
- Bringing chapter concepts to life, vivid new photos and detailed illustrations enhance content clarity and improve student understanding.
- Revised tables and charts provide the most current information available.
- References are completely up to date with today's measurement standards.
- Instructor Resources are now included on the text website.

#### **FEATURES**

- FUNDAMENTALS OF DIMENSIONAL METROLOGY, 6e emphasizes real-world application throughout the text.
- Focusing on practical application and understanding, end-of-chapter questions enable readers to check their understanding as they progress through the book.

#### **CONTENTS**

Preface. 1. Measurement and Metrology. 2. Language and Systems of Measurement. 3. Measurement and Tolerances. 4. Statistics and Metrology. 5. Graduated Scales and Scaled Instruments. 6. Vernier Instruments. 7. Micrometer Instruments 8. Gage Blocks. 9. Calibration. 10. Measurement by Comparison. 11. Reference Planes. 12. Angle Measurement. 13. Surface Measurement. 14. High Amplification-Comparators. 15. Pneumatic Measurement. 16. Optical Flats. 17. Optical Metrology. 18. Coordinate Measuring Machines. Appendices. Glossary. Index.

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### **PROCESS TECHNOLOGY**



NEW EDITION:

## PROCESS TECHNOLOGY PLANT OPERATIONS, 2E

Michael Speegle, San Jacinto College

Addressing modern process plant operations in an easy-to-understand format, this comprehensive text reveals the important role technicians play in the function of a business unit. The author thoroughly examines operator responsibilities and functions, from recognizing opportunities that improve process operations, to detecting and removing threats to steady-state operation. The text also systematically explores business fundamentals and the importance of quality, as well as the chemistry and physics of process operations, maintenance duties, material handling, and process troubleshooting techniques. Now thoroughly expanded and updated, the Second Edition of this trusted text includes new chapters on jobs in process technology, environmental compliance, emergency response, and instrumentation. With numerous new and revised tables and photos, as well as additional learning resources to promote Internet research and critical thinking, the text is an even more useful and effective resource for current and future process plant technicians.

#### **NEW TO THIS EDITION**

- Every chapter now includes a "Resources" section containing useful teaching and learning tools and material to encourage critical thinking, including lecture presentations, class activities, discussion materials, and links to relevant websites for information on chapter topics.
- Many chapters feature new or updated tables and photos, enhancing the text's visual appeal and helping

- bring key concepts to life for readers.
- Numerous new chapters greatly expand coverage of topics important in the field today, such as environmental compliance, emergency response, jobs in process technology, and instrumentation.

#### **FEATURES**

- This proven text combines detailed, comprehensive coverage with an engaging, reader-friendly presentation to make even complex material easier to understand and apply.
- Within each chapter, material is organized by topic to make it easier to teach, learn, review, and reference information relevant to a specific area.
- Abundant photos, line drawings, tables, and other illustrations throughout the text help to clarify complex processes and make the text more effective and appealing for today's visual learners.
- Drawing on nearly two decades of experience as an industry professional, the author delivers a thorough examination of operator responsibilities and functions while strongly emphasizing business fundamentals, quality, and safety.

#### **CONTENTS**

Preface. 1. Process Technology Today. 2. Jobs in Process Technology. 3. John's Twelve-Hour Shift. 4. Safety. 5. Environmental Compliance and Title V. 6. Emergency Response Teams. 7. Process Physics for Operators. 8. Quality for Operators. 9. Economics for Operators. 10. Communication for Operators. 11. Instrumentation. 12. Routine Technician Duties. 13. Process Samples and common Analytical Tests. 14. Operator Maintenance Duties. 15. Material Handling of Bulk Liquids. 16. Material Handling of Bulk Solids. 17. Material Handling: Oil Movement and Storage. 18. Process Unit Shutdown. 19. Process Unit Turnaround. 20. Process Unit Startup. 21. Abnormal Situations. 22. Process Troubleshooting. Glossary.

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## INTERNET

## **WEB SITE CREATION**





## DEVELOPING MOBILE WEBSITES WITH HTML5

David Karlins

Whatever your level of expertise with web development, DEVELOPING MOBILE WEBSITES WITH HTML5 will give you the hands-on help you need to learn how to create dynamic mobile websites that work equally well on laptops and desktops using HTML5. Popular author and web-design teacher David Karlins combines aesthetics and technique in a book that is uniquely accessible to designers at all levels, covering essential topics such as building animated and interactive mobile web apps, understanding and applying styling to mobile sites, creating mobile-friendly forms and collecting data from users, and working with JavaScript libraries, JavaScript widgets, and Cascading Style Sheets (CSS). In today's fast-moving technology market, mobile isn't an add-on-it's essential. Get in on the action with DEVELOPING MOBILE WEBSITES WITH HTML5.

#### **FEATURES**

- Uses only HTML5 and CSS3.
- Covers effective mobile site design (type, color, and more).
- Covers applying mobile-friendly navigation.
- Includes a companion website with code and examples at http://dk-mobile.uphero.com/

#### **CONTENTS**

1. Solving Mobile Design Challenges with HTML5. 2. Building and Testing a Multipage Mobile Web App with HTML5. 3. Animating Navigation. 4. Applying Data-Theme Styling. 5. Customizing Mobile Styles with ThemeRoller. 6. Creating Collapsible Blocks. 7. Designing with Grids. 8. Providing Native Video. 9. Audio for Mobile. 10. Scaling Images for Mobile Devices. 11. Building Mobile-Friendly Forms. 12. Deploying Mobile

Widgets. 13. Building a Complete Mobile Presence. 14. Using Templates.

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## NEW PERSPECTIVES ON XML, COMPREHENSIVE, 3E

Patrick Carey, Westminster Kingsway College; Sasha Vodnik

Updated to teach the most current XML standards, this book uses real-world case studies and a practical, step-by-step approach to teach XML.

#### **NEW TO THIS EDITION**

- XML tutorials updated to cover validating both within an editor and within the latest versions of multiple browsers.
- Expanded coverage of basic and advanced schema concepts with increased hands-on instruction, including converting a DTD to a schema.
- New case scenarios in tutorials and exercises.
- New pedagogical features have been added, including Visual Overviews, ProSkills boxes, ProSkills exercises, and Key Steps.

#### **FEATURES**

- Includes ten tutorials and five appendices perfect for a semester-long introductory course on XML.
- Covers XML syntax to create valid, well-formed documents and shows how to work with namespaces to create documents combining several XML vocabularies.
- Gives a thorough lesson on Schemas in Tutorial 4 including employing multiple schemas in large document structures.
- Shows students how to work with several standard XML vocabularies, including XHTML, MathML, and

RSS.

 Provides cross-browser solutions to programming with the W<sub>3</sub>C document object model.

#### **CONTENTS**

Tutorial 1: Creating an XML Document. Tutorial 2: Validating an XML Document. Tutorial 3: Working with Basic Schemas. Tutorial 4: Working with Advanced Schemas. Tutorial 5: Working with XSLT and XPath. Tutorial 6: Working with XSLT Functional Programming. Tutorial 7: Creating Element Groups. Tutorial 8: Combining XML and PHP. Tutorial 9: Working with XML and Databases. Tutorial 10: Using XML with Mobile Devices. Appendix A: Installing Exchanger Lite. Appendix B: XSLT Elements and Attributes. Appendix C: XPath Reference. Appendix D: DTD Reference. Appendix E: XML Schema Reference. Appendix F: Regular Expressions Reference. Appendix G: XML and CSS. Appendix H: Installing XAMPP.

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NEW EDITION!

## PROFESSIONAL WEB DESIGN, 5E Techniques and Templates

Clint Eccher

If you are a web designer, or are on your way to becoming one, you know the importance of staying up-to-date with the latest tools, techniques, and trends of the business. Learning CSS technology and continually improving your design and developer skills are essential elements of your success. In this fifth edition of PROFESSIONAL WEB DESIGN: TECHNIQUES AND TEMPLATES, popular author and web developer Clint Eccher teaches beginning to intermediate web designers, through case studies and helpful tips and techniques, how to create attractive,

fast, and efficient websites. In addition to the helpful instruction, readers will also have access to more than 200 completely customizable design templates. Eccher covers essential topics, from understanding how web development works today to working with clients, enhancing usability, understanding graphics, and much more. The included case studies cover a variety of requirements and design types. Get up to speed, and up to date, with modern web design—get PROFESSIONAL WEB DESIGN: TECHNIQUES AND TEMPLATES, FIFTH EDITION.

#### **NEW TO THIS EDITION**

 Covers new web design technology that has been developed since last edition published four years ago.

#### **FEATURES**

- Includes more than 200 customizable design templates.
- Features case studies for a variety of site types.
- Includes tips on working with clients.

#### **CONTENTS**

1. Overview of Web Development Today. 2. Designing for the Past, Present, and Future. 3. Things to Consider Before Beginning. 4. Enhancing Usability. 5. Gathering Requirements and Creating a Comp. 6. What Is Needed to Build Mortised Sites. 7. Understanding Graphics. 8. Creating CSS Designs. 9. Case Study: Low-Content CSS Design. 10. Case Study: Medium-Content CSS Design. 11. Case Study: High-Content CSS Design. 12. Case Study: Full-Height Three-Column Layout. 13. Case Study: Background-Based Design. 14. Case Study: A CSS Form. 15. Tips and Techniques. 16. Customizing the Designs Included in This Book. 17. Templates Included Online.

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## MEDIA ARTS & DESIGN

## **3D MODELING & ANIMATION**





## ON ANIMATION-THE DIRECTOR'S PERSPECTIVE

**Animation World Network** 

If you are looking for a book published directly by the best known and most authoritative name in animation on the Web, you have finally found it. "On Animation: The Official AWN Animation Masters Series" contains a series of engaging, intimate books that glimpse into the life and work of some of the most accomplished individuals in the animation industry, such as Steven Spielberg, Brad Bird, Peter Lord and Tim Burton. Each book focuses on different topics, including directing, cinematography, writing, storyboarding, and producing. Written for animation, visual effects and game development students and professionals, as well as animation and cinema fans, this book is the ideal read for anyone interested in learning about the ins-and-outs of the animation industry.

#### **FEATURES**

- Accessible style geared for both the student and professional.
- Designed to present an incisive and comprehensive overview of the animation industry.
- Published by AWN, the best known and most authoritative name in animation on the web.
- Illustrated with stills from popular features and short films.

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### **DESIGN CONCEPTS**



### NEW EDITION!

# EXPLORING THE BASICS OF DRAWING (WITH COURSEMATE PRINTED ACCESS CARD), 2E

Victoria Vebell, Pratt Institute

Packed with exquisite artwork and illustrations, the EXPLORING THE BASICS OF DRAWING, 2e package delivers a comprehensive introduction to the art of drawing through both the text and CourseMate. This new edition offers thorough coverage of the fundamental skills needed to learn still-life drawing, basic shapes, and the key concepts of perspective, light, value, and space. Its reader-friendly format offers clear instructions and detailed descriptions. The author thoroughly explains and illustrates each step of the drawing process--reflecting her three decades of professional illustration experience. With new chapters on figure and landscape drawing, as well as unique new author-created videos vividly illustrating essential drawing techniques via CourseMate, students will gain the knowledge and practice they need to build their skills and confidence.

#### **NEW TO THIS EDITION**

- Delivered via the CourseMate platform, new authorcreated videos vividly illustrate essential drawing techniques, giving learners up-close demonstrations of drawing techniques in action.
- All-new chapters on Figure Drawing and Landscape Drawing expand the book's focus.
- Chapters revised to offer even more insight on perspective and instruction on this key element.
- New material and expanded discussions on technical drawing.

#### **FEATURES**

 A comprehensive introduction to the art of drawing that begins with basic shapes and progresses from

- there, making for a logical progression that builds on success from the simple to the complex.
- Illustrated Demonstrations in the chapters build upon each other and include instructions, demonstration, and review.
- End of chapter features including things to remember, review questions, projects and homework assignments help readers retain the key skills taught in the chapter and put them to use.
- Short cuts, tricks, and tools learned in the author's three decades of professional illustration add to the book's unique features.
- From the very beginning, the text orients students to everything that is involved in drawing, including materials, lighting, position, etc.

#### **CONTENTS**

1.Getting Started. 2. Basic Shapes and Learning to See. 3. Value and Spherical Shapes. 4. Linear Perspective and Cubic Shapes. 5. Proportion and Rectangular Shapes. 6. Elliptical Perspective and Cylindrical Objects. 7. The Illusion of Space and Conical Shapes. 8. Composition and Complex Shapes. 9. Drapery. 10. Metal. 11.Glass. 12. Additional Media. 13. Drawing the Human Figure. 14. Landscape Drawing. Index.

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## **PHOTOGRAPHY**





## DAVID BUSCH'S COMPACT FIELD GUIDE FOR THE NIKON D4/D4S

David D. Busch

Are you tired of squinting at the tiny color-coded tables and difficult-to-read text you find on the typical

laminated reference card that you keep with you when you're in the field or on location? Well throw away your cheat sheets and command cards! DAVID BUSCH'S COMPACT FIELD GUIDE FOR THE NIKON D4/D4S is your solution. This lay-flat, spiral-bound reference guide condenses all the must-have information you need while shooting into a portable book you'll want to permanently tuck into your camera bag. You'll find every settings option for your Nikon D4 or D4s listed, along with advice on why you should use—or not use each adjustment. Useful tables provide recommended settings for a wide variety of shooting situations, including landscapes, portraits, sports, close-ups, and travel. With this guide on hand, you have all the information you need at your fingertips so you can confidently use your camera on the go.

#### **FEATURES**

- Handy size, take-it-with-you field guide.
- Includes checklists, tables, and charts covering the fundamental operations of the Nikon D4.
- Includes how-to tips for shooting movies with the Nikon D4.

#### **CONTENTS**

Quick Setup Guide.
 Nikon D4/D4s Roadmap.
 Playback and Shooting Menu Settings.
 Custom Settings, Setup, and Retouch Menus, and My Menu.
 Using Flash.
 Live View and Shooting Movies.
 Shooting Tips.

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## DAVID BUSCH'S NIKON D4 GUIDE TO DIGITAL SLR PHOTOGRAPHY

David D. Busch

DAVID BUSCH'S NIKON D4 GUIDE TO DIGITAL SLR PHOTOGRAPHY is your best bet for getting great results with your D4. Nikon's new flagship camera, the D4 includes a 16.2 megapixel sensor, advanced HDTV video features, ISO up to 204,400, and a completely new exposure sensor with 91,000-pixel resolution. If you're hoping to use your new Nikon D4 to explore the world of digital photography, to flex your creativity, or to do your job better, this is the book for you. With clear how-to steps and full-color illustrations, DAVID BUSCH'S NIKON D4 GUIDE TO DIGITAL SLR PHOTOGRAPHY covers all the features of this capable camera in depth, from taking your first photos through advanced details of setup, exposure, lenses, lighting, and more, and relates each feature to specific photographic techniques and situations. With David Busch as your guide, you'll be in full creative control, whether you're shooting on the job, as an advanced hobbyist, or are just out for fun. Start building your knowledge, creativity, and confidence with the Nikon D<sub>4</sub> today.

#### **FEATURES**

- Covers the basics of shooting completely--from setup to metering, lighting, exposure, and more.
- Includes the Nikon D4 Roadmap, a quick-reference visual guide to functions and features.
- Features a section on movie-making with your Nikon D4.

#### **CONTENTS**

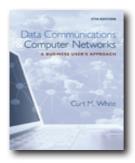
Introduction. 1. QUICK TOUR: SHOOTING YOUR FIRST NIKON D4 PICTURE. Selecting Shooting Mode. Focusing. Taking the Picture. Depth of Field Preview. Releasing the Shutter. Using the Self-Timer. Using Sequence Shooting. Reviewing the Image. Trashing the Duds. Transferring Images to Your Computer. Choosing an Image Format. 2. THE NIKON D4 ROADMAP. Front of the Camera Controls (picture + callouts). Back of the Camera Controls (picture + callouts). Top of the Camera Controls (picture + callouts). Viewfinder Display (picture + callouts). LCD Display. View and Playback Images. Activating the Onboard Flash. Basic Control Layout. Exposure Modes. Focus Modes. Shooting Modes. 3. SETTING UP YOUR NIKON D4. The Setup Menu. Date, Time, and Language. Setting LCD Brightness. Specifying Image Quality. Setting Autofocus Options. Choosing Drive Mode. Using Custom Settings Banks. Setting Your

Viewfinder's Diopter Adjustment. Resetting the Camera. Updating Your Firmware. 4. SHOOTING BASICS. Metering Modes. Metering Techniques. Interpreting Histograms. Adjusting Exposures with EV. Bracketing Exposures and other Parameters. ISO Sensitivity. Setting White Balance. Working with High Speed Continuous Shooting Modes. Focus Modes. Image Parameters. 5. PHOTOGRAPHY WITH YOUR NIKON D4. Understanding Exposure. ISO and Noise Control. Using Apertures. Controlling Depth of Field. Motion and Shutter Speed. 6. ADVANCED SHOOTING AND MOVIE MAKING. Shooting Full HDTV D-Movies. Editing Movies. Enhancing Sound. Capturing Continuous Sequences. Freezing Action. 7. WORKING WITH LENSES. Nikon lenses. Third-Party lenses. Lens compatibility. Using Zooms. Working with Prime Lenses. Applying the Lens Crop Factor to Your Pictures. Using a Wide-Angle Lens. Using Telephoto Lenses. Using Normal Lenses. Using Macro Lenses. Cool Special Features. Extending the Range of Any Lens with a Converter. Working with Autofocus . 8. WORKING WITH LIGHT. Nikon D4 Flash Basics. The Built-In Flash. Flash Modes. Using Manual Flash. Flash Exposure Compensation. External Flash Units. Nikon Flash. Third Party Flash. Using Studio Flash. Using Modeling Lights. Conquering Available Light. Incandescent Lighting Dealing with Fluorescents Infrared and UV. 9. DOWNLOADING AND EDITING. Software Utilities. Nikon Software. Third Party Software. Noise Reduction Software. RAW converters. 10. TROUBLESHOOTING YOUR NIKON D4. Charging and Maintaining Batteries. Battery Life. Using Alternate Power Sources. Checking your Internal Clock Battery. Cleaning the CCD. Troubleshooting. Glossary. Index.

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## MIS

### **DATA COMMUNICATIONS**





## DATA COMMUNICATIONS AND COMPUTER NETWORKS, 8E

A Business User's Approach

Curt White, DePaul University

Balancing the most technical concepts with practical everyday issues, DATABASE COMMUNICATIONS AND COMPUTER NETWORKS, 8e provides thorough coverage of the basic features, operations, and limitations of different types of computer networks--making it the ideal resource for future business managers, computer programmers, system designers, as well as home computer users. Offering a comprehensive introduction to computer networks and data communications, the text includes coverage of the language of computer networks as well as the effects of data communications on business and society. Completely up to date, the Eighth Edition reflects the latest trends, developments, and practices from the field. It offers full coverage of wireless technologies, industry convergence, compression techniques, network security, LAN technologies, VoIP, and error detection and correction. New coverage includes near field communications, updated USB interface, lightning interface, and IEEE 802.11 ac and ad wireless standards, firewall updates, router security problems, the Internet of Things, cloud computing, zero-client workstations, and Internet domain names.

#### **NEW TO THIS EDITION**

- Offering the most current coverage available in this fastchanging environment, DATA COMMUNICATIONS AND COMPUTER NETWORKS: A BUSINESS USER'S APPROACH, 8e covers the latest practices, issues, and technologies relating to computer networks, data communication, computer language, and the effects of all of these on today's society.
- Thoroughly revised and updated Chapter 1:

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- "Details" sections separate highly technical material from the rest of the chapter narrative and provide thorough explanations to ensure student understanding.
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### **ELECTIVES**





## CONCEPTS OF DATABASE MANAGEMENT, 8E

Philip J. Pratt, Grand Valley State University; Mary Z. Last

Delivering concise, cutting-edge coverage, CONCEPTS OF DATABASE MANAGEMENT, 8e uses real-world cases, examples, and illustrations to give students a thorough understanding of such critical issues as database design, data integrity, concurrent updates, data security, and more. Completely updated to Microsoft Access 2013 standards, the text presents SQL in a database-neutral environment and covers all major topics, including E-R diagrams, normalization, and database design. It provides detailed coverage of the relational model (including OBE and SQL), normalization and views, database administration and management, and more. Advanced topics covered include distributed databases, data warehouses, stored procedures, triggers, data macros, and Web Apps. Ideal for an introductory database course in an information systems, business, or CIS program, CONCEPTS OF DATABASE MANAGEMENT, 8e can be used in varying disciplines by instructors who want database coverage without using a trade book or a large academic book.

#### **NEW TO THIS EDITION**

- Offering the most current coverage available, the new CONCEPTS OF DATABASE MANAGEMENT, 8e is packed with the latest technologies, practices, and developments from the field.
- The Eighth Edition is completely updated to Microsoft Access 2013 standards.
- Comprehensive, current coverage of database design and database management systems provides readers with the tools they need for real-world success.

• A new continuing case problem appears in each chapter throughout the book.

#### **FEATURES**

- Thorough yet succinct, CONCEPTS OF DATABASE MANAGEMENT delivers clear, comprehensive discussions of database design that include normalization, an easily applied database design method, E-R diagrams, numerous database design examples, requirements gathering and analysis, tradeoff discussions, and more.
- Extensive coverage of SQL offers numerous examples to effectively illustrate concepts and includes such advanced topics as concurrency issues, distributed databases, data warehouses, stored procedures, triggers, XML, and database processing over the Web.
- A common case problem in each chapter reinforces key concepts as it challenges students to put what they learn into real-world practice. Two additional case problems are presented in the exercises at the end of each chapter. Critical thinking questions and exercises challenge students to use problem-solving and analytical skills.
- Providing students with additional insight, appendices describe the purpose and syntax of the major SQL commands used in the book. Appendices include Access Web Apps and a Systems Analysis Approach to Information-Level Requirements.
- The Instructor's Manual offers detailed tips on integrating the Eighth Edition with other books from Course Technology that cover Microsoft Access 2013 and SOL.

#### **CONTENTS**

1. Introduction to Database Management. 2. The Relational Model 1: Introduction, QBE, and Relational Algebra. 3. The Relational Model 2: SQL. 4. The Relational Model 3: Advanced Topics. 5. Database Design 1: Normalization. 6. Database Design 2: Design Method. 7. DBMS Functions. 8. Database Administration. 9. Database Management Approaches. Appendix A: Comprehensive Design Example: Marvel College. Appendix B: SQL Reference. Appendix C: "How Do I" Reference. Appendix D: Answers to Odd-Numbered Review Questions. Appendix E: Access Web Apps. Appendix F: Systems Analysis Approach to Information-Level Requirements.

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## **INTRODUCTION TO IS/MIS/IT**



NEW EDITION:

## FUNDAMENTALS OF INFORMATION SYSTEMS, 8E

Ralph M. Stair, Professor Emeritus, Florida State University; George Reynolds, Strayer University

Combining the latest research and most current coverage available into a succinct nine chapters, FUNDAMENTALS OF INFORMATION SYSTEMS, 8E equips students with a solid understanding of the core principles of IS and how it is practiced. The streamlined eighth edition features a wealth of new examples, figures, references, and cases as it covers the latest developments from the field--and highlights their impact on the rapidly changing role of today's IS professional. It includes expanded coverage of mobile solutions, an increased focus on energy and environmental concerns, new discussions on the growing use of cloud computing across the globe, a stronger career emphasis, and two cases per chapter (with additional cases on the text website). Learning firsthand how information systems can increase profits and reduce costs, students explore new information on e-commerce and enterprise systems, artificial intelligence, virtual reality, green computing, and other issues reshaping the industry. The text introduces the challenges and risks of computer crimes, hacking, and cyberterrorism. It also presents some of the most current research on virtual communities, global IS work solutions, and social networking. A long-running example gives students an up-close view of how technology was used in the design, development, and production of this text. Powerful new interactive instructor and student multimedia resources include MindTap™ and Aplia™. No matter where students' career paths may lead, FUNDAMENTALS OF INFORMATION SYSTEMS, 8E can help you equip future professionals to maximize their success as employees, decision makers, and business leaders.

#### **NEW TO THIS EDITION**

- COMPLETELY UP TO DATE: Reflecting the latest developments and practices from the field, the brief FUNDAMENTALS OF INFORMATION SYSTEMS, 8E includes all-new boxes and examples, revised cases, references from 2013 and 2014, and updated content throughout--making it the most current text on the market.
- CONCISE: A succinct 560 pages, the text offers a streamlined overview of the key fundamentals of IS.
   Each chapter ends with two cases. Additional Legacy cases are included on the text website.
- EXPANDED COVERAGE OF MOBILE DEVICES: Across the industry, more people are using mobile devices to conduct business, provide entertainment, stay connected with clients, coworkers, and organizations, and more. The increasingly essential mobile devices are introduced in Chapter 1, and their vital role in IS is covered extensively throughout the book.
- INCREASED EMPHASIS ON ENERGY AND ENVIRONMENTAL CONCERNS: Starting in Chapter 2, the text thoroughly explores how organizations are trimming IS department costs, how information systems are being used to help reduce energy costs throughout organizations, and what the concerns of many individuals and organizations are about the impact of IS on the environment. A new section on energy and environmental concerns is featured in many chapters, whereas others integrate energy and environmental issues into existing chapter content.
- POWERFUL INTERACTIVE INSTRUCTOR AND STUDENT RESOURCES: Offering the ultimate personal learning experience, MindTap™ provides a wealth of online teaching and learning tools integrated with the text. A full Aplia™ build also is available to enhance text material.
- TEXTBOOK TECHNOLOGY EXAMPLE: Giving students a real-world example they can easily relate to, chapter material emphasizes the use of technology to design, develop, and produce FUNDAMENTALS OF INFORMATION SYSTEMS, 8e. Students and

- instructors alike can see firsthand how the authors and whole publishing team use technology throughout the entire publishing process.
- STRONGER CAREER EMPHASIS: In response to reviewer suggestions, the text includes even more examples of how IS is relevant to students' current lives and future career plans. The "Information Systems@Work" boxes include an increased career emphasis throughout.

#### **FEATURES**

- OPENING VIGNETTES REFLECT INFORMATION SYSTEMS AT WORK IN ACTUAL COMPANIES THROUGHOUT THE WORLD. Immediately drawing students into chapter content, intriguing vignettes highlight familiar organizations, real-world issues, and interesting IS challenges and issues currently facing U.S., foreign-based, and multinational companies.
- "INFORMATION SYSTEMS@WORK" SPECIAL INTEREST BOXES HIGHLIGHT THE LATEST TOPICS AND TRENDS. Lifted directly from leading headlines, engaging "Information Systems@Work" features focus on some of the most recent topics and emerging trends in IS. These feature boxes show students how to use information systems most effectively to further a variety of careers.
- "ETHICAL AND SOCIETAL ISSUES" SPECIAL INTEREST BOXES DEMONSTRATE THE CHALLENGES FACING PROFESSIONALS. Gaining a better understanding of the numerous ethical challenges information systems professionals encounter, students see firsthand how actual IS professionals confront and react to ethical dilemmas.

#### **CONTENTS**

1. An Introduction to Information Systems in Organizations. 2. Hardware and Software. 3. Database Systems and Applications. 4. Telecommunications and Networks. 5. Electronic and Mobile Commerce and Enterprise Systems. 6. Information and Decision Support Systems. 7. Knowledge Management and Specialized Information Systems. 8. Systems Development. 9. The Personal and Social Effects of Computers.

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#### NEW EDITION!

## MIS 5 (WITH COURSEMATE PRINTED ACCESS CARD), 5E

Hossein Bidgoli, California State University, Bakersfield

Created by the continuous feedback of a "student-tested, faculty-approved" process, MIS5 delivers a visually appealing, succinct print component, tear-out review cards for students and instructors and a consistent online offering with CourseMate that includes an eBook in addition to a set of interactive digital tools all at a value-based price and proven to increase retention and outcomes. MIS5 employs state-of-the-art coverage through numerous practical applications and offers emerging cases from the information systems field. In addition, author Hossein Bidgoli provides a daily article link on current MIS topics via Facebook, Twitter (@4LTR Press\_MIS) and LinkedIn (4LTR Press for MIS). Follow along!

#### **NEW TO THIS EDITION**

- Brand-new topics have been added of which Cyber Crime (Ch. 4), Big Data (Ch. 3), Net Neutrality (Ch. 4), the Internet of Everything (Ch. 7) and Contextual Computing (Ch. 13) are prime examples.
- The End of Chapter content has been redesigned to include 8 new Review and Discussion questions, 6 Projects, 5 new Cases and a brand-new section "Are you ready to move on" which offers 6 Test Questions.

#### **FEATURES**

- Several new Web sites and mobile apps have been added throughout the textbook.
- The brand-new End of Chapter questions will include:
   8 new Review and Discussion questions, 6 Projects,
   5 new Cases and a brand-new section "Are you ready to move on" which offers 6 Test Questions.
- Updated information boxes and end-of-chapter cases show MIS applications in current business settings.

- Big data, the Internet of Everything, and Contextual Computing are some of the new topics covered.
- Every 4LTR Press solution comes complete with an engaging print textbook, tear-out review cards, an interactive digital solution (CourseMate), and an eBook all of which were directly influenced from student focus groups and surveys, and from interviews with over 200 faculty and students.
- Shorter, comprehensive chapters in a modern design present content in a more engaging and accessible format without minimizing coverage for your course.
- MIS 5 offers today's most current IS statistics, hardware, software, and applications.
- Hossein Bidgoli provides a daily article link on current MIS topics via Facebook, LinkedIn (4LTR Press for MIS) and Twitter.

#### **CONTENTS**

Part I: FUNDAMENTALS OF INFORMATION SYSTEMS. 1. Information Systems: An Overview. 2. Computers: The Machines Behind Computing. 3. Database Systems, Data Warehouses, and Data Marts. 4. Personal, Legal, Ethical, and Organizational Issues of Information Systems. 5. Protecting Information Resources. Part II: DATA COMMUNICATION, THE INTERNET, E-COMMERCE. AND GLOBAL INFORMATION SYSTEMS. 6. Data Communication: Delivering Information Anywhere and Anytime. 7. The Internet, Intranets, and Extranets. 8. E-Commerce. 9. Global Information Systems. Part III: IS DEVELOPMENT, ENTERPRISE SYSTEMS, MSS, AND EMERGING TRENDS. 10. Building Successful Information Systems. 11. Enterprise Systems. 12. Management Support Systems. 13. Intelligent Information Systems. 14. Emerging Trends, Technologies, and Applications.

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## **NETWORKING & SECURITY**

DATA / TELECOMMUNICATIONS





## DATA COMMUNICATIONS AND COMPUTER NETWORKS, 8E

A Business User's Approach

Curt White, DePaul University

Balancing the most technical concepts with practical everyday issues, DATABASE COMMUNICATIONS AND COMPUTER NETWORKS, 8e provides thorough coverage of the basic features, operations, and limitations of different types of computer networks--making it the ideal resource for future business managers, computer programmers, system designers, as well as home computer users. Offering a comprehensive introduction to computer networks and data communications, the text includes coverage of the language of computer networks as well as the effects of data communications on business and society. Completely up to date, the Eighth Edition reflects the latest trends, developments, and practices from the field. It offers full coverage of wireless technologies, industry convergence, compression techniques, network security, LAN technologies, VoIP, and error detection and correction. New coverage includes near field communications, updated USB interface, lightning interface, and IEEE 802.11 ac and ad wireless standards, firewall updates, router security problems, the Internet of Things, cloud computing, zero-client workstations, and Internet domain names.

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- Offering the most current coverage available in this fastchanging environment, DATA COMMUNICATIONS AND COMPUTER NETWORKS: A BUSINESS USER'S APPROACH, 8e covers the latest practices, issues, and technologies relating to computer networks, data communication, computer language, and the effects of all of these on today's society.
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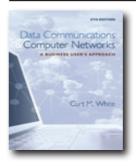
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## INTRODUCTION TO NETWORKING



NEW EDITION!

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A Business User's Approach

Curt White, DePaul University

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### **NETWORKING**





#### COMPTIA CLOUD+ CVo-oo1 IN DEPTH

Ron Gilster

COMPTIA CLOUD+ CVo-oo1 IN DEPTH will prepare you to pass CompTIA's new Cloud+ certification exam. Using the proven In Depth certification training method, it is a comprehensive, up-to-date, user-friendly test-prep guide. The book is fully mapped to Cloud+ exam objectives and offers in-depth coverage of all relevant topics, from cloud delivery models and services to virtualization, infrastructure, network management, and much more. End-of-chapter questions are included, to test and sharpen your comprehension along the way. As cloud computing grows, network administrators and other IT professionals must keep pace. The CompTIA Cloud + certification exam validates the knowledge and best practices required of professionals working in cloud-computing environments, and the coaching and test-prep resources of COMPTIA CLOUD+ CVo-oo1 IN DEPTH will give you the skills and confidence you'll need to succeed on exam day.

#### **FEATURES**

- Covers concepts and models of cloud computing.
- Covers virtual environment infrastructure and network management.
- Features end-of-chapter questions to test comprehension.

#### **CONTENTS**

Introduction. Part I: THE CONCEPTS AND MODELS OF CLOUD COMPUTING. 1. Cloud Delivery Models and Services. 2. Cloud Services. 3. Object Storage. Part II: VIRTUALIZATION. 4. The Benefits of Virtualization. 5. The Components in a Cloud Environment. 6. Hypervisor Systems. 7. Virtual Device Management. 8. Virtual Resource Migration. Part III: VIRTUAL ENVIRONMENT INFRASTRUCTURE. 9. Storage Technologies. 10. Storage Configuration. 11. Storage Provisioning. 12. Protocols. 13. Hardware. 14. Implementation. Part IV: NETWORK MANAGEMENT. 15. Monitoring. 16. Physical Resource Allocation. 17. Security. 18. System Management. 19. Optimization. 20. Deployment. 21. Disaster Recovery. 22. Availability.

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### MCSA GUIDE TO ADMINISTERING MICROSOFT WINDOWS SERVER 2012/R2, EXAM 70-411

Greg Tomsho, Yavapai College

Offering a wealth of hands-on activities, MCSA Guide to Administering Microsoft Windows Server 2012/R2, Exam 70-411empowers students to successfully pass the MCSE/MCSA certification exam while preparing them to face the real-world challenges of a Microsoft networking professional. This engaging, four-color text equips readers with the skills necessary to manage a Windows Server 2012 system with a focus on administration. Comprehensive coverage includes server deployment and maintenance, advanced file services, remote access, network access protection, Group Policy, Active Directory, DNS and much more. In addition, hands-on labs and case projects give students plenty of opportunity to put what they learn into real-world practice.

#### **FEATURES**

- Full-color content maps completely to MCSA Certification Exam 70-411: Adminstering Windows Server 2012
- Coverage of features new to Windows Server 2012, including new Windows Deployment Services (WDS), DirectAccess implementation, file classification in File Server Resource Manager (FSRM) and more.
- A list of 70-411 exam objectives is cross-referenced with chapters and sections that cover each objective.
- The text includes a 120-day evaluation version of Microsoft Windows Server 2012.
- Learning Objectives, Chapter Summaries, Key Terms & Definitions, Review Questions, Hands-On Activities, and Case Projects reinforce skills as they are learned, while test preparation resources help students get ready for exam day.
- Tomsho's MCSA Guide to Administering Microsoft Windows Server 2012/R2, Exam 70-411follows a proven pedagogy focusing on quality, classroom usability and a hands-on experience for students.
- Integrated throughout every chapter, practical activities reinforce conceptual material with real-life application.
- Case projects encourage readers to review and apply key concepts through real-world set up and administrative scenarios.
- Step-by-step hands-on activities walk you thorugh tasks ranging from deploying Windows with Windows Deplyment Services (WDS), maintaining Windows computers with Windows Server Update Services (WSUS), and configuring advanced file services, such as Distributed File Systems (DFS), File ReServer Resource Manager (FSRM), and Encrypting File System (EFS).
- Challenging case projects build on one another and require you to apply the concpets and technologies learned throughout the book.

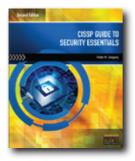
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 Deploying Windows Server. 2. Windows Server Update Services. 3. Advanced File Services Configuration. 4. Server Monitoring and Auditing.
 Remote Access Configuration. 6. Network Policy Configuration. 7. Domain Controller and Active Directory Management. 8. User and Service Account Configuration. 9. Group Policy Settings and Preferences. 10. Managing Group Policies. 11.

Managing and Configuring DNS. Appendix A: MCSA Exam 70-411 Objectives.

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## **SECURITY**





## CISSP GUIDE TO SECURITY ESSENTIALS, 2E

Peter H. Gregory

CISSP GUIDE TO SECURITY ESSENTIALS, Second Edition, provides complete, focused coverage to prepare students and professionals alike for success on the Certified Information Systems Security Professional (CISSP) certification exam. The text opens with an overview of the current state of information security, including relevant legislation and standards, before proceeding to explore all ten CISSP domains in great detail, from security architecture and design to access control and cryptography. Each chapter opens with a brief review of relevant theory and concepts, followed by a strong focus on real-world applications and learning tools designed for effective exam preparation, including key terms, chapter summaries, study questions, hands-on exercises, and case projects. Developed by the author of more than 30 books on information securitythe Second Edition of this trusted text has been updated to reflect important new developments in technology and industry practices, providing an accurate guide to the entire CISSP common body of knowledge.

#### **NEW TO THIS EDITION**

 The Second Edition includes extensive updates throughout the text to reflect important new industry

- practices, evolving technology, emerging threats, and effective new means of system and data protection.
- The author has added new material on cloud systems threats and countermeasures, data jurisdiction, data sovereignty, access control processes, operating systems, software attack objectives, the BCP and DRP life cycles, the security incident response process, root cause analysis, threat modeling, source code scanning, and data leakage prevention systems.
- Updated study questions across the ten CISSP domains reflect the latest trends, technology, and practices users will need to master to achieve professional success and prepare for the certification exam
- New and updated study problems and case projects feature highly relevant examples and realworld scenarios that today's information security professionals are likely to encounter.

#### **FEATURES**

- Covering the complete CISSP common body of knowledge within a single, comprehensive guide, this trusted text is ideal for anyone pursuing the advanced certification that has become the standard for the global information security industry, as well as the U.S.
   Department of Defense and National Security Agency.
- Following an introduction that briefly reviews the current state of information security, the text dedicates individual chapters to each of the ten CISSP domains, enabling users to focus on each one in great depth, and to direct their review and exam preparation efforts where they need the most support.
- After briefly discussing essential theory and concepts relevant to a specific domain, each chapter features a strong practical focus, emphasizing real-world examples, hands-on exercises, and a variety of learning tools to support exam preparation, including key terms, chapter summaries, and study questions.
- Developed by the author of more than 30 books on information and business security—the text reflects the invaluable perspective of a security professional with more than 25 years of industry experience.
- To complement the core chapter content, a premium website features expanded information and resources, including additional exam practice questions.

#### **CONTENTS**

Introduction. 1. Information Security and Risk

Management. 2. Access Controls. 3. Software Development Security. 4. Business Continuity and Disaster Recovery. 5. Cryptography. 6. Legal Regulations, Compliance, and Investigations. 7. Security Operations. 8. Physical and Environmental Security. 9. Security Architecture and Design. 10. Telecommunications and Network Security. Appendix A: Ten Domains of CISSP. Appendix B: (ISC)<sup>2</sup> Code of Ethics. Appendix C: The CISSP Exam. Glossary. Index.

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NEW EDITION!

## GUIDE TO COMPUTER FORENSICS AND INVESTIGATIONS (WITH DVD), 5E

Bill Nelson; Amelia Phillips, Highline Community College; Christopher Steuart

Updated with the latest advances from the field, GUIDE TO COMPUTER FORENSICS AND INVESTIGATIONS, Fifth Edition combines all-encompassing topic coverage, authoritative information from seasoned experts, powerful instructor resources, and realworld student applications-delivering the most comprehensive forensics resource available. This proven author team's wide ranging areas of expertise mirror the breadth of coverage provided in the text, which focuses on techniques and practices for gathering and analyzing evidence used to solve crimes involving computers. While other texts offer more of an overview of the field, this hands-on learning text provides clear instruction on the tools and techniques of the trade, introducing readers to every step of the computer forensics investigation-from lab set-up to testifying in court. It also details step-by-step guidance on how to use current forensics software and provides free demo downloads of popular tools like FTK Imager for use with Case Projects and Hands-On Projectsgiving readers the opportunity to put their new skills into action.

#### **NEW TO THIS EDITION**

- Master the skills needed to launch and conduct a successful digital investigation with the updated fifth edition of this popular book, Guide to Computer Forensics and Investigations: Processing Digital Evidence. This resource guides readers through conducting a high-tech investigation, from acquiring digital evidence to reporting its findings. Updated coverage includes new software and technologies as well as up-to-date reference sections, and content includes how to set up a forensics lab, how to acquire and evaluate the necessary tools, and how to conduct an investigation and subsequent digital analysis. This book features free downloads of the latest forensics software so that readers can become familiar with the tools of the trade.
- New to This Edition: Updated coverage on Linux and Macintosh, Updated coverage on virtual machine software, such as VMware and Virtual Box, Updated coverage on Android, mobile devices, and handheld devices, Enhanced end-of-chapter exercises

#### **FEATURES**

- GUIDE TO COMPUTER FORENSICS AND INVESTIGATIONS explains how to use the most popular forensics tools.
- Provides specific guidance on dealing with civil and criminal matters relating to the law and technology.
- Includes discussions on how to manage a digital forensics operation in today's business environment.
- Review Questions, Hands-On Projects, and Case Projects that give readers the opportunity to practice skills they have learned.
- Free software works with running case studies, giving readers the opportunity to test their new skills and tying the content to professional practice.
- Videos of drive acquisitions and related activities for digital forensics are also included on the DVD.
- Expansive artwork brings chapter concepts to life.
   For example, cutaway views of hard drives present a difficult concept like the anatomy of a disk in a way students can fully understand.

#### **CONTENTS**

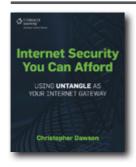
Understanding the Digital Forensics Profession

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and Investigations. 2. The Investigator's Office and Laboratory. 3. Data Acquisition. 4. Processing Crime and Incident Scenes. 5. Working with Windows and CLI Systems. 6. Current Computer Forensics Tools. 7. Macintosh and Linux Boot Processes and File Systems. 8. Recovering Graphics Files. 9. Computer Forensics Analysis and Validation. 10. Virtual Machine and Cloud Forensics. 11. Live Acquisitions and Network Forensics. 12.

Email investigations. 13. Cell Phone and Mobile Device Forensics. 14. Report Writing for High Tech Investigations. 15. Expert Testimony in High Ethics for the Investigator Tech Investigations. 16. and Expert Witness. Appendix A Digital Forensics Test References. Appendix B **Digital Forensics** References, Appendix C Digital Forensics Lab Considerations, Appendix D Digital Forensic Alternative Tools and Methods.

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## INTERNET SECURITY YOU CAN AFFORD The Untangle® Internet Gateway

Dawson

Untangle is an Internet gateway and firewall that provides a powerful solution for protecting computer networks, whether at home or on the job—stopping viruses, hackers, and other unwanted Internet traffic from interfering with your life. In its basic form, Untangle is free, so getting started is easy on the budget. Although the software is available in a variety of configurations, the free version of the Untangle Next Generation Firewall (Untangle NG) and its accompanying software modules can handily meet the Internet security needs of just about any home or small business. With INTERNET SECURITY YOU CAN

AFFORD: USING UNTANGLE AS YOUR INTERNET GATEWAY, you will learn everything you need to know to secure your network, including downloading and installing Untangle, implementing network and user-protection best practices, scaling up your Untangle installation, and much more. Protect your network and its users without wrecking your budget—get INTERNET SECURITY YOU CAN AFFORD: USING UNTANGLE AS YOUR INTERNET GATEWAY.

#### **FEATURES**

- Introduces a cost-effective security option.
- Provides the only book on Untangle®, the free, opensource alternative to expensive Internet security appliances and gateways.
- Details how Untangle® 's multi-functional firewall software simplifies and consolidates the many network and security products that organizations need at the gateway to the Internet, making protection and filtering easy and affordable.
- Provides answers and reference tools, whether you are a parent securing a home network, a school district CTO, or small business owner.
- Guides you through decision-making, installation, networking, and use.

#### **CONTENTS**

Introduction. Part 1: OK, I'm convinced. Now what? Chapter 1: Get a Computer. Chapter 2: Networking 101. Chapter 3: Download and Install Untangle. Part 2: So about This So-called "Server"...How Do I Protect My Network? Chapter 4: What's Happening Inside My Untangle Gateway? Chapter 5: Network and User Protection Best Practices. Chapter 6: Implementing Best practices (or not) with Untangle. Chapter 7: User Considerations. Chapter 8: Advanced Topics. Part 3: I Don't Think This is Enough for Me - What's This "Scalability" of Which You Speak? Chapter 9: Paid Features. Chapter 10: Bigger Box? Bigger Network? Or Both? Appendices Appendix A: Repurposing a Computer. Appendix B: Building Your Own Computer. Appendix C: Untangle Appliances. Appendix D: Untangle Alternatives. Appendix E: Applicable Laws and Rules Regarding Content Filtering. Appendix F: Glossary. Appendix G: References.

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#### NEW EDITION!

## PRINCIPLES OF INFORMATION SECURITY, 5E

Michael E. Whitman - Ph. D., CISM, CISSP, Michael J. Coles College of Business, Kennesaw State University; Herbert J. Mattord - MBA, CISM, CISSP, Michael J. Coles College of Business, Kennesaw State University

Specifically oriented to the needs of information systems students, PRINCIPLES OF INFORMATION SECURITY, 5e delivers the latest technology and developments from the field. Taking a managerial approach, this market-leading introductory book teaches all the aspects of information security-not iust the technical control perspective. It provides a broad review of the entire field of information security, background on many related elements, and enough detail to facilitate understanding of the topic. It covers the terminology of the field, the history of the discipline, and an overview of how to manage an information security program. Current and relevant, the fifth edition includes the latest practices, fresh examples, updated material on technical security controls, emerging legislative issues, new coverage of digital forensics, and hands-on application of ethical issues in IS security. It is the ultimate resource for future business decision-makers.

#### **NEW TO THIS EDITION**

- Completely up to date, PRINCIPLES OF INFORMATION SECURITY, 5e reflects the latest developments from the field, including new innovations in technology and methodologies, updated examples and references, and the most current coverage of emerging issues available.
- Restructured treatment of threats and attacks improve the logical flow of the text while providing added depth on threat levels and severities as well as expanded coverage of attacks against information

- systems.
- Updated material on technical security controls includes enhancements to the coverage of firewall rules and wireless security (WEP, WPA, etc.).
- Risk management coverage has been refreshed and enhanced to better reflect current industry practice.
- The coverage of digital forensics and e-discovery has been expanded.
- New information on software security is the most up to date available.
- Ch. 3 Legal, Ethical, and Professional Issues in Information Security details the newest laws, legislative efforts and legal interpretations in the United States and abroad as well as a host of identity theft bills.
- Updated computer forensics content focuses more on the perspective of the general security professional than the forensics specialist.
- Updated chapter sequences improve the flow and linkage of risk management and planning activities.
- A new end-of-chapter feature focuses on ethical decision making in the context of each chapter's opening case study, giving students hands-on experience dealing with the ethical issues of realworld practice.

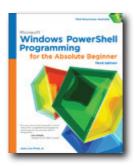
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1. Introduction to Information Security. 2. The Need for Security. 3. Legal, Ethical, and Professional Issues in Information Security. 4. Planning for Security. 5. Risk Management. 6. Security Technology: Firewalls, VPNs, and Wireless. 7. Security Technology: Intrusion Detection and Prevention Systems and Other Security Tools. 8. Cryptography. 9. Physical Security. 10. Implementing Information Security. 11. Security and Personnel. 12. Information Security Maintenance and eDiscovery.

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## **PROGRAMMING**

### **CONCEPTS**



#### NEW EDITION!

# WINDOWS POWERSHELL PROGRAMMING FOR THE ABSOLUTE BEGINNER, 3RD, 3E

Jerry Lee Ford, Jr.

Learning doesn't have to be boring. MICROSOFT WINDOWS POWERSHELL PROGRAMMING FOR THE ABSOLUTE BEGINNER, THIRD EDITION, keeps things fun and interesting by teaching you how to program through the development of computer games. In these pages, you'll discover everything you need to know to begin developing your own scripts. You'll develop a new game that reinforces a newly learned concept in each chapter. No prior experience or programming knowledge is required. Topics covered include the basic steps involved in interacting with the PowerShell command prompt and in creating and executing PowerShell scripts, object-based scripting and PowerShell's relationship with the .NET Framework, the way to implement conditional logic and set up loops to automate repetitive tasks and process large collections of data, how to improve the overall organization of your PowerShell scripts using functions, and advanced topics such as tracking down and debugging errors and using PowerShell to interact with Windows Management Instrumentation. The third edition of this book is a PowerShell scripting primer for either PowerShell 3.0 or PowerShell 4.0. Regardless of which version of PowerShell you are working with, this unique book has you covered. After reading MICROSOFT WINDOWS POWERSHELL FOR THE ABSOLUTE BEGINNER, THIRD EDITION, not only will you have access to a collection of working sample scripts, you will have laid a foundation that allows you to move on and begin to tackle realworld challenges.

#### **NEW TO THIS EDITION**

• Updated to cover through PowerShell 3.0 and 4.0.

• CoversWindows Management Instrumentation (WMI) and teaches the reader how use this technology as the basis for developing administrative scripts.

#### **FEATURES**

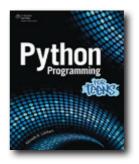
- Covers Windows PowerShell basics and how to write PowerShell scripts.
- Advanced topics include working with files and folders, basic system administration, and debugging PowerShell scripts.
- Includes companion website.

#### **CONTENTS**

1. Introducing Windows PowerShell. 2. Interacting with the PowerShell Console Window and Integrated Scripting Environment. 3. Object-Based Scripting with .NET. 4. Working with Variables, Arrays and Hashes. 5. Implementing Conditional Logic. 6. Using Loops to Process Data. 7. Organizing Scripts Using Functions. 8. Working with Files and Folders. 9. Basic System Administration. 10. Debugging PowerShell Scripts. 11. PowerShell and Windows Management Instrumentation (WMI).

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### **OPEN SOURCE**





#### PYTHON PROGRAMMING FOR TEENS

Kenneth A. Lambert, Washington and Lee University

If you want to learn how to program in Python, one of today's most popular computer programming languages, PYTHON PROGRAMMING FOR TEENS is the perfect first step. Written by teacher, author, and Python expert Kenneth Lambert, this book will help you

build a solid understanding of programming and prepare you to make the jump to other languages and more advanced instruction. In PYTHON PROGRAMMING FOR TEENS, you will learn problem solving, program development, the basics of using classes and objects, and more. Special topics include 2-D geometry, fractals, animations, and recursion. The book's topics are illustrated using turtle graphics, a system that provides graphical output from programs and makes learning more fun. Get started programming today with PYTHON PROGRAMMING FOR TEENS.

#### **FEATURES**

- Includes instruction on working with Turtle Graphics.
- Covers controls structures, defining functions, and much more.
- Covers user interaction with mouse and keyboard.

#### **CONTENTS**

1. Getting Started with Python. 2. Getting Started with Turtle Graphics. 3. Control Structures: Sequencing, Iteration, and Selection. 4. Composing, Saving, and Running Programs. 5. Defining Functions. 6. User Interaction with the Mouse and the Keyboard. 7. Recursion. 8. Objects and Classes. 9. Animations. Appendix A: Turtle Graphics Commands. Appendix B: Solutions to Exercises.

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### **PROGRAMMING LANGUAGES**



NEW EDITION!

## C PROGRAMMING FOR THE ABSOLUTE BEGINNER, 3RD, 3E

Keith Davenport; Michael Vine

Many students of C will rightly admit that it's not an easy language to learn, but the professional insight, clear explanations, examples, and pictures in the Cengage Learning for the Absolute Beginner series make learning C easy and fun. Programming is not a skill you can acquire by reading; you have to write programs to learn. That's why each chapter in this book contains programming challenges, a chapter review, and a complete program that uses chapter-based concepts to construct an easily built application. With the guidance in this book, you'll learn how to create algorithms and pseudocode to think through and design programs; translate your designs and plans into working C programs; write, compile, test, and debug your code; use data types, arrays, pointers, strings, file operations and more to create robust programs.

#### **FEATURES**

- Each chapter features a simple game project that reinforces chapter concepts.
- Uses a C compiler that is available free on the web.
- Covers looping structures, arrays, pointers, and more.

#### **CONTENTS**

1. Getting Started with C Programming. 2. Primary Data Types. 3. Conditions. 4. Looping Structures. 5. Structured Programming. 6. Arrays. 7. Pointers. 8. Strings. 9. Introduction to Data Structures. 10. Dynamic Memory Allocation. 11. File Input and Output. 12. The C Preprocessor. 13. Common UNIX Commands. 14. Vim Quick Guide. 15. Nano Quick Guide. 16. TCC Quick Guide. 17. ASCII Character Codes. 18. Common C Library Functions.

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NEW EDITION!

**JAVASCRIPT, 6E** 

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#### The Web Warrior Series

Sasha Vodnik; Don Gosselin

Now in its sixth edition, JAVASCRIPT guides beginning programmers through web application development using the JavaScript programming language. As with previous editions of the book, the authors introduce key web authoring techniques with a strong focus on industry application. New coverage includes developing for touchscreen and mobile devices, and using the ¡Query library. A real-world project, similar to what students would encounter in a professional setting, is developed chapter by chapter. Because professional web development jobs often require programmers to add features to existing sites, each chapter project uses a professionally designed web site. After completing a course using this textbook, students will be able to use JavaScript to build professional quality, dynamic web sites.

#### **NEW TO THIS EDITION**

- An entirely new chapter covers coding for mobile devices and touchscreens, and mobile versions of working projects are incorporated throughout the text.
- Each chapter includes a Best Practices box highlighting a guideline for real-world implementation of the topic at hand, a Programming Concepts box offering a concise explanation of a principle underlying the subject of that chapter, and a Skills at Work box providing guidance for navigating the world of work.
- Includes a new chapter introducing the basics of jQuery.
- Fully revised to reflect current industry standards for creating arrays and objects, writing equality operators, and listening for events.

#### **FEATURES**

- Teaches Web authoring techniques to students with little or no programming experience using the industry-standard JavaScript language.
- New full-color interior design features multicolor code samples that visually identify language components and figures that accurately display project previews.
- Includes a Short Quiz element that tests student understanding of the concept or technique presented in each major section.
- Provides plenty of opportunities for skill application

- through updated end-of-chapter Hands-on Projects and Case Projects. Completed HTML and CSS code for real-world projects is provided to students, so they can focus on learning and writing JavaScript.
- Real-world projects are written in HTML5; all non-mobile projects are coded for IE8 compatibility.

#### **CONTENTS**

1. Introduction to JavaScript. 2. Working with Functions, Data Types, and Operators. 3. Building Arrays and Controlling Flow. 4. Debugging and Error Handling. 5. Working with the Document Object Model (DOM) and DHTML. 6. Enhancing and Validating Forms. 7. Using Object-Oriented JavaScript. 8. Manipulating Data in Strings and Arrays. 9. Managing State Information and Security. 10. Programming for Touchscreens and Mobile Devices. 11. Updating Web Pages with Ajax. 12. Introduction to jQuery. Appendix A: Installing and Configuring a Testing Server. Appendix B: Working with HTML and CSS. Appendix C: JavaScript Reference. Appendix D: Solutions to Short Quizzes.

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## WEB DESIGN & DEVELOP-MENT

### **INTERACTIVE MEDIA DESIGN**





## DEVELOPING MOBILE WEBSITES WITH HTML5

**David Karlins** 

Whatever your level of expertise with web development, DEVELOPING MOBILE WEBSITES WITH HTML5 will give you the hands-on help you need to learn how

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to create dynamic mobile websites that work equally well on laptops and desktops using HTML5. Popular author and web-design teacher David Karlins combines aesthetics and technique in a book that is uniquely accessible to designers at all levels, covering essential topics such as building animated and interactive mobile web apps, understanding and applying styling to mobile sites, creating mobile-friendly forms and collecting data from users, and working with JavaScript libraries, JavaScript widgets, and Cascading Style Sheets (CSS). In today's fast-moving technology market, mobile isn't an add-on—it's essential. Get in on the action with DEVELOPING MOBILE WEBSITES WITH HTML5.

#### **FEATURES**

- Uses only HTML5 and CSS3.
- Covers effective mobile site design (type, color, and more).
- Covers applying mobile-friendly navigation.
- Includes a companion website with code and examples at http://dk-mobile.uphero.com/

#### **CONTENTS**

1. Solving Mobile Design Challenges with HTML5. 2. Building and Testing a Multipage Mobile Web App with HTML5. 3. Animating Navigation. 4. Applying Data-Theme Styling. 5. Customizing Mobile Styles with ThemeRoller. 6. Creating Collapsible Blocks. 7. Designing with Grids. 8. Providing Native Video. 9. Audio for Mobile. 10. Scaling Images for Mobile Devices. 11. Building Mobile-Friendly Forms. 12. Deploying Mobile Widgets. 13. Building a Complete Mobile Presence. 14. Using Templates.

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### NEW PERSPECTIVES ON XML,

#### **COMPREHENSIVE, 3E**

Patrick Carey, Westminster Kingsway College; Sasha Vodnik

Updated to teach the most current XML standards, this book uses real-world case studies and a practical, step-by-step approach to teach XML.

#### **NEW TO THIS EDITION**

- XML tutorials updated to cover validating both within an editor and within the latest versions of multiple browsers.
- Expanded coverage of basic and advanced schema concepts with increased hands-on instruction, including converting a DTD to a schema.
- New case scenarios in tutorials and exercises.
- New pedagogical features have been added, including Visual Overviews, ProSkills boxes, ProSkills exercises, and Key Steps.

#### **FEATURES**

- Includes ten tutorials and five appendices perfect for a semester-long introductory course on XML.
- Covers XML syntax to create valid, well-formed documents and shows how to work with namespaces to create documents combining several XML vocabularies.
- Gives a thorough lesson on Schemas in Tutorial 4 including employing multiple schemas in large document structures.
- Shows students how to work with several standard XML vocabularies, including XHTML, MathML, and RSS.
- Provides cross-browser solutions to programming with the W<sub>3</sub>C document object model.

#### **CONTENTS**

Tutorial 1: Creating an XML Document. Tutorial 2: Validating an XML Document. Tutorial 3: Working with Basic Schemas. Tutorial 4: Working with Advanced Schemas. Tutorial 5: Working with XSLT and XPath. Tutorial 6: Working with XSLT Functional Programming. Tutorial 7: Creating Element Groups. Tutorial 8: Combining XML and PHP. Tutorial 9: Working with XML and Databases. Tutorial 10: Using XML with Mobile Devices. Appendix A: Installing Exchanger Lite. Appendix B: XSLT Elements and Attributes. Appendix C: XPath Reference. Appendix D: DTD Reference. Appendix E: XML Schema Reference. Appendix F:

Regular Expressions Reference. Appendix G: XML and CSS. Appendix H: Installing XAMPP.

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#### NEW EDITION!

## PRINCIPLES OF WEB DESIGN, 6E The Web Warrior Series

Joel Sklar

PRINCIPLES OF WEB DESIGN, Sixth Edition, guides readers through the entire web site design process, while developing and enhancing HTML, CSS, and visual design skills along the way. Now updated to include designing web content for smartphones and tablets, this Sixth Edition features all-new sections on HTML5, CSS3, and responsive design as well as technical updates and new screen shots throughout. Beginning with the web design environment and the principles of sound web design, students will continue to planning site layout and navigation, and progress to web typography, colors and images, and more. With thought-provoking hands-on activities and projects, students will gain a solid foundation of designing successful, standards-based, responsive web sites that are portable across different operating systems, browsers, smartphones and tablets.

#### **NEW TO THIS EDITION**

- Includes updated examples and information on web design for smartphones and tablets.
- Offers a new chapter on building responsive web pages.
- Updated to reflect the latest HTML5 and CSS3 standards and capabilities, focusing on HTML5 elements that create structure and interaction on web pages.
- Enhanced to include examples from recent web pages

- and browsers.
- Provides new coding samples and instructions for designing contemporary web pages.

#### **FEATURES**

- Discusses the latest HTML5 and CSS3 design trends, including building responsive web pages for smartphones and tablets.
- Full color! This allows users to see the truly visual nature of the example web sites used to illustrate web design principles.
- Updated code samples and hands-on activities let students "dive under the hood" and get plenty of coding experience.
- Companion site (www.joelsklar.com/pwd6), provides additional information, code samples, and links for further research.

#### **CONTENTS**

1. HTML5. 2. Web Site Design Principles. 3. Site Planning. 4. Cascading Style Sheets. 5. Web Typography. 6. Box Properties. 7. Page Layouts. 8. Graphics and Color. 9. Site Navigation. 10. Data Tables. 11. Web Forms. 12. Responsive Web Design. Appendix A: HTML Reference. Appendix B: CSS Reference.

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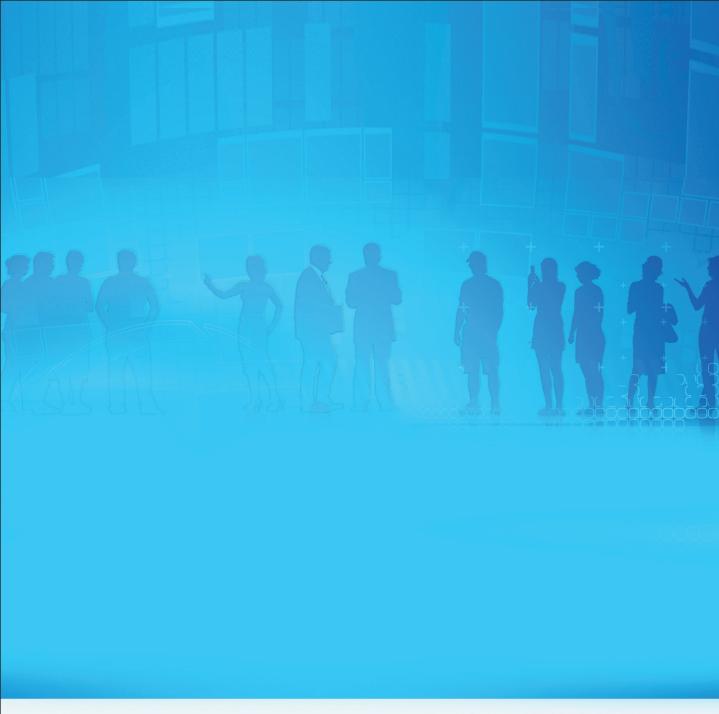


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