

Chen Li

Curriculum Vitae, As of December 18, 2021

Professor, Department of Computer Science, UC, Irvine, CA 92697-3435

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Education

1996 – 2001 Stanford University CA

Ph.D. Computer Science

Thesis: *Query Processing and Optimization in Information-Integration Systems*.

Advisor: Professor Jeffrey D. Ullman

1994 – 1996 Tsinghua University Beijing, China

M.S. Computer Science

Dissertation: *A Communication Interface based on SCI*.

Advisor: Professor Meiming Shen.

1989 – 1994 Tsinghua University Beijing, China

B.S., Computer Science. Minor: Enterprise Management

Research Interests

Databases, information systems, search, data-intensive computing, data integration, data analytics, data quality, data visualization.

Experience

11/2012–current UC Irvine, Department of Computer Science

Professor

7/2007 – 11/2012 UC Irvine, Department of Computer Science

Associate Professor

2001 – 7/2007 UC Irvine, Department of Computer Science

Assistant Professor

8/2008 – 12/2014

Founder/CTO

Started a company specialized in information access for enterprises.

Took a leave from UCI to work at SRCH2 from 7/2013 to 12/2014.

9/2005–12/2007 Google Santa Monica/Irvine, CA

Visiting Research Scientist

Full time before 12/31/2005, part time after 1/1/2006.

1996 – 2001 Stanford University, Computer Science CA

Graduate Student Researcher

Focused on database research, including data integration, web databases, data warehouses, and multimedia databases.

2000 IBM Almaden Research Center CA

Supplemental Research Associate

Researched on a web-based database system

2000	Common Object Inc.	San Mateo, CA
Consultant		
Participated in the design and implementation of a corporate database system using data-integration technologies.		
1998	Hewlett Packard Labs	Palo Alto, CA
Research Intern		
Ported a well-known main-memory database system to a shared-memory distributed system.		
1995	Chinese University of Hong Kong	Hong Kong
Student Visitor		
Studied how to reduce communication cost using a simplified transfer protocol in parallel processing.		
1993 – 1996	Tsinghua University	Beijing, China
Research Assistant		
Researched on parallel and distributed processing and high-performance networking.		

Publications

Journal Articles:

- J1. Answering Queries with Useful Bindings. Chen Li and Edward Chang. ACM Transactions on Database Systems (TODS), Volume 26, Issue 3, September 2001.
- J2. Clustering for Approximate Similarity Search in High-Dimensional Spaces. Chen Li, Edward Chang, Hector Garcia-Molina, and Gio Wiederhold. IEEE Transaction on Knowledge and Data Engineering, Volume 14, Number 4, pp.792-808, July/August 2002.
- J3. Computing Complete Answers to Queries in the Presence of Limited Access Patterns. Chen Li. VLDB J. 12(3): 211-227 (2003).
- J4. Answering Queries Using Materialized Views with Minimum Size, Rada Chirkova, Chen Li, and Jia Li, VLDB Journal (2006), Volume 15, Number 3, 191-210.
- J5. Achieving Communication Efficiency through Push-Pull Partitioning of Semantic Spaces in Client-Server Architectures, Amitabha Bagchi, Amitabh Chaudhary, Michael T. Goodrich, Chen Li, and Michal Shmueli-Scheuer. TKDE, October 2006 (Vol. 18, No. 10).
- J6. Supporting Efficient Record Linkage for Large Data Sets Using Mapping Techniques, Liang Jin, Chen Li, and Sharad Mehrotra, World Wide Web Journal, Volume 9, Issue 4, 557-584, 2006.
- J7. Rewriting Queries Using Views in the Presence of Arithmetic Comparisons, Foto Afrati, Chen Li, and Prasenjit Mitra, Theoretical Computer Science, Volume 368, Numbers 1-2, pages 88-123, 2006.
- J8. Using Views to Generate Efficient Evaluation Plans for Queries, Foto Afrati, Chen Li, and Jeff Ullman, Journal of Computer and System Sciences, 73(5), 703-724, 2007.
- J9. SEPIA: Estimating Selectivities of Approximate String Predicates in Large Databases, Liang Jin, Chen Li, and Rares Vernica, VLDB Journal, Volume 17, Issue 5, pages 1213-1229, August 2008.
- J10. Scott Christley, Yiming Lu, Chen Li, Xiaohui Xie: Human genomes as email attachments. Journal of Bioinformatics 25(2): 274-275 (2009)
- J11. Guoliang Li, Chen Li, Jianhua Feng, Lizhu Zhou: SAIL: Structure-aware indexing for effective and progressive top-k keyword search over XML documents. Inf. Sci. 179(21): 3745-3762 (2009)

- J12. Interactive and Fuzzy Search: A Dynamic Way to Explore MEDLINE, Jiannan Wang, Inci Cetindil, Shengyue Ji, Chen Li, Xiaohui Xie, Guoliang Li, Jianhua Feng, Journal of Bioinformatics, 2010.
- J13. Supporting BioMedical Information Retrieval: The BioTracer Approach, Heri Ramampiaro and Chen Li, In Transactions on Large-Scale Data- and Knowledge-Centered Systems (TLDKS), 2011, No.4. Vol. 6990, Springer. pp. 73–94.
- J14. ASTERIX: towards a scalable, semistructured data platform for evolving-world models. Alexander Behm, Vinayak R. Borkar, Michael J. Carey, Raman Grover, Chen Li, Nicola Onose, Rares Vernica, Alin Deutsch, Yannis Papakonstantinou, Vassilis J. Tsotras, Distributed and Parallel Databases, 2011, 29(3), 185-216.
- J15. Efficient fuzzy full-text type-ahead search, Guoliang Li, Shengyue Ji, Chen Li, Jianhua Feng. VLDB J. 20(4): 617-640 (2011).
- J16. Ahmadi, A., Behm, A., Honnalli, N., Li, C., Weng, L., Xie, X. (2011). Hobbes: optimized gram-based methods for efficient read alignment. Nucleic Acids Research.
- J17. SKIF-P: a point-based indexing and ranking of web documents for spatial-keyword search, Ali Khodaei, Cyrus Shahabi, Chen Li, GeoInformatica 16(3): 563-596 (2012)
- J18. Speeding Up Chemical Searches Using the Inverted Index: The Convergence of Chemoinformatics and Text Search Methods, Ramzi Nasr, Rares Vernica, Chen Li, Pierre Baldi. Journal of Chemical Information and Modeling 52(4): 891-900 (2012)
- J19. Supporting Search-As-You-Type Using SQL in Databases, Guoliang Li, Jianhua Feng, Chen Li, IEEE Trans. Knowl. Data Eng. 25(2): 461-475 (2013)
- J20. Improving read mapping using additional prefix grams, Jongik Kim, Chen Li, Xiaohui Xie. BMC Bioinformatics 15: 42 (2014)
- J21. Negative Factor: Improving Regular-Expression Matching in Strings, Xiaochun Yang, Tao Qiu, Bin Wang, Baihua Zheng, Yaoshu Wang, Chen Li, ACM TODS, 2015.
- J22. Robust and Efficient Memory Management in Apache AsterixDB, by Taewoo Kim, Alexander Behm, Michael Blow, Vinayak Borkar, Yingyi Bu, Michael Carey, Murtadha Al Hubail, Shiva Jahangiri, Jianfeng Jia, Chen Luo, Ian Maxon, Pouria Pirzadeh, Journal of Software: Practice and Experience, 2020.
- J23. Similarity query support in big data management systems, Taewoo Kim, Wenhai Li, Alexander Behm, Inci Cetindil, Rares Vernica, Vinayak Borkar, Michael J. Carey, Chen Li, Information Systems, Volume 88, February 2020.
- J24. Why Do People Oppose Mask Wearing? A Comprehensive Analysis of US Tweets During the COVID-19 Pandemic, Lu He, Changyang He, Tera L Reynolds, Qiushi Bai, Yicong Huang, Chen Li, Kai Zheng, Yunan Chen, JAMIA 2021.
- J25. The Social Amplification and Attenuation of COVID-19 Risk Perception Shaping Mask Wearing Behavior: A Longitudinal Twitter Analysis, Suellen Hopfer, Emilia J. Fields, Yuwen Lu, Ganesh Ramakrishnan, Ted Grover, Quishi Bai, Yicong Huang, Chen Li, and Gloria Mark, PLOS ONE, 2021.

Peer-reviewed Conferences Full Papers:

- C1. Performance Analysis of the Communication Mechanism for POE Workstation Cluster. Weiqiang Zhuang, Chen Li, Meiming Shen. Microcomputer & Micro-system, Jan, 1995.

- C2. 2D BubbleUp: Managing Parallel Disks for Media Servers. Edward Chang, Hector Garcia-Molina, and Chen Li. Proc. of International Conference of Foundations of Data Organization (FODO'98), pages 221-230, Kobe, Japan, 1998.
- C3. RIME: A Replicated Image Detector for the World-Wide Web. Edward Chang, James Ze Wang, Chen Li, and Gio Wiederhold. Proceedings of SPIE Symposium of Voice, Video, and Data Communications, pages 58—67, Boston, MA, November 1998.
- C4. Searching Near-Replicas of Images via Clustering. Edward Chang, Chen Li, James Wang, Peter Mork, and Gio Wiederhold. Proc. of SPIE Symposium of Voice, Video, and Data Communications, Multimedia Storage and Archiving Systems VI, pages 281-292, Boston, MA, September, 1999.
- C5. Optimizing Large Join Queries in Mediation Systems. Ramana Yerneni, Chen Li, Jeffrey Ullman, Hector Garcia-Molina. International Conference on Database Theory (ICDT), Jerusalem, Israel, January, 1999. (29% accepted)
- C6. Computing Capabilities of Mediators. Ramana Yerneni, Chen Li, Hector Garcia-Molina, Jeffrey Ullman. SIGMOD'99, Philadelphia, PA, May 1999. (20% accepted)
- C7. Query Planning with Limited Source Capabilities. Chen Li and Edward Chang. Proc. of International Conference on Database Engineering (ICDE), pages 401-412, San Diego, CA, February, 2000. (14% accepted)
- C8. On Answering Queries in the Presence of Limited Access Patterns. Chen Li and Edward Chang. Proc. of International Conference on Database Theory (ICDT), pages 219-233, London, UK, January, 2001. (35% accepted)
- C9. Minimizing View Sets without Losing Query-Answering Power. Chen Li, Mayank Bawa, and Jeff Ullman. Proc. of International Conference on Database Theory (ICDT), pages 99-113, London, UK, January, 2001. (35% accepted)
- C10. Generating Efficient Plans for Queries Using Views. Foto Afrati, Chen Li, and Jeff Ullman. Proc. of ACM SIGMOD, pages 319 - 330, Santa Barbara, CA, May, 2001. (15% accepted)
- C11. Answering Queries Using Views with Arithmetic Comparisons. Foto Afrati, Chen Li, and Prasenjit Mitra. In Proc. of ACM PODS, pages 209-220, June 2002, Madison, Wisconsin. (22% accepted)
- C12. Executing SQL over Encrypted Data in the Database-Service-Provider Model. Hakan Hacigumus, Bala Iyer, Chen Li, and Sharad Mehrotra. In Proc. of ACM SIGMOD, pages 216-227, June 2002, Madison, Wisconsin. (18% accepted). **Received SIGMOD 2012 10-year Test-of-Time Award.**
- C13. Efficient Record Linkage in Large Data Sets, Liang Jin, Chen Li, and Sharad Mehrotra, Proc. of the 8th International Conference on Database Systems for Advanced Applications (DASFAA), pages 137-146, March, 2003, Kyoto, Japan. (33% accepted). **Received DASFAA 2013 10-year Best Paper Award.**
- C14. Materializing Views with Minimal Size to Answer Queries. Rada Chirkova and Chen Li. Proc. of ACM PODS, pages 38-48, San Diego, CA, June 2003. (20% accepted).
- C15. On Containment of Conjunctive Queries with Arithmetic Comparisons. Foto Afrati, Chen Li, Prasenjit Mitra. Proc. of EDBT'04, pages 459-476, Crete, Greece, March 2004 (14% accepted).
- C16. NNH: Improving Performance of Nearest-Neighbor Searches Using Histograms. Liang Jin, Nick Koudas, Chen Li. Proc. of EDBT'04, pages

- 385-402, Crete, Greece, March 2004. (14% accepted).
- C17. Secure XML Publishing without Information Leakage in the Presence of Data Inference. Xiaochun Yang and Chen Li, Proc. of VLDB'04, pages 96-107, August 29 -- September 3, Toronto, Canada. (16% accepted).
 - C18. Indexing Mixed Types for Approximate Retrieval, Liang Jin, Nick Koudas, Chen Li, Anthony K.H. Tung. VLDB 2005. (16% accepted).
 - C19. Selectivity Estimation for Fuzzy String Predicates in Large Data Sets, Liang Jin and Chen Li. VLDB 2005. (16% accepted).
 - C20. Relaxing Join and Selection Queries. Nick Koudas, Chen Li, Anthony Tung, and Rares Vernica. VLDB 2006, Seoul, Korea, 2006. (13.2% accepted)
 - C21. Supporting Approximate Similarity Queries with Quality Guarantees in P2P Systems, Qi Zhong, Iosif Lazaridis, Mayur Deshpande, Chen Li, Sharad Mehrotra, Hal Stern, COMAD 2006, December 14-16, 2006, Delhi, India. (26% accepted)
 - C22. Protecting Individual Information Against Inference Attacks in Data Publishing, Chen Li, Houtan Shirani-Mehr, and Xiaochun Yang. DASFAA 2007. (18.7% accepted)
 - C23. VGRAM: Improving Performance of Approximate Queries on String Collections Using Variable-Length Grams, Chen Li, Bin Wang, and Xiaochun Yang. VLDB 2007.
 - C24. Processing Spatial-Keyword (SK) Queries in Geographic Information Retrieval (GIR) Systems, Ramaswamy Hariharan, Bijit Hore, Chen Li, Sharad Mehrotra, SSDBM, 2007.
 - C25. Data Exchange with Arithmetic Comparisons, Foto Afrati, Chen Li, and Vassia Pavlaki. EDBT 2008.
 - C26. Efficient Merging and Filtering Algorithms for Approximate String Searches, Chen Li, Jiaheng Lu, Yiming Lu, ICDE 2008, 257-266.
 - C27. Supporting Keyword Queries on Structured Databases with Limited Search Interfaces Nurcan Yuruk, Xiaowei Xu, Chen Li, Jeffrey Xu Yu, DASFAA 2008.
 - C28. Cost-Based Variable-Length-Gram Selection for String Collections to Support Approximate Queries Efficiently, Xiaochun Yang, Bin Wang, and Chen Li, ACM SIGMOD 2008.
 - C29. Space-Constrained Gram-Based Indexing for Efficient Approximate String Search, Alexander Behm, Shengyue Ji, Chen Li, and Jiaheng Lu, ICDE 2009.
 - C30. Best-Effort Top-k Query Processing Under Budgetary Constraints, Michal Shmueli-Scheuer, Chen Li, Yosi Mass, Haggai Roitman, Ralf Schenkel, and Gerhard Weikum, ICDE 2009.
 - C31. Guoliang Li, Shengyue Ji, Chen Li, Jianhua Feng: Efficient type-ahead search on relational data: a TASTIER approach, SIGMOD Conference, 2009.
 - C32. Shengyue Ji, Guoliang Li, Chen Li, Jianhua Feng: Efficient interactive fuzzy keyword search, International World Wide Web Conference, 2009.
 - C33. Efficient Approximate Search on String Collections (Tutorial), Marios Hadjieleftheriou, Chen Li, PVLDB 2009.
 - C34. Efficient parallel set-similarity joins using MapReduce, Rares Vernica, Michael J. Carey, Chen Li. SIGMOD 2010.
 - C35. Hybrid Indexing and Seamless Ranking of Spatial and Textual Features of Web Documents, Ali Khodaei, Cyrus Shahabi, Chen Li, DEXA 2010.
 - C36. Supporting Location-Based Approximate-Keyword Queries. Sattam Alsubaiee, Alexander Behm, Chen Li, ACM GIS 2010.
 - C37. Answering Approximate String Queries on Large Data Sets Using External Memory, Alexander Behm, Chen Li, and Michael Carey, ICDE

- 2011.
- C38. CHIME: An Efficient Error-Tolerant Chinese Pinyin Input Method, Yabin Zheng, Chen Li, Maosong Sun, IJCAI 2011, 2551-2556.
 - C39. Location-Based Instant Search, Shengyue Ji, Chen Li, SSDBM 2011: 17-36.
 - C40. Inside “Big Data Management”: Ogres, Onions, or Parfaits? Vinayak Borkar, Michael J. Carey, and Chen Li, EDBT 2012
 - C41. Supporting Efficient Top-k Queries in Type-Ahead Search, Guoliang Li, Jiannan Wang, Chen Li, Jianhua Feng, SIGIR 2012.
 - C42. Efficient direct search on compressed genomic data, Xiaochun Yang, Bin Wang, Chen Li, Jiaying Wang, Xiaohui Xie, ICDE 2013: 961-972
 - C43. Improving regular-expression matching on strings using negative factors, Xiaochun Yang, Bin Wang, Tao Qiu, Yaoshu Wang, Chen Li, SIGMOD Conference 2013: 361-372
 - C44. String similarity measures and joins with synonyms, Jiaheng Lu, Chunbin Lin, Wei Wang, Chen Li, Haiyong Wang, SIGMOD Conference 2013: 373-384
 - C45. Storage Management in AsterixDB, Sattam Alsubaiee, Alexander Behm, Vinayak R. Borkar, Zachary Heilbron, Young-Seok Kim, Michael J. Carey, Markus Dreseler, Chen Li, PVLDB 7(10): 841-852 (2014)
 - C46. AsterixDB: A Scalable, Open Source BDMS, Sattam Alsubaiee, Yasser Altowim, Hotham Altwaijry, Alexander Behm, Vinayak R. Borkar, Yingyi Bu, Michael J. Carey, Inci Cetindil, Madhusudan Cheelangi, Khurram Faraaz, Eugenia Gabrielova, Raman Grover, Zachary Heilbron, Young-Seok Kim, Chen Li, Guangqiang Li, Ji Mahn Ok, Nicola Onose, Pouria Pirzadeh, Vassilis J. Tsotras, Rares Vernica, Jian Wen, Till Westmann, PVLDB 7(14): 1905-1916 (2014)
 - C47. Efficient instant-fuzzy search with proximity ranking, Inci Cetindil, Jamshid Esmaelnezhad, Taewoo Kim, Chen Li. ICDE 2014: 328-339.
 - C48. LSM Based Storage and Indexing: An Old Idea with Timely Benefits, Alsubaiee, S., Carey, M. J., Li, C. GeoRich (2015).
 - C49. Hobbes3: Dynamic Generation of Variable-Length Signatures for Efficient Approximate Subsequence Mappings, Jongik Kim, Chen Li, Xiaohui Xie, ICDE 2016. A Comparative Study of Log-Structured Merge-Tree-Based Spatial Indexes for Big Data, Young-Seok Kim, Taewoo Kim, Michael J. Carey, Chen Li, ICDE 2017 Poster.
 - C50. Twitter Coverage of Climate Change and Health before and after the 2016 US Presidential Election, Suellen Hopfer, Miryha Runnerstrom, Jianfeng Jia, Taewoo Kim, Chen Li, American Public Health Association 2017.
 - C51. Visual Analytics Ecology for Complex System Testing, Simon Su, Michael Barton, Michael An, Vincent Perry, Chen Li, Jianfeng Jia, Brian Panneton, Visualization in Practice 2017 at IEEE VIS 2017.
 - C52. Drum: A Rhythmic Approach to Interactive Analytics on Large Data, Jianfeng Jia, Chen Li, Michael J. Carey, IEEE Big Data 2017.
 - C53. Supporting Similarity Queries in Apache AsterixDB Taewoo Kim, Wenhai Li, Alexander Behm, Inci Cetindil, Rares Vernica, Vinayak Borkar, Michael Carey, Chen Li, EDBT 2018.
 - C54. ZigZag: Supporting Similarity Queries on Vector Space Models, Wenhai Li, Lingfeng Deng, Yang Li, and Chen Li, SIGMOD 2018.
 - C55. Inves: Incremental Partitioning-Based Verification for Graph Similarity Search, Jongik Kim, Dong-Hoon Choi and Chen Li, EDBT 2019.
 - C56. Use of Twitter data to improve Zika virus surveillance in the United States during the 2016 epidemic, Shahir Masri, Jianfeng Jia, Chen Li, Guofa Zhou, Ming-Chieh Lee, Guiyun Yan and Jun Wu, BMC Public Health, 2019.

- C57. Amber: A Debuggable Dataflow System Based on the Actor Model, Avinash Kumar, Zuozhi Wang, Shengquan Ni, and Chen Li, VLDB 2020.
- C58. Tempura: A General Cost-Based Optimizer Framework for Incremental Data Processing, Zuozhi Wang, Kai Zeng, Botong Huang, Wei Chen, Xiaozong Cui, Bo Wang, Ji Liu, Liya Fan, Dachuan Qu, Zhenyu Hou, Tao Guan, Chen Li, Jingren Zhou, VLDB 2021.
- C59. JEDI: These aren't the JSON documents you're looking for..., Thomas Hütter, Nikolaus Augsten, Christoph Kirsch, Michael Carey, and Chen Li, SIGMOD 2022.

Peer-reviewed Workshop Publications and Demos (appeared in Proceedings):

- W1. HiComm -- A New Technique for Improving Communication Performance in Workstation Cluster. Chen Li, Weiqiang Zhuang, Meiming Shen, Dingxing Wang, Weimin Zheng, APPT'95, October, 1995, Beijing, China.
- W2. Capability Based Mediation in TSIMMIS. Chen Li, Ramana Yerneni, Vasilis Vassalos, Hector Garcia-Molina, Yannis Papakonstantinou, Jeffrey Ullman, Murty Valiveti. Proc. of ACM SIGMOD, Demo track, pages 564 – 566, Seattle, WA, June, 1998.
- W3. Towards Perception-Based Image Retrieval. Edward Chang, Beitaio Li, and Chen Li. Proceedings of IEEE Workshop on Content-based Access of Image and Video Libraries, pages 401-412, South Carolina, June, 2000.
- W4. Answering Queries with Database Restrictions (Research Summary). Chen Li. Symposium on Abstraction, Reformulation and Approximation (SARA), pages 328 – 329, July 2000, Horseshoe Bay (Lake LBJ), Texas.
- W5. Describing and Utilizing Constraints to Answer Queries in Data-Integration Systems. Chen Li. Online Proc. of IJCAI 2003 workshop on Information Integration on the Web, pages 163-168, August 2003, Acapulco, Mexico.
- W6. Schema-Guided Wrapper Maintenance for Web-Data Extraction. Xiaofeng Meng, Dongdong Hu, Chen Li. Proc. of International Workshop on Web Information and Data Management (WIDM), pages 1-8, New Orleans, Louisiana, Nov. 2003. (28% accepted)
- W7. A Supervised Visual Wrapper Generator for Web-Data Extraction. Xiaofeng Meng, Haiyan Wang, Dongdong Hu, Chen Li: Proc. of the 28th Annual International Computer Software and Applications Conference (COMPSAC), pages 657 – 662, Dallas, TX, Nov. 2003.
- W8. RACCOON: A Peer-Based System for Data Integration and Sharing. Chen Li, Jia Li, Qi Zhong. Proc. of ICDE'2004, page 852, Boston, MA, March 2004, demo track. (58% accepted)
- W9. XGuard: A System for Publishing XML Documents without Information Leakage in the Presence of Data Inference. Proc. of ICDE'2005, Demo track, Tokyo Japan, March 2005.
- W10. Answering Aggregation Queries on Hierarchical Web Sites Using Adaptive Sampling. Foto Afrati, Paraskevas Lekeas, and Chen Li. Technical Report, UCI ICS, August 2005. A short version appears in CIKM'2005, 31st October - 5th November, 2005 Bremen, Germany.
- W11. Quality-Driven Approximate Methods for GIS Data Integration. Ramaswamy Hariharan, Michal Schmueli-Scheuer, Chen Li, and Sharad Mehrotra. ACM GIS 2005, November 4-5th, 2005 Bremen, Germany.
- W12. Communication-Efficient Query Answering with Quality Guarantees in

- Client-Server Applications. Michal Shmueli-Scheuer, Amitabh Chaudhary, Avigdor Gal, Chen Li. WebDB 2007
- W13. Quality-Aware Retrieval of Data Objects from Autonomous Sources for Web-Based Repositories, Houtan Shirani-Mehr, Chen Li, Gang Liang, Michal Shmueli-Scheuer, ICDE 2008.
- W14. Rares Vernica, Chen Li: Efficient top-k algorithms for fuzzy search in string collections. KEYS 2009: 9-14
- W15. Automatic URL Completion and Prediction Using Fuzzy Type-Ahead Search, Jiannan Wang, Guoliang Li, Jianhua Feng, Chen Li, SIGIR 2009 (Poster)
- W16. Efficient fuzzy type-ahead search in TASTIER, Guoliang Li, Shengyue Ji, Chen Li, Jiannan Wang, Jianhua Feng, ICDE 2010, Demo.
- W17. Fuzzy Keyword Search on Spatial Data, Sattam Alsubaiee, Chen Li, DASFAA 2010. (Excellent Demo Award)
- W18. Seaform: Search-As-You-Type in Forms, Hao Wu, Guoliang Li, Chen Li, Lizhu Zhou, VLDB 2010 (Demo).
- W19. The Flamingo Software Package on Approximate String Queries. Chen Li, DASFAA Workshops 2011, 477.
- W20. Big data platforms: what's next? Vinayak R. Borkar, Michael J. Carey, Chen Li, ACM Crossroads 19(1): 44-49 (2012)
- W21. ASTERIX: An Open Source System for "Big Data" Management and Analysis, Sattam Alsubaiee, Yasser Altowim, Hotham Altwaijry, Alexander Behm, Vinayak R. Borkar, Yingyi Bu, Michael J. Carey, Raman Grover, Zachary Heilbron, Young-Seok Kim, Chen Li, Nicola Onose, Pouria Pirzadeh, Rares Vernica, Jian Wen. PVLDB 5(12): 1898-1901 (2012)
- W22. ASTERIX: Scalable Warehouse-Style Web Data Integration, Sattam Alsubaiee, Alexander Behm, Raman Grover, Rares Vernica, Vinayak Borkar, Michael J. Carey, Chen Li. IIWeb 2012 (co-located with SIGMOD 2012).
- W23. Towards Interactive Analytics and Visualization on One Billion Tweets, Jianfeng Jia, Chen Li, Xi Zhang, Chen Li, Michael J. Carey, Simon Su, ACM GIS 2016
- W24. A Demonstration of TextDB: Declarative and Scalable Text Analytics on Large Data Sets, Zuozhi Wang, Flavio Bayer, Seungjin Lee, Kishore Narendran, Xuxi Pan, Qing Tang, Jimmy Wang, Chen Li, ICDE 2017 Demo. **(Best Demo award)**.
- W25. Caching Geospatial Objects in Web Browsers, Taewoo Kim, Vidhyasagar Thirumaraiselvan, Jianfeng Jia, Chen Li, ACM SIGSPATIAL 2017 (Demo Paper).
- W26. End-to-End Machine Learning with Apache AsterixDB, Wail Alkowiileet, Sattam Alsubaiee, Michael J. Carey, Chen Li, Heri Ramampiaro, Phanwadee Sinthong, Xikui Wang, DEEM Workshop 2018 (Co-located with SIGMOD)
- W27. Visually Analyzing A Billion Tweets: An Application for Collaborative Visual Analytics on Large High-Resolution Display, Simon Su, Michael An, Vincent Perry, Jianfeng Jia, Taewoo Kim, Te-Yu Chen, Chen Li, Workshop on Analysis of Large-scale Disparate Data. BigData 2018: 3597-3606.
- W28. Heatflip: Temporal-Spatial Sampling for Progressive Heat Maps on Social Media Data, Niklas Stoehr, Johannes Meyer, Volker Markl, Qiushi Bai, Taewoo Kim, De-Yu Chen, Chen Li. Workshop on Big Social Media Data Management and Analysis (BSMDMA2018), BigData 2018: 3723-3732
- W29. Grosbeak: A Data Warehouse Supporting Resource-Aware Incremental Computing, Zuozhi Wang, Kai Zeng, Botong Huang, Wei

Chen, Xiaozong Cui, Bo Wang, Ji Liu, Liya Fan, Dachuan Qu, Zhenyu Ho, Tao Guan, Chen Li, Jingren Zhou, SIGMOD 2020 (Demo).

- W30. Demonstration of Interactive Runtime Debugging of Distributed Dataflows in Texera, Zuozhi Wang, Avinash Kumar, Shengquan Ni, and Chen Li, VLDB 2020 (Demo).

Non-refereed Publications and Book Chapters:

- O1. Managing Parallel Disks for Continuous Media Data. Edward Chang, Chen Li, and Hector Garcia-Molina. A Book Chapter in Information Organization & Databases, p.107-120, Kluwer Publisher, 2000
- O2. Using Constraints to Describe Source Contents in Data Integration Systems. Chen Li, IEEE Intelligent Systems 18(5): 49-53 (2003).
- O3. Recent Progress on Selected Topics on Database Research -- A Report from Nine Young Chinese Researchers Working in the United States. The Journal of Computer Science and Technology, Zhiyuan Chen, Chen Li, Jian Pei, Yufei Tao, Haixun Wang, Wei Wang, Jiong Yang, Jun Yang, and Donghui Zhang. Journal of Computer Science and Technology, Volume 18, Issue 5, Pages 538 – 552, September 2003.
- O4. Report on the First International VLDB Workshop on Clean Databases (CleanDB 2006), Dongwon Lee and Chen Li, ACM SIGMOD Record, 36(1), 54 – 56, 2007.
- O5. Chen Li: Rewriting Queries using Views. Encyclopedia of Database Systems 2009: 2438-2441
- O6. Search-As-You-Type: Opportunities and Challenges, Chen Li, Guoliang Li, IEEE Data Eng. Bull. 2010.
- O7. Record Linkage: A 10-Year Retrospective. Chen Li, Sharad Mehrotra, Liang Jin, DASFAA (1) 2013: 3-12

Patents

- Li, C., Wang, B., Yang, X., Patent, "IMPROVING PERFORMANCE OF APPROXIMATE STRING QUERIES USING VARIABLE-LENGTH HIGH-QUALITY GRAMS", US Patent 7996369, <http://www.google.com/patents/US7996369>
- Li, C., Li, G., Ji, S., Wang, J., Feng, J., Patent, "SUPPORTING INTERACTIVE, FUZZY SEARCH ON STRUCTURED DATA EFFICIENTLY", US Patent 8631035, <http://www.google.com/patents/US8631035>

Recent Professional activities

- ACM distinguished member (since 2018)
- Faculty Director of the ICS Master of Computer Science Program, UCI, since 2020.
- Treasurer and board member of the VLDB Endowment, since 1/2020.
- Co-Chair, VLDB 2021 Industrial Track
- Committee members: SIGMOD 2021, SIGMOD 2020, VLDB 2019, SIGMOD 2018, VLDB 2018
- Liaison for VLDB 2019 industrial sponsors
- Tutorial co-chair for Big Data 2019
- July 2016 – 2017: ICDE 2017 Area Chair
- Oct. 2015 – Sept. 2017: PVLDB advisory committee member
- Oct. 2015 – 2016: Guest editor of VLDBJ Special Issue for VLDB 2015.
- Co-PC chair of VLDB2015
- Program Member and Proceedings Chair, ACM PODS 2005.

Awards and

- 2019: NSF grant titled “CCRI: ENS: Collaborative Research: Supporting

Funding

- and Sustaining Apache AsterixDB for the CISE Research Community”.
- 2019: Research grant from Orange County Health Care Agency (OCHCA)
- 2018: NIH subawards on social media analysis
- 2018: Research grant from Orange County Health Care Agency (OCHCA)
- 2018: Research grant from Alibaba
- 2017 NSF EAGER grant.
- ICDE 2017 Best Demo Award.
- 2016, Research fund from ARL (Army Research Lab)
- 2013, NSF grant 1305430 titled “CI-ADDO-NEW: Asterix: A Community Software Platform for Big Data Research, Analysis, and Management.”
- 2013, Gift funds from HTC.
- 2013, DASFAA 10-year Best Paper Award.
- 2012, ACM SIGMOD 10-year Test-of-Time award.
- 2012, UCI ICS Dean’s Award for Graduate Student Mentoring.
- 2011, the third place at the Microsoft Speller Challenge competition.
- 2010, NIH grant (\$372,360) to support research on the iPubmed system
- 2010, Intel grant on compression of human genome data.
- 2010, NSF research award IIS 1030002 on powerful keyword search in a cloud-computing infrastructure.
- 2009, NSF research award 0910989 titled "DC: Large: Collaborative Research: ASTERIX: A Highly Scalable Parallel Platform for Semistructured Data Management and Analysis."
- 2009, NSF grant 0844574 titled “Supporting efficient fuzzy queries on large text repositories using Hadoop.”
- 2009, UCI ICS Dean's Award for excellence in Mid-Career Research, 2009.
- 2007, NSF Grant titled “SGER: Answering Approximate String Queries Using Variable-Length Grams”
- 2006, ICS Ted & Janice Smith Faculty Seed Fund
- 2006, Google Research Award, \$37.5K, renewable for a 2nd year.
- 2006: Gift Fund from Microsoft Research (7K).
- 2005: UCI Career Development Award.
- 2003 NSF CAREER Award, \$400K, PI, starting 9/1/2003, for 5 years.
- 2003 NSF ITR Award 0331707, “Responding to the Unexpected,” \$12.5M for 5 years, Senior Investigator, starting 10/1/2003.
- Single Investigator Innovation Grant: CORCLR, UC Irvine, May 2003.
- Stanford Graduate Fellowship, Stanford University, 1997 – 2001.
- Merit-Based Scholarships, Tsinghua University, China, 1994 – 1996.
- Outstanding Student Award, Tsinghua University, June 1994.
- Entrance exams waived, Tsinghua University, 1994 and 1989.