

Curriculum Vitae — Jianliang Xu

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ACADEMIC POSITIONS

September 2013 – Present	Full Professor , Hong Kong Baptist University
September 2008 – August 2013	Associate Professor , Hong Kong Baptist University
December 2009 – January 2010	Senior Visiting Fellow , Fudan University, China
May 2005 – June 2005	Visiting Scholar , Pennsylvania State University, University Park, USA
September 2002 – August 2008	Assistant Professor , Hong Kong Baptist University

RESEARCH INTERESTS

Big Data Management, Blockchain, Mobile Computing, Data Security and Privacy

EDUCATION

Ph.D., August 2002, Computer Science, Hong Kong University of Science and Technology, Hong Kong
Dissertation: “Client-Side Data Caching in Mobile Computing Environments”

B.Eng. (First Class Honors), June 1998, Computer Science & Engineering, Zhejiang University, Hangzhou, China

AWARDS & HONORS

- Best Paper Award, The 20th International Conference on Web Information Systems Engineering (WISE), 2019
- VLDB Distinguished Reviewer Award, 2019
- Nominated for UGC Teaching Award (General Faculty Member), 2018
- HKBU President’s Award for Outstanding Performance in Teaching, 2018
- HKBU President’s Award for Outstanding Performance in Scholarly Work, 2017
- HKBU Faculty Performance Award for Outstanding Young Researcher, 2012
- First-Class Award, The 12th National Challenge Cup Contest, 2011
- Best Student Paper Award Runner-up, The 15th International Conference on Database Systems for Advanced Applications (DASFAA), 2010
- Champion University Award (Team Coach), IBM-HK Inter-University Programming Contest, 2008
- Zhu Kezhen Scholarship (竺可楨獎學金), the highest honor for graduates of Zhejiang University (*only top 6 out of 2000+ graduates awarded in that year*), 1998

RESEARCH GRANTS (*Totalling over HK\$25M in PI capacity, including 14 GRF projects*)

A. RGC / General Research Fund (GRF, formerly known as CERG)

1. **Principal Investigator**, “Stateless Blockchains for Scalable Transaction Processing,” RGC/GRF, HKBU 12201520, 2021-2023, HK\$1,057,394.
2. **Principal Investigator**, “Towards Integrity-Assured Search in Scalable Blockchain Systems,” RGC/GRF, HKBU 12200819, 2020-2022, HK\$731,089.

3. **Principal Investigator**, “Verifiable Publish/Subscribe Queries over Outsourced Data Streams,” RGC/GRF, HKBU12201018, 2019-2021, HK\$693,000.
 4. **Principal Investigator**, “Keyword-based Spatial Influence Queries,” RGC/GRF, HKBU12200817, 2018-2020, HK\$875,000.
 5. **Principal Investigator**, “Authenticated Analytical Query Services on Set-Valued Data,” RGC/GRF, HKBU12244916, 2017-2019, HK\$844,559.
 6. **Principal Investigator**, “Social-Aware Ridesharing in Location-Based Services,” RGC/GRF, HKBU12201615, 2016-2018, HK\$496,028.
 7. **Principal Investigator**, “Authenticated Queries for Cloud-Assisted Multi-Source Data Collection,” RGC/GRF, HKBU12202414, 2015-2018, HK\$875,000.
 8. **Principal Investigator**, “Differentially Private Publication of Network Data via Density-Based Exploration and Reconstruction,” RGC/GRF, HKBU12200914, 2014-2017, HK\$500,000.
 9. **Principal Investigator**, “iGPS: Privacy-Preserving Geo-Proximity Services in Location-based Social Networks,” RGC/GRF, HKBU211512, 2012-2015, HK\$700,000.
 10. **Principal Investigator**, “Transaction Management for Flash-based Database Systems: Protocols, Implementations and Optimizations,” RGC/GRF, HKBU211510, 2010-2012, HK\$600,636.
 11. **Principal Investigator**, “Query Processing in Flash-Based Storage-Centric Sensor Networks,” RGC/GRF, HKBU210808, 2009-2011, HK\$307,657.
 12. **Principal Investigator**, “Data-Centric Filter Management and Routing Optimization for Distributed Monitoring Systems,” RGC/GRF, HKBU211307, 2008-2010, HK\$381,150.
 13. **Principal Investigator**, “iPDA: Privacy-Preserving Location-based Data Access in Mobile Environments,” HKBU 2112/06E, RGC/GRF, HKBU211206, 2006-2009, HK\$356,000.
 14. **Principal Investigator**, “ECOQUAD: Energy-Conserving Quality-Aware Data Collection in Wireless Sensor Networks,” RGC/GRF, HKBU2115/05E, 2005-2008, HK\$391,852.
 15. **Co-Investigator**, “Semantic Indexing for Keyword Search on Graphs,” RGC/GRF, PI: Byron Choi, HKBU 12201119, 2020-2022, HK\$518,999.
 16. **Co-Investigator**, “Development and Evaluation of an Internet-based Cognitive Behavioral Intervention Program for Reducing Psychological Distress of Chinese University Students in Hong Kong,” RGC/GRF, PI: Jiayan Pan, HKBU 12606118, 2019-2021, HK\$964,160.
 17. **Co-Investigator**, “Exploring the Structural Critical Entities in Big Attributed Graphs,” RGC/GRF, PI: Zhiwei Zhang, HKBU 12201518, 2019-2021, HK\$693,000.
 18. **Co-Investigator**, “Efficient Graph Search Algorithms for Public-Private Social Networks,” RGC/GRF, PI: Xin Huang, HKBU 12200917, 2017-2020, HK\$500,000.
 19. **Co-Investigator**, “Incognito Browsing of Spatial-Temporal Data Using Computational Private Information Retrieval,” RGC/GRF, PI: Haibo Hu, HKBU 12200914, 2014-2017, HK\$692,894.
 20. **Co-Investigator**, “Spatio-Temporal Attestation for Location-based Services Using Private Signatures,” RGC/GRF, PI: Haibo Hu, HKBU210612, 2012-2015, HK\$690,000.
 21. **Co-Investigator**, “Privacy-Conscious Query Authentication for Outsourced and Cloud Databases,” RGC/GRF, PI: Haibo Hu, HKBU210811, 2011-2013, HK\$911,375.
 22. **Co-Investigator**, “Optimizations for the View Update Problem with Emerging Applications,” RGC/GRF, PI: Byron Choi, HKBU210409, 2010-2011, HK\$329,952.
 23. **Co-Investigator**, “Wireless Information Publication and Access,” RGC/GRF, PI: Dik Lee, HKUST6179/03E, 2003-2005, HK\$414,398.
- B. RGC / Collaborative Research Fund (CRF)**
24. **Co-PI**. “A Human-Powered Machine Learning System,” CRF C6030-18G, 2019-2022, HK\$3,716,381 (HK\$621,000 allocated to HKBU).
 25. **Co-PI**. “Security and Privacy-enhancing Technologies for Cloud Storage of Big Data,” CRF C1008-16G, 2017-2020, HK\$5,983,404 (HK\$1,020,000 allocated to HKBU).
- C. RGC / Research Impact Fund (RIF)**
26. **Co-PI**. “Development and Evaluation of the Effectiveness of an Online Cognitive Behavioral Intervention Program for Hong Kong People with Social Anxiety Disorder,” RIF R2018-18, 2019-2023, HK\$6,286,227.
- D. RGC / German-Hong Kong Joint Research Scheme**

27. **PI**, “Energy-Efficient Data Management with Novel Storage Technologies” (German partner: Prof. Theo Härder / University of Kaiserslautern), G_HK018/11, 2012-2013, \$52,000.

E. ITC / Innovation and Technology Fund (ITF)

28. **PI**, “Privacy-Preserving Large-Scale Indoor Location Tracking using Wearable Devices,” ITF/ITSP Tier 2, ITS/288/15FX & InP/085/16 & InP/129/16, 2016-2018, HK\$2,002,150 + HK\$381,360 + HK\$373,326.
29. **Co-PI & Deputy Coordinator**, “Development of an Online Cognitive Behavioural Intervention Program to Reduce Depressive Symptoms for Adults with Depression,” ITB/FBL/1002/18/P, 2019-2021, HK\$4,664,561.
30. **Co-I & Research Team Leader**, “Hybrid Geofencing Systems for Elderly and Child Care,” ITF/ITSP Tier 2, ITS/231/13FX, 2014-2016, HK\$2,378,200.
31. **Co-I**, “Big Data and Deep Learning Based Online Education Platform,” ITF/ITSP Tier 2, ITS/443/16FX, 2017-2019, HK\$3,500,000.

F. National Natural Science Foundation of China (NSFC) and Others

32. **Co-PI**, “城市大數據與智能處理關鍵理論與技術”, 廣東省基礎與應用基礎研究基金-粵港澳研究團隊, Guangdong Basic and Applied Basic Research Foundation, 2019B1515130001, 2020.1-2023.12, ¥3,000,000, (¥600,000 allocated to HKBU).
33. **PI**, “陽江地方特色產業防偽溯源區塊鏈創新服務平台”, 廣東省科技專項資金, SDZX2019042, 2019.7-2021.6, ¥2,000,000,
34. **PI**, “The 20th IEEE Int’l Conf. on Mobile Data Management (MDM)”, Croucher Foundation, 2019.6, \$90,000.
35. **PI**, “Design and Optimization of GPU Accelerated AI Engine for Name Entity Recognition”, ASTRI, 2019.4-2019.6, \$250,000.
36. **PI**, “Blockchain-based Supply Chain System”, Consultancy Project, Zhongshuo (Hong Kong) Co., Ltd., 2018.5-2020.4, \$486,000.
37. **Co-I**, “Community Search over Big Attributed Graphs”, NSFC, Project No. 61702435, 2018.1-2020.12, ¥290,000.
38. **Co-I**, “Cluster-based Publish/Subscribe over Geo-Textual Streams”, NSFC, Project No. 61702436, 2018.1-2020.12, ¥210,000.
39. **Co-PI**, “新一代無線智能體驗終端與大數據採集分析平台研發”, 廣州市科技計劃項目產學研協同創新重大專項(港澳台地區合作項目). 2017.5-2019.4, ¥1,000,000.
40. **Co-I**, “Privacy-Preserving Search over Massive Data”, NSFC, Project No. 61572413, ¥630,000, 2016.1-2019.12.
41. **Co-I**, “Crowdsourcing-based Data Cleaning for Uncertain Knowledge Graphs”, NSFC, Project No. 61572193, 2016.1-2016.12, ¥160,000.
42. **Co-I and PI of Subcontract**, “Flash-based Database Systems,” NSFC Key Project No. 60833005, 2009-2012, ¥2,000,000. Subcontract: “Flash-Optimized Query Processing Algorithms,” ¥200,000.

G. HKBU / Faculty Research Grant (FRG)

43. **Principal Investigator**, “Multi-Source Query Authentication,” HKBU/FRG2/13-14/064, 2014-2016, HK\$135,000.
44. **Principal Investigator**, “Reverse Keyword Search in Spatio-Textual Queries,” HKBU/FRG2/12-13/081, 2013-2015, HK\$134,820.
45. **Principal Investigator**, “µPDA: Mutual Privacy-Preserving Data Access in Mobile Geo-Social Networking Services,” HKBU/FRG2/11-12/074, 2012-2014, HK\$120,000.
46. **Principal Investigator**, “Privacy-Aware Location Data Publishing for Mobile Computing Applications,” HKBU/FRG 07-08/II-23, 2008-2010, HK\$110,000.
47. **Principal Investigator**, “Adaptive Data Collection for Real-Time Monitoring in Wireless Sensor Networks,” HKBU/FRG 05-06/II-65, 2006-2008, HK\$110,000.
48. **Principal Investigator**, “Data Dissemination Algorithms in a Wired/Wireless Integrated Environment,” HKBU/FRG 04-05/II-26, 2005-2007, HK\$124,000.
49. **Principal Investigator**, “Improving Content Distribution with QoS Guarantees,” HKBU/FRG 03-04/II-19, 2004-2006, HK\$108,864.
50. **Principal Investigator**, “Processing and Scheduling Location-Dependent Queries,” HKBU/FRG 02-03/II-34, 2003-2005, HK\$181,440.

H. Teaching Development Grant

51. **Principal Investigator**, “Web-based Tutoring for Enhancing Teaching and Learning of Database Systems,” TDG/0607/III/09, 2008, HK\$98,000.

PUBLICATIONS

- ♦ **Received >10,000 citations in total, with an h-index 48, according to Google Scholar (July 2020)[†]**
 - **Papers received 50~99 citations are marked with ** (25 papers)**
 - **Papers received ≥ 100 citations are marked with *** (19 papers)**
- ♦ **78 regular papers published in CCF Rank-A Journals and Conferences[‡]**

A. Edited Books / Proceedings

1. Y. Cai, Y. Ishikawa, and J. Xu (Eds.) *Web and Big Data, 2nd APWeb-WAIM Joint International Conference*. Lecture Notes in Computer Science, Vol. 10987, Springer, 2018.
2. B. Cui, N. Zhang, J. Xu, X. Lian, and D. Liu (Eds.) *Web-Age Information Management, 17th International Conference WAIM 2016*. Lecture Notes in Computer Science, Vol. 9658-9, Springer, 2016.
3. Y. Chen, W.-T. Balke, J. Xu, et al. (Eds.) *Web-Age Information Management - WAIM 2014 International Workshops: BigEM, HardBD, DaNoS, HRSUNE, BIDASYS*. Lecture Notes in Computer Science, Springer, 2014.
4. J. Wang, H. Xiong, Y. Ishikawa, J. Xu, and J. Zhou (Eds.) *Web-Age Information Management, 14th International Conference WAIM 2013*. Lecture Notes in Computer Science, Vol. 7923, Springer, 2013.
5. J. Xu, G. Yu, S. Zhou, and R. Unland (Eds.) *Database Systems for Advanced Applications, DASFAA 2011 International Workshops*. Lecture Notes in Computer Science, Vol. 6637, Springer, 2011.
6. X. Meng, Y. Chen, J. Xu, and J. Lu (Eds.) *Proceedings of the Second International CIKM Workshop on Cloud Data Management (CloudDB 2010)*, ACM, 2010.
7. X. Tang, J. Xu, and S. T. Chanson (Eds.) *Web Content Delivery*. New York: Springer Publisher, ISBN 0-387-24356-9, Springer, 2005.

B. Authored Books / Book Chapters

1. X. Huang, L. V.S. Lakshmanan, and J. Xu. “Community Search in Large Graphs.” Morgan & Claypool Publishers, August 2019.
2. C. Xu, C. Zhang, and J. Xu. “Verifiable Cloud Computing.” *Encyclopedia of Wireless Networks*. S. Shen, X. Lin, and K. Zhang, Eds., Springer, 2019.
3. H. Hu, J. Zhou, J. Xu, and J. K. Ng. “Positioning and Privacy in Location-based Services.” *Handheld Computing for Mobile Commerce: Applications, Concepts, and Technologies*. W.-C. Hu and Y. Zuo, Eds., Idea Group Publishing, Feb. 2010, pp. 279-299.
4. H. Hu, J. Xu, and X. Tang. “Energy Efficient Data Management.” *Sensor Network and Configuration: Fundamentals, Techniques, Platforms, and Experiments*, Chapter 12, N. P. Mahalik, Ed., New York: Springer Publisher, ISBN: 978-3-540-37364-3, 2007, pp. 259-279.
5. J. Xu. “Mobile Caching for Location-based Services.” *Encyclopedia of E-Commerce, E-Government and Mobile Commerce*, M. Khosrow-Pour, Ed., Idea Group Publishing, ISBN: 1-59140-799-0, March 2006.
6. J. Xu, H. Hu, X. Tang, and B. Zheng. “Mobile Cache Management.” *Wireless Information Highways*, Chapter 2, D. Katsaros et al., Eds., Idea Group Publishing, ISBN: 1-59140-568-8, 2005, pp. 32-59.
7. J. Xu and J. Liu. “Broadcast Scheduling Algorithms for Wireless Data Dissemination.” *Design and Analysis of Wireless Networks*, Chapter 8, Y. Pan and Y. Xiao, Eds., Nova Science, ISBN: 1-59454-186-8, 2004.
8. **J. Xu, D. L. Lee, Q. Hu, and W.-C. Lee. “Data Broadcast.” *Handbook of Wireless Networks and Mobile Computing*, I. Stojmenovic, Ed., Chapter 11, John Wiley & Sons, 2002, ISBN 0-471-41902-8, pp. 243-265.

C. Refereed Journal Papers (50 ACM/IEEE Transactions papers, 4 VLDBJ papers, 7 other IEEE journal papers)

1. H. Zhu, X. Yang, B. Wang, W.-C. Lee, J. Yin, and J. Xu. “Processing Continuous k Nearest Neighbor Queries in Obstructed Space with Voronoi Diagrams.” *ACM Transactions on Spatial Algorithms and Systems (TSAS)*, accepted to appear, 2020.

[†] <http://scholar.google.com/citations?user=LJNsBeoAAAAJ>

[‡] <http://www.ccf.org.cn/sites/ccf/paiming.jsp>

2. J. Huang, X. Huang, and J. Xu. "Truss-based Structural Diversity Search in Large Graphs." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, accepted to appear, 2020.
3. P. Yi, B. Choi, Z. Zhang, S. S. Bhowmick, and J. Xu. "GFocus: User Focus-based Graph Query Autocompletion." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, accepted to appear, 2020.
4. G. Li, B. Choi, J. Xu, S. S. Bhowmick, K-P Chun, and G. L-H. Wong. "Efficient Shapelet Discovery for Time Series Classification." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, accepted to appear, 2020.
5. Q. Liu, Z. Zhu, J. Xu, and Y. Gao. "MaxiZone: Maximizing Influence Zone over Geo-Textual Data." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, accepted to appear, 2020.
6. J. Jiang, B. Choi, J. Xu, and S. S. Bhowmick. "A Generic Ontology Framework for Indexing Keyword Search on Massive Graphs." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, accepted to appear, 2019.
7. Y. Li, J. Wan, R. Chen, J. Xu, X. Fu, H. Gu, P. Lv, and M. Xu. "Top-k Vehicle Matching in Social Ridesharing: A Price-aware Approach." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, accepted to appear, 2019.
8. C. Song, K. H. Kwon, J. Xu, X. Huang, and S. Li. "Curbing Profanity Online: A Network-Based Diffusion Analysis of Profane Speech on Chinese Social Media." *New Media & Society*, accepted to appear, 2019. (Impact factor = 4.18)
9. Z. Zhang, G. Wang, J. Xu, and X. Du. "A Survey of Blockchain Data Management." *Journal of Software*, 31(9), Sept 2020.
10. L. Chen, S. Shang, C. S. Jensen, J. Xu, P. Kalnis, B. Yao, and L. Shao. "Top-k Term Publish/Subscribe for Geo-Textual Data Streams." *Very Large Data Bases Journal (VLDBJ)*, 29(5): 1101-1128, 2020.
11. X. Fu, C. Zhang, H. Lu, and J. Xu. "Efficient Matching of Offers and Requests in Social-Aware Ridesharing." *Geoinformatics*, 23(4): 559-589, October 2019.
12. Y. Zhang, Q. Chen, J. Y. Xie, Y. H. Yeung, B. Xiao, B. Liao, J. Xu*, and J.-W. Qiu*. "Development of a Transcriptomic Database for 14 Species of Scleractinian Corals." *BMC Genomics*, 20: 387, May 2019.
13. X. Cao, B. Qiu, X. Li, Z. Shi, G. Xu, and J. Xu. "Multidimensional Balance-based Cluster Boundary Detection for High Dimensional Data." *IEEE Transactions on Neural Networks and Learning Systems (TNNLS)*, 30(6): 1867-1880, June 2019.
14. L. Chen, Y. Li, J. Xu, and Christian S. Jensen. "Towards Why-Not Spatial Keyword Top-k Queries: A Direction-Aware Approach." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 30(4): 796-809, 2018.
15. C. Xu, Q. Chen, H. Hu, J. Xu, and X. Hei. "Authenticating Aggregate Queries over Set-Valued Data with Confidentiality." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 30(4): 630-644, 2018.
16. H. Hu, Q. Chen, J. Xu, and B. Choi. "Assuring Spatio-Temporal Integrity on Mobile Devices with Minimum Location Disclosure." *IEEE Transactions on Mobile Computing (TMC)*, 16(11): 3000-3013, November 2017.
17. X. Fu, X. Miao, J. Xu, and Y. Gao. "Continuous Range-based Skyline Queries in Road Networks." *Springer Journal of World Wide Web (WWWJ)*, 20(6): 1443-1467, November 2017.
18. X. Lin, J. Xu, H. Hu, and Z. Fan. "Reducing Uncertainty of Probabilistic Top-k Ranking via Pairwise Crowdsourcing." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 29(10): 2290-2303, October 2017.
19. Q. Zhu, H. Hu, C. Xu, J. Xu, and W.-C. Lee. "Geo-Social Group Queries with Minimum Acquaintance Constraints." *Very Large Data Bases Journal (VLDBJ)*, 26(5): 709-727, October 2017.
20. Y. Li, R. Chen, L. Chen, and J. Xu. "Towards Social-aware Ridesharing Group Query Services." *IEEE Transactions on Services Computing (TSC)*, 10(4): 646-659, July-August 2017.
21. J. Chen, J. Xu, T. Tang, and R. Chen. "WebIntera-classroom: An Interaction-aware Virtual Learning Environment for Augmenting Learning Interactions." *Interactive Learning Environments*, 25(6): 792-807, July 2017. (Impact Factor = 1.67 according to JCR 2016)
22. X. Lin, Y. Peng, B. Choi, and J. Xu. "Human-Powered Data Cleaning for Probabilistic Reachability Queries on Uncertain Graphs." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 29(7): 1452-1465, July 2017.
23. P. Yi, B. Choi, S. S. Bhowmick, and J. Xu. "AutoG: A Visual Query Autocompletion Framework for Graph Databases." *Very Large Data Bases Journal (VLDBJ)*, 26(3): 347-372, June 2017.

24. D. Wang, J. Liu, J. Xu, H. Jiang, and C. Wang. "Data Sweeper: A Proactive Filtering Framework for Error-Bounded Sensor Data Collection." *IEEE Transactions on Emerging Topics in Computing (TETC)*, 4(4): 487 – 501, Oct.-Dec. 2016.
25. Y. Lu, D. Wu, B. He, X. Tang, J. Xu, and M. Guo. "Rank-Aware Dynamic Migrations and Adaptive Demotions for DRAM Power Management." *IEEE Transactions on Computers (TC)*, 65(1): 187-202, January 2016.
26. S. Gao, J. Xu, T. Haerder, B. He, B. Choi, and H. Hu. "PCMLogging: Optimizing Transaction Logging and Recovery Performance with PCM." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 27(12): 3332-3346, December 2015.
27. X. Lin, J. Xu, and H. Hu. "Reverse Keyword Search for Spatio-Textual Top-k Queries in Location-Based Services." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 27(11): 3056-3069, Nov. 2015.
28. Y. Li, R. Chen, J. Xu, Q. Huang, H. Hu, and B. Choi. "Geo-Social K-Cover Group Queries for Collaborative Spatial Computing." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 27(10): 2729-2742, October 2015. (Selected as the Spotlight Paper of the Issue)
29. Z. Fan, B. Choi, Q. Chen, J. Xu, H. Hu, and S. S. Bhowmick. "Structure-Preserving Subgraph Query Services." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 27(8): 2275-2290, August 2015.
30. Y. Peng, Z. Fan, B. Choi, J. Xu, and S. S. Bhowmick. "Authenticated Subgraph Similarity Search in Outsourced Graph Databases." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 27(7): 1838-1860, July 2015.
31. D. Wu, B. Choi, J. Xu, and Christian S. Jensen. "Authentication of Moving Top-k Spatial Keyword Queries." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 27(4): 922-935, April 2015.
32. Z. Fan, Y. Peng, B. Choi, J. Xu, and S. S. Bhowmick. "Towards Efficient Authenticated Subgraph Query Service in Outsourced Graph Databases." *IEEE Transactions on Services Computing (TSC)*, 7(4): 696-713, October-December 2014.
33. S. T. On, S. Gao, B. He, M. Wu, Q. Luo, and J. Xu. "FD-Buffer: A Cost-Based Adaptive Buffer Replacement Algorithm for Flash Memory Devices." *IEEE Transactions on Computers (TC)*, 63(9): 2288-2301, September 2014.
34. Y. Peng, B. Choi, J. Xu, H. Hu, and S. S. Bhowmick. "Side-Effect Estimation: A Filtering Approach to the View Update Problem." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 26(9): 2307-2322, September 2014.
35. R. Chen, Y. Peng, B. Choi, J. Xu, and H. Hu. "A Private DNA Motif Finding Algorithm." *Journal of Biomedical Informatics (JBI)*, 50: 122-132, August 2014. (Impact Factor = 2.13 according to JCR 2012)
36. C. Li, J. Chen, D. Chu, G. Song, H. Zhang, Y. Ye, and J. Xu. "A Wrapper for Extracting Information Records from Forums based on Page Segmentation." *International Journal of Database Theory & Application*, 7(4): 11-22, August 2014.
37. Y. Li, D. Wu, J. Xu, B. Choi, and W. Su. "Spatial-aware Interest Group Queries in Location-based Social Networks." *Data & Knowledge Engineering (DKE)*, 92: 20-38, July 2014.
38. X. Lin, J. Xu, H. Hu, and W.-C. Lee. "Authenticating Location-Based Skyline Queries in Arbitrary Subspaces." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 26(6): 1479-1493, June 2014.
39. H. P. Li, H. Hu, and J. Xu. "Nearby Friend Alert: Location Anonymity in Mobile Geosocial Networks." *IEEE Pervasive Computing (PC)*, 12(4): 62-70, Oct.-Dec. 2013.
40. J. Deng, B. Choi, J. Xu, H. Hu, and S. S. Bhowmick. "Incremental Maintenance of the Minimum Bisimulation of Cyclic Graphs." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 25(11): 2536-2550, November 2013.
41. Y. Li, S. T. On, J. Xu, H. Hu, and B. Choi. "Optimizing Non-Indexed Join Processing for Flash Storage based Systems." *IEEE Transactions on Computers (TC)*, 62(7): 1417-1431, July 2013.
42. X. Lin, J. Xu, and H. Hu. "Range-based Skyline Queries in Mobile Environments." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 25(4): 835-849, April 2013.

43. J. Sun, Q. Chen, J.C.Y. Lun, #J. Xu, #J.-W. Qiu. "PcarnBase: Development of a Transcriptomic Database for the Brain Coral *Platygyra carnosus*." *Marine Biotechnology*, 15(2):244-251, April 2013. (*Impact Factor* = 3.43 according to JCR 2011)
44. S. T. On, J. Xu, B. Choi, H. Hu, and B. He. "Flag Commit: Supporting Efficient Transaction Recovery on Flash-based DBMSs." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 24(9): 1624-1639, 2012.
45. ***X. Pan, J. Xu, and X. Meng. "Protecting Location Privacy against Location-Dependent Attacks in Mobile Services." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 24(8): 1506-1519, August 2012.
46. J. Wen, X. Meng, X. Hao, and J. Xu. "An Efficient Approach for Continuous Density Queries." *Frontiers of Computer Science in China*, 6(5): 581-595, October 2012.
47. Z. Huo, X. Meng, and J. Xu. "Privacy-Preserving Query Processing in Cloud Environments." *Journal of Frontiers of Computer Science and Technology*, 6(5): 385-396, May 2012 (in Chinese).
48. Y. Tang, J. Xu, S. Zhou, W.-C. Lee, D. Deng, and Y. Wang. "A Lightweight Multi-dimensional Index for Complex Queries over DHTs." *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, 22(12): 2046-2054, Dec. 2011.
49. D. Wang, J. Xu, F. Wang, and J. Liu. "Mobile Filter: Exploring Migration of Filters for Error-Bounded Continuous Data Collection in Sensor Networks." *IEEE Transactions on Vehicular Technology (TVT)*, 59(8): 4093-4104, October 2010.
50. H. Hu and J. Xu. "2PASS: Bandwidth-Optimized Location Cloaking for Anonymous Location-Based Services." *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, 21(10): 1458-1472, October 2010. (**Selected as the Spotlight Paper of the Issue**)
51. H. Hu, J. Xu, S. T. On, J. Du, and J. K. Ng. "Privacy-Aware Location Data Publishing." *ACM Transactions on Database Systems (TODS)*, 35(3), Article 18 (42 pages), July 2010.
52. S. T. On, H. Hu, Y. Li, and J. Xu. "Flash-Optimized B+-Tree." *Journal of Computer Science and Technology (JCST)*, 5(3): 507-520, May 2010.
53. **J. Xu, X. Tang, H. Hu, and J. Du. "Privacy-Conscious Location-Based Queries in Mobile Environments." *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, 21(3): 313-326, March 2010.
54. H. Hu, J. Xu, and D. Lee. "PAM: An Efficient and Privacy-Aware Monitoring for Continuously Moving Objects." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 22(3): 404-419, March 2010.
55. **Y. Tang, S. Zhou, and J. Xu. "LIGHT: A Query-Efficient yet Low-Maintenance Indexing Scheme over DHTs." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 22(1): 59-75, Jan 2010.
56. X. Tang, J. Xu, and W.-C. Lee. "Analysis of TTL-Based Consistency in Unstructured Peer-to-Peer Networks." *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, 19(12): 1683-1694, December 2008.
57. Y. Xu, W.-C. Lee, J. Xu, and G. Mitchell. "Energy-Aware and Time-Critical Geo-Routing in Wireless Sensor Networks." *International Journal of Distributed Sensor Networks (IJDSN)*, 4(4): 315-346, October-December 2008.
58. J. Xu, X. Tang, and W.-C. Lee. "Distributed Query Processing in Flash-based Sensor Networks." *Frontiers of Computer Science in China*, 2(3): 248-256, September 2008.
59. **X. Tang and J. Xu. "Optimizing Lifetime for Continuous Data Aggregation with Precision Guarantees in Wireless Sensor Networks." *ACM/IEEE Transactions on Networking (ToN)*, 16(4): 904-917, August 2008.
60. **X. Tang and J. Xu. "Adaptive Data Collection Strategies for Lifetime-Constrained Wireless Sensor Networks." *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, 19(6): 721-734, June 2008.
61. **J. Xu, X. Tang, and W.-C. Lee. "A New Storage Scheme for Approximate Location Queries in Object Tracking Sensor Networks." *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, 19(2): 262-275, Feb. 2008.
62. ***M. Wu, J. Xu, X. Tang, and W.-C. Lee. "Top-k Monitoring in Wireless Sensor Networks." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 19(7): 962-976, July 2007.
63. J. Liu, J. Xu, and X. Chu. "Fine-Grained Scalable Video Caching for Heterogeneous Clients." *IEEE Transactions on Multimedia (TMM)*, 8(5): 1011-1020, Oct. 2006.
64. **J. Xu, W.-C. Lee, X. Tang, Q. Gao, and S. Li. "An Error-Resilient and Tunable Distributed Indexing Scheme for Wireless Data Broadcast." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 18(3): 392-404, March 2006.

65. ***J. Xu, X. Tang, and W.-C. Lee. "Scheduling Time-Critical On-Demand Broadcast: Algorithms, Analysis, and Performance Evaluation." *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, 17(1): 3-14, Jan. 2006.
66. ***B. Zheng, J. Xu, W.-C. Lee, and D. L. Lee. "Grid-Partition Index: A Hybrid Method for Nearest Neighbor Queries in Wireless Location-Dependent Services." *Very Large Data Bases Journal (VLDBJ)*, 15(1): 21-39, Jan. 2006. (Impact Factor = 7.01 according to JCR 2008)
67. **X. Tang and J. Xu. "QoS-Aware Replica Placement for Content Distribution." *IEEE Transactions on Parallel and Distributed Systems (TPDS)*, 16(10): 921-932, Oct. 2005.
68. **J. Xu, B. Zheng, W.-C. Lee, and D. L. Lee. "The D-tree: An Index Structure for Planar Point Queries in Location-Based Wireless Services." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 16(12): 1526-1542, Dec. 2004.
69. ***J. Liu and J. Xu. "Proxy Caching for Media Streaming over the Internet." *IEEE Communications Magazine*, 42(8): 88-94, August 2004.
70. J. Xu, J. Liu, B. Li, and X. Jia. "Caching and Prefetching for Web Content Distribution." *IEEE Computing in Science and Engineering (CiSE), Special Issue on Web Engineering*, 6(4): 54-59, July/August 2004.
71. ***J. Xu, Q. Hu, W.-C. Lee, and D. L. Lee. "Performance Evaluation of an Optimal Cache Replacement Policy for Wireless Data Dissemination." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 16(1): 125-139, Jan. 2004.
72. D. L. Lee, K. K. Hoi, J. Xu, and W. S. D. Wong. "Web Browsing on Small Displays." *IEEE Distributed Systems Online*, vol. 4, no. 10, Oct. 2003.
73. ***J. Xu, X. Tang, and D. L. Lee. "Performance Analysis of Location-Dependent Cache Invalidation Schemes for Mobile Environments." *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 15(2): 474-488, March/April 2003.
74. J. Xu, D. L. Lee, and B. Li. "On Bandwidth Allocation for Data Dissemination in Cellular Mobile Networks." *ACM/Springer Journal of Wireless Networks (WINET)*, 9(2): 103-116, March 2003.
75. ***B. Zheng, J. Xu, and D. L. Lee. "Cache Invalidation and Replacement Policies for Location-Dependent Data in Mobile Environments." *IEEE Transactions on Computers (TC)*, 51(10): 1141-1153, Oct. 2002.
76. ***J. Xu, B. Li, and D. L. Lee. "Placement Problems for Transparent Data Replication Proxy Services." *IEEE Journal on Selected Areas in Communications (JSAC), Special Issue on Internet Proxy Services*, 20(7): 1383 - 1398, Sep. 2002.
77. ***D. L. Lee, W.-C. Lee, J. Xu, and B. Zheng. "Data Management in Location-Dependent Information Services." *IEEE Pervasive Computing*, 1(3): 65-72, July-September 2002.

D. Refereed Conference Papers

1. Kai Li, Yuzhe Tang, Jiaqi Chen, Zhehu Yuan, Cheng Xu, Jianliang Xu, Qi Zhang. "Cost-Effective Data Feeds to Blockchains via Workload-Adaptive Data Replication", *ACM/IFIP Middleware 2020*, Delft, Netherlands, Dec. 2020.
2. X. Zhu, X. Huang, B. Choi, and J. Xu. "Top-k Graph Summarization on Hierarchical DAGs." *Proc. of the ACM International Conference on Information and Knowledge Management (CIKM '20)*, Oct. 2020.
3. X. Zhu, X. Huang, J. Huang, B. Choi, and J. Xu. "HDAG-Explorer: An Interactive System for Hierarchical DAG Summarization and Exploration." *Proc. the 46th International Conference on Very Large Data Bases (PVLDB '20)*, Tokyo, Japan, 2020. (Demo Paper)
4. Q. Liu, M. Zhao, X. Huang, J. Xu, and Y. Gao. "Truss-based Community Search over Large Directed Graphs." *Proc. of the ACM SIGMOD Int'l Conf. on Management of Data (SIGMOD '20)*, Portland, OR, USA, June 2020, pp. 2183-2197.
5. H. Wang, C. Xu, C. Zhang, and J. Xu. "vChain: A Blockchain System Ensuring Query Integrity." *Proc. of the ACM SIGMOD Int'l Conf. on Management of Data (SIGMOD '20)*, Portland, OR, USA, June 2020, pp. 2693-2696. (Demo Paper)

6. Q. Liu, Y. Zhu, M. Zhao, X. Huang, J. Xu, and Y. Gao. "VAC: Vertex-Centric Attributed Community Search." *Proceedings of the 36th IEEE International Conference on Data Engineering (ICDE '20)*, Dallas, Texas, USA, April 2020, pp. 937-948.
7. J. Jiang, X. Huang, B. Choi, J. Xu, S. S Bhowmick, and L. Xu. "PPKWS: An Efficient Framework for Keyword Search on Public-Private Networks." *Proceedings of the 36th IEEE International Conference on Data Engineering (ICDE '20)*, Dallas, Texas, USA, April 2020, pp. 457-468.
8. R. Yang, X. Lin, J. Xu, Y. Yang, and L. He. "Optimizing Knowledge Graphs through Voting-based User Feedback." *Proceedings of the 36th IEEE International Conference on Data Engineering (ICDE '20)*, Dallas, Texas, USA, April 2020, pp. 421-432.
9. Z. Feng, T. Liu, H. Li, H. Lu, L. Shou, and J. Xu. "Indoor Top-k Keyword-aware Routing Query." *Proceedings of the 36th IEEE International Conference on Data Engineering (ICDE '20)*, Dallas, Texas, USA, April 2020, pp. 1213-1224.
10. T. Liu, Z. Feng, H. Li, H. Lu, M. A. Cheema, H. Cheng, and J. Xu. "Shortest Path Queries for Indoor Venues with Temporal Variations." *Proc. the 36th IEEE International Conference on Data Engineering (ICDE '20)*, Dallas, Texas, USA, April 2020, pp. 2014-2017. (Short Paper)
11. S. Guo, Y. Ji, C. Zhang, C. Xu, and J. Xu. "vCBIR: A Verifiable Search Engine for Content-Based Image Retrieval." *Proceedings of the 36th IEEE International Conference on Data Engineering (ICDE '20)*, Dallas, Texas, USA, April 2020, pp. 1730-1733. (Demo Paper)
12. J. Huang, X. Huang, Y. Zhu, and J. Xu. "Parameter-Free Structural Diversity Search," *Proceedings of the 20th International Conference on Web Information Systems Engineering (WISE '19)*, Hong Kong, Nov. 2019, pp. 677-693. (Best Paper Award)
13. L. Sun, X. Huang, R.-H. Li, J. Xu. "Fast Algorithms for Intimate-Core Group Search in Weighted Graphs," *Proceedings of the 20th International Conference on Web Information Systems Engineering (WISE '19)*, Hong Kong, Nov. 2019, pp. 728-744.
14. L. Liu, X. Huang, J. Xu, Y. Song. "Oasis: Online Analytic System for Incivility Detection and Sentiment Classification," *Proceedings of IEEE International Conference on Data Mining (ICDM '19)*, Beijing, 2019, pp. 1098-1101. (Demo Paper)
15. K. Li, Y. Tang, B. H. Kim, and J. Xu. "Secure Consistency Verification for Untrusted Cloud Storage by Public Blockchains," *Proceedings of the 15th International Conference on Security and Privacy in Communication Networks (SecureComm '19)*, Orlando, USA, Oct. 2019, pp. 39-62.
16. C. Xu, C. Zhang, and J. Xu. "vChain: Enabling Verifiable Boolean Range Queries over Blockchain Databases," *Proc. of the ACM SIGMOD Int'l Conf. on Management of Data (SIGMOD '19)*, Amsterdam, Netherlands, July 2019, pp. 141-158.
17. H. Wang, X. Fu, J. Xu, and H. Lu. "Learned Index for Spatial Queries." *Proceedings of the 20th IEEE Conference on Mobile Data Management (MDM '19)*, Hong Kong, June 2019, pp. 569-574.
18. C. Zhang, C. Xu, J. Xu, Y. Tang, and B. Choi. "GEM²-Tree: A Gas-Efficient Structure for Authenticated Range Queries in Blockchain." *Proceedings of the 35th IEEE International Conference on Data Engineering (ICDE '19)*, Macau SAR, China, April 2019, pp. 842-853.
19. Z. Zhang, X. Huang, J. Xu, B. Choi, and Z. Shang. "Keyword-Centric Community Search." *Proceedings of the 35th IEEE International Conference on Data Engineering (ICDE '19)*, Macau SAR, China, April 2019, pp. 422-433.
20. S. Guo, J. Xu, C. Zhang, C. Xu, and T. Xiang. "ImageProof: Enabling Authentication for Large-Scale Image Retrieval." *Proceedings of the 35th IEEE International Conference on Data Engineering (ICDE '19)*, Macau SAR, China, April 2019, pp. 1070-1081.
21. Y. Ji, C. Xu, J. Xu, and H. Hu. "vABS: Towards Verifiable Attribute-Based Search over Shared Cloud Data." *Proceedings of the 35th IEEE International Conference on Data Engineering (ICDE '19)*, Macau SAR, China, April 2019, pp. 2028-2031. (Demo Paper)

22. N. Ng, P. Yi, Z. Zhang, B. Choi, S. S. Bhowmick, and J. Xu. "FGreat: Focused Graph Query Autocompletion." *Proceedings of the 35th IEEE International Conference on Data Engineering (ICDE '19)*, Macau SAR, China, April 2019, pp. 1956-1959. (Demo Paper)
23. Z. Zhang, H. Wei, J. Xu, and B. Choi. "GScan: Exploiting Sequential Scans for Subgraph Matching." *Proc. the 24th International Conference on Database Systems for Advanced Applications (DASFAA '19)*, Chiang Mai, Thailand, April 2019, pp. 471-475.
24. X. Huang, J. Jiang, B. Choi, J. Xu, Z. Zhang, and Y. Song. "PP-DBLP: Modeling and Generating Attributed Public-Private Networks with DBLP." *Proc. the IEEE ICDM Workshop on Graph Analytics (GA '18)*, Singapore, Nov. 2018, pp. 986-989.
25. C. Xu, J. Xu, H. Hu, and M. H. Au. "When Query Authentication Meets Fine-Grained Access Control: A Zero-Knowledge Approach." *Proc. of the ACM SIGMOD Int'l Conf. on Management of Data (SIGMOD '18)*, Houston, TX, June 2018, pp. 147-162.
26. C. Zhang, C. Xu, J. Xu, and B. Choi. "Distributed kNN Query Authentication." In *Proc. the 19th IEEE International Conference on Mobile Data Management (MDM '18)*, Aalborg, Denmark, June 2018, pp. 167-176.
27. X. Fu, C. Zhang, H. Lu, and J. Xu. "Efficient Matching of Offers and Requests in Social-Aware Ridesharing." In *Proc. the 19th IEEE International Conference on Mobile Data Management (MDM '18)*, Aalborg, Denmark, June 2018, pp. 197-206.
28. X. Lin, Y. Peng, J. Xu, and B. Choi. "Human-Powered Data Cleaning for Probabilistic Reachability Queries on Uncertain Graphs." *Proc. the 34th IEEE International Conference on Data Engineering (ICDE '18)*, Paris, France, April 2018, pp. 1755-1756 (Poster Paper).
29. X. Lin, J. Xu, H. Hu, and Z. Fan. "Reducing Uncertainty of Probabilistic Top- k Ranking via Pairwise Crowdsourcing." *Proc. the 34th IEEE International Conference on Data Engineering (ICDE '18)*, Paris, France, April 2018, pp. 1757-1758 (Poster Paper).
30. C. Xu, Q. Chen, H. Hu, J. Xu, and X. Hei. "Authenticating Aggregate Queries over Set-Valued Data with Confidentiality." *Proc. the 34th IEEE International Conference on Data Engineering (ICDE '18)*, Paris, France, April 2018, pp. 1797-1798 (Poster Paper).
31. Y. Tang, Z. Xing, C. Xu, J. Chen, and J. Xu. "Lightweight Logging over the Blockchain for Data-Intensive Applications." The Second Workshop on Trusted Smart Contracts at Financial Cryptography 2018, Curaçao, March 2018.
32. Q. Liu, Z. Feng, X. Xie, J. Xu, X. Lin, and C. S. Jensen. "iZone: Efficient Influence Zone Evaluation over Geo-Textual Data." *Proc. the 34th IEEE International Conference on Data Engineering (ICDE '18)*, Paris, France, April 2018, pp. 1645-1648 (Demo Paper).
33. X. Huang, B. Choi, J. Xu, W. Cheung, Y. Zhang and J. Liu. "Ontology-based Graph Visualization for Summarized View." *Proc. of the International Conference on Information and Knowledge Management (CIKM '17)*, Singapore, Nov 2017 (Short Paper), pp. 2115-2118.
34. X. Fu, J. Huang, H. Lu, J. Xu, and Y. Li. "Top- k Taxi Recommendation in Realtime Social-Aware Ridesharing Services." In *Proc. the 15th International Symposium on Spatial and Temporal Databases (SSTD 2017)*, Washington DC, August 2017, pp. 221-241.
35. J. Xu, J. Xu, G. Cao, H. Xu, M. Xu, and N. Zheng. "Towards Optimal Free-of-Charge Trip Planning in Bike-Sharing Systems." In *Proc. the 18th IEEE International Conference on Mobile Data Management (MDM '17)*, Daejeon, South Korea, May 2017, pp. 92-101.
36. J. Chen, B. Zhu, O. Balter, J. Xu, W. Zou, A. Hedman, R. Chen, and M. Sang. "FishBuddy: Promoting Student Engagement in Self-Paced Learning through Wearable Sensing." In *Proc. the 3rd IEEE International Conference on Smart Computing (SMARTCOMP '17)*, Hong Kong, May 2017, pp. 1-9.
37. L. Chen, Y. Li, J. Xu, and C. S. Jensen. "Direction-Aware Why-Not Spatial Keyword Top- k Queries." *Proc. the 33rd IEEE International Conference on Data Engineering (ICDE '17)*, San Diego, USA, April 2017, pp. 107-110 (Short Paper).

38. X. Huang, L. V. S. Lakshmanan, and J. Xu. "Community Search over Big Graphs: Models, Algorithms, and Opportunities." *Proc. the 33rd IEEE International Conference on Data Engineering (ICDE '17)*, San Diego, USA, April 2017, pp. 1451-1454 (Tutorial Paper).
39. X. Xie, X. Lin, J. Xu, and C. S. Jensen. "Reverse Keyword-based Location Search." *Proc. the 33rd IEEE International Conference on Data Engineering (ICDE '17)*, San Diego, California, USA, April 2017, pp. 375-386.
40. H. Yan, X. Cheng, S. Su, Q. Zhang, and J. Xu. "Authenticated Spatio-textual Similarity Joins in Untrusted Cloud Environments." *Proc. the 22nd IEEE International Conference on Parallel and Distributed Systems (ICPADS '16)*, Wuhan, China, Dec. 2016, pp. 685-694.
41. X. Zhou, W. Wang, and J. Xu. "General Purpose Index-based Method for Efficient MaxRS Query." *Proc. 27th International Conference on Database and Expert Systems Applications (DEXA '16)*, Porto, Portugal, Sept. 2016, pp. 20-36.
42. L. Chen, J. Xu, C. S. Jensen, and Y. Li. "YASK: A Why-Not Question Answering Engine for Spatial Keyword Query Services." *Proc. the 42nd International Conference on Very Large Data Bases (PVLDB '16)*, New Delhi, India, September 2016, pp. 1501-1504. (Demo Paper)
43. P. Yi, B. Choi, S. S. Bhowmick, J. Xu. "AutoG: A Visual Query Autocompletion Framework for Graph Databases." *Proc. the 42nd International Conference on Very Large Data Bases (PVLDB '16)*, New Delhi, India, September 2016, pp. 1505-1508. (Demo Paper)
44. L. Chen, J. Xu, X. Lin, Christian S. Jensen, and H. Hu. "Answering Why-Not Spatial Keyword Top-k Queries via Keyword Adaption." *Proc. the 32nd IEEE International Conference on Data Engineering (ICDE '16)*, Helsinki, Finland, May 2016, pp. 697-708.
45. X. Lin, J. Xu, and H. Hu. "Reverse Keyword Search for Spatio-Textual Top-k Queries in Location-Based Services." *Proc. the 32nd IEEE International Conference on Data Engineering (ICDE '16)*, Helsinki, Finland, May 2016. (Poster Paper)
46. Y. Li, R. Chen, J. Xu, Q. Huang, H. Hu, and B. Choi. "Geo-Social K-Cover Group Queries for Collaborative Spatial Computing." *Proc. the 32nd IEEE International Conference on Data Engineering (ICDE '16)*, Helsinki, Finland, May 2016. (Poster Paper)
47. Z. Fan, B. Choi, Q. Chen, J. Xu, H. Hu, and S. S. Bhowmick. "Structure-Preserving Subgraph Query Services." *Proc. the 32nd IEEE International Conference on Data Engineering (ICDE '16)*, Helsinki, Finland, May 2016. (Poster Paper)
48. R. Chen, Q. Xiao, Y. Zhang, and J. Xu. "Differentially Private High-Dimensional Data Publication via Sampling-based Inference." *Proc. of the 21st ACM SIGKDD Conference on Knowledge Discovery and Data Mining (SIGKDD '15)*, Sydney, Australia, August 2015, pp. 129-138.
49. Q. Chen, H. Hu, and J. Xu. "Authenticated Online Data Integration Services." *Proc. the ACM SIGMOD Int. Conf. on Management of Data (SIGMOD '15)*, Melbourne, Australia, June 2015, pp. 167-181.
50. L. Chen, X. Lin, H. Hu, Christian S. Jensen, and J. Xu. "Answering Why-not Questions on Spatial Keyword Top-k Queries." *Proc. the 31st IEEE International Conference on Data Engineering (ICDE '15)*, Seoul, Korea, April 2015, pp. 279-290.
51. Z. Fan, B. Choi, J. Xu, and S. S. Bhowmick. "Asymmetric Structure-Preserving Subgraph Query for Large Graphs." *Proc. the 31st IEEE International Conference on Data Engineering (ICDE '15)*, Seoul, Korea, April 2015, pp. 339-350.
52. S. Gao, B. He, and J. Xu. "Real-Time In-Memory Checkpointing for Future Hybrid Memory Systems." *Proc. the 29th ACM International Conference on Supercomputing (ICS '15)*, Newport Beach, CA, USA, June 2015, pp. 263-272.
53. L. Wang, X. Meng, H. Hu, and J. Xu. "Bichromatic Reverse Nearest Neighbor Query without Information Leakage." *Proc. the 20th International Conference on Database Systems for Advanced Applications (DASFAA '15)*, Hanoi, Vietnam, April 2015.

54. S. Su, H. Yan, X. Cheng, P. Tang, P. Xu, and J. Xu. "Authentication of Top-k Spatial Keyword Queries in Outsourced Databases." *Proc. the 20th International Conference on Database Systems for Advanced Applications (DASFAA '15)*, Hanoi, Vietnam, April 2015.
55. Q. Chen, H. Hu, and J. Xu. "Authenticating Top-k Queries in Location-based Services with Confidentiality." *Proceedings of the VLDB Endowment (PVLDB '14)*, Hangzhou, China, September 2014, pp. 49-60.
56. D. Wu, Y. Li, B. Choi, and J. Xu. "Social-Aware Top-k Spatial Keyword Search." In *Proc. the 15th IEEE International Conference on Mobile Data Management (MDM '14)*, Brisbane, Australia, July 2014.
57. J. Chen, Y. Li, X. Chu, S. Shi, T. Tao, L. Cui, Z. Xu, and J. Xu. "Ebanshu: An Interactivity-aware Blended Virtual Learning Environment." In *Proc. the 9th International Conference on Internet and Web Applications and Services (ICIW '14)*, Paris, France, July 2014.
58. Y. Ou, L. Chen, J. Xu and T. Haerder. "Wear-Aware Algorithms for PCM-Based Database Buffer Pools." In *Proc. the Second International Workshop on Big Data Management on Emerging Hardware (HardBD)*, Macau, June 2014.
59. X. Zhang, R. Chen, J. Xu, X. Meng, and Y. Xie. "Towards Accurate Histogram Publication under Differential Privacy." *Proceedings of SIAM International Conference on Data Mining (SDM '14)*, Philadelphia, USA, April 2014, pages 587-595.
60. S. Yin, Z. Fan, P. Yi, B. Choi, J. Xu and S. Zhou. "Privacy-Preserving Reachability Query Services." *Proc. the 19th International Conference on Database Systems for Advanced Applications (DASFAA '14)*, Bali, Indonesia, April 2014, pages 203-219.
61. H. Hu, J. Xu, X. Xu, K. Pei, B. Choi, and S. Zhou. "Private Search on Key-Value Stores with Hierarchical Indexes." *Proc. the 30th IEEE International Conference on Data Engineering (ICDE '14)*, Chicago, IL, USA, April 2014.
62. X. Lin, H. Hu, H. P. Li, J. Xu, and B. Choi. "Private Proximity Detection and Monitoring with Vicinity Regions." *Proceedings of 12th International ACM SIGMOD Workshop on Data Engineering for Wireless and Mobile Access (MobiDE '13)*, New York, New York, June 2013, pp. 5-12.
63. H. Hu, Q. Chen, and J. Xu. "VERDICT: Privacy-Preserving Authentication of Range Queries in Location-based Services." *Proceedings of the 29th International Conferences on Data Engineering (ICDE '13)*, Brisbane, Australia, April 2013, pp. 1312-1315. (Demo)
64. L. Song, Y. Peng, B. Choi, J. Xu, B. He. "Spectral Decomposition for Optimal Graph Index Prediction." *Proceedings of PAKDD*, Gold Coast, Australia, April 2013, pp. 187-200. (Acceptance ratio=11.3%)
65. B. He, D. Wu, X. Tang, J. Xu, and M. Guo. "RAMZzz: Rank-Aware DRAM Power Management with Dynamic Migrations and Demotions." *Proc. ACM/IEEE International Conference on High Performance Computing, Networking, Storage and Analysis (SC '12)*, Salt Lake City, Utah, November 2012, Article No. 32 (11 pages). (Acceptance ratio=21%)
66. Y. Li, D. Wu, J. Xu, B. Choi, and W. Su. "Spatial-aware Interest Group Queries in Location-based Social Networks." In *Proc. the 21st ACM Conference on Information and Knowledge Management (ACM CIKM '12)*, Maui Hawaii, October 2012, pp. 2643-2646. (Poster Paper)
67. Y. Ou, J. Xu, and T. Härder. "Towards an Efficient Flash-Based Mid-Tier Cache." *Proc. 23rd International Conference on Database and Expert Systems Applications (DEXA '12)*, Vienna, Austria, September 2012, pp. 55-70.
68. X. Lin, J. Xu, and J. Gu. "Continuous Skyline Queries with Integrity Assurance in Outsourced Spatial Databases." In *Proc. The 13th International Conference on Web-Age Information Management (WAIM '12)*, August 2012, pp. 114-126.
69. **H. Hu, J. Xu, Q. Chen, and Z. Yang. "Authenticating Location-based Services without Compromising Location Privacy." *Proc. the ACM SIGMOD Int. Conf. on Management of Data (SIGMOD '12)*, Scottsdale, Arizona, USA, May 2012, pp. 301-312.
70. X. Lin, J. Xu, and H. Hu. "Authentication of Location-based Skyline Queries." In *Proc. the 20th ACM Conference on Information and Knowledge Management (ACM CIKM '11)*, Glasgow, Scotland, UK, October 2011, pp. 1583-1588. (Short Paper, Acceptance ratio=31%)

71. S. Gao, J. Xu, B. He, B. Choi, and H. Hu. "PCMLogging: Reducing Transaction Logging Overhead with PCM." In *Proc. the 20th ACM Conference on Information and Knowledge Management (ACM CIKM '11)*, Glasgow, Scotland, UK, October 2011, pp. 2401-2404. (Poster Paper, *Acceptance ratio=31%*)
72. F. Liu, J. Deng, Y. Peng, B. Choi, and J. Xu. "Predicting the Optimal Ad-hoc Index for Reachability Queries on Graph Databases." In *Proc. the 20th ACM Conference on Information and Knowledge Management (ACM CIKM '11)*, Glasgow, Scotland, UK, October 2011, pp. 2357-2360. (Poster Paper, *Acceptance ratio=31%*)
73. Z. Yang, S. Gao, J. Xu, and B. Choi. "Authentication of Range Query Results in MapReduce Environments." In *Proc. the 3rd ACM Workshop on Cloud Data Management (CloudDB '11)*, October 2011, pp. 25-32.
74. J. Deng, B. Choi, J. Xu and S. Bhowmick. "Optimizing Incremental Maintenance of Minimal Bisimulation of Cyclic Graphs." In *Proc. the 16th International Conference on Database Systems for Advanced Applications (DASFAA '11)*, Hong Kong, China, 2011, pp. 543-557. (*Acceptance ratio=54/225=24%*)
75. ***H. Hu, J. Xu, C. Ren, and B. Choi. "Processing Private Queries over Untrusted Data Cloud through Privacy Homomorphism." In *Proceedings of the 27th International Conferences on Data Engineering (ICDE '11)*, Hannover, Germany, April 2011, pp. 601-612. (*Acceptance ratio=98/494=19.8%*)
76. Y. Peng, B. Choi, and J. Xu. "Selectivity Estimation of Twig Queries on Cyclic Graphs." In *Proceedings of the 27th International Conferences on Data Engineering (ICDE '11)*, Hannover, Germany, April 2011, pp. 960-971. (*Acceptance ratio=98/494=19.8%*)
77. Y. Li, J. Xu, B. Choi, and H. Hu. "StableBuffer: Optimizing Write Performance for DBMS Applications on Flash Devices." In *Proc. The 19th ACM Conference on Information and Knowledge Management (ACM CIKM '10)*, Toronto, Canada, October 2010, pp. 339-348. (*Acceptance ratio=127/945=13%*)
78. S. T. On, Y. Li, B. He, M. Wu, Q. Luo, and J. Xu. "FD-Buffer: A Buffer Manager for Databases on Flash Disks." In *Proc. The 19th ACM Conference on Information and Knowledge Management (ACM CIKM '10)*, Toronto, Canada, October 2010, pp. 1297-1300. (Short Paper, *Acceptance ratio=31%*)
79. B. Choi, H. Hu, J. Xu, W. Cheung, C. H. Li and J. Liu. "Data Engineering in Graph Databases." In *Proc. the 25th International Symposium on Computer and Information Sciences (ISCIS '10)*, Invited Paper, London, UK, September 2010, pp. 127-132. (Invited Paper)
80. D. Wang, J. Liu, and J. Xu. "Data Sweeper: A Proactive Filtering Framework for Error-Bounded Sensor Data Collection." In *Proc. IEEE International Workshop on Quality of Service (IWQoS '10)*, Beijing, China, June 2010, pp. 1-2. (Poster Paper)
81. X. Liu, J. Xu, and W.-C. Lee. "A Cross Pruning Framework for Top-k Data Collection in Wireless Sensor Networks." In *Proc. the 11th International Conference on Mobile Data Management (MDM '10)*, Kansas City, Missouri, USA, May 2010, pp. 157-166. (*Acceptance ratio = 25%*)
82. X. Liu, M. Ye, J. Xu, Y. Tian, and W.-C. Lee. "*k*-Selection Query over Uncertain Data." In *Proc. the 15th Int. Conf. on Database Systems for Advanced Applications (DASFAA '10)*, Tsukuba, Japan, April 2010, pp. 444-459. (*Acceptance ratio=23%*, **Best Student Paper Award Runner-up**)
83. S. Gao, Y. Li, J. Xu, B. Choi, and H. Hu. "DigestJoin: Expediting Joins on Solid-State Drives." In *Proc. the 15th Int. Conf. on Database Systems for Advanced Applications (DASFAA '10)*, Tsukuba, Japan, April 2010, pp. 428-431. (Demo)
84. J. Yu, J. Guan, J. Xu, and S. Zhou. "Towards Keyword Search over Relational Databases in DHT Networks." In *Proc. the 15th Int. Conf. on Parallel and Distributed Systems (ICPADS '09)*, pages 448-455, Dec. 2009.
85. **X. Pan, X. Meng, and J. Xu. "Distortion-based Anonymity for Continuous Queries in Location-Based Mobile Services." In *Proc. the 17th ACM SIGSPATIAL Int'l Conference on Advances in Geographic Information Systems (ACM GIS '09)*, Seattle, USA, November 2009, pp. 256-265. (*Acceptance ratio=38/185=21%*)
86. Y. Tang, J. Xu, S. Zhou, and W.-C. Lee. "m-LIGHT: Indexing Multi-dimensional Data over DHTs." In *Proc. the 29th IEEE Int. Conf. on Distributed Computing Systems (ICDCS '09)*, Montreal, Quebec, Canada, June 2009. (*Acceptance ratio=74/455=16%*)
87. **H. Hu and J. Xu. "Non-Exposure Location Anonymity." In *Proc. the 25th IEEE Int. Conf. on Data Engineering (ICDE '09)*, Shanghai, China, March 2009. (*Acceptance ratio=93/554=17%*)

88. Y. Li, S. T. On, J. Xu, B. Choi, and H. Hu. "DigestJoin: Exploiting Fast Random Reads for Flash-based Joins." In *Proc. the 10th International Conference on Mobile Data Management (MDM '09)*, Taipei, Taiwan, May 2009.
89. S. T. On, H. Hu, Y. Li, and J. Xu. "Lazy-Update B+-Tree for Flash Devices." In *Proc. the 10th International Conference on Mobile Data Management (MDM '09)*, Taipei, Taiwan, May 2009.
90. X. Pan, J. Xu, and X. Meng. "Protecting Location Privacy against Location-dependent Attack in Mobile Services." In *Proc. ACM 17th Conference on Information and Knowledge Management (CIKM '08)*, Napa Valley, CA, USA, October 2008. (Poster Paper)
91. X. Hao, X. Meng, and J. Xu. "Continuous Density Queries for Moving Objects." In *Proc. 7th Int. ACM Workshop on Data Engineering for Wireless and Mobile Access (MobiDE '08)*, Vancouver, Canada, June 2008 (in conjunction with SIGMOD 2008).
92. D. Wang, J. Xu, J.-C. Liu, and F. Wang. "Mobile Filtering for Error-Bounded Data Collection in Sensor Networks." In *Proc. the 28th IEEE Int. Conf. on Distributed Computing Systems (ICDCS '08)*, Beijing, China, June 2008. (Acceptance ratio=16%)
93. P.-Y. Li, W.-C. Peng, T.-W. Wang, W.-S. Ku, J. Xu, J. A. Hamilton, Jr. "A Cloaking Algorithm based on Spatial Networks for Location Privacy." In *Proc. the IEEE Int. Conf. on Sensor Networks, Ubiquitous, and Trustworthy Computing (SUTC 2008)*, Taichung, Taiwan, June 2008.
94. Z. Xiao, J. Xu, and X. Meng. "p-Sensitivity: A Semantic Privacy-Protection Model for Location-based Services." In *Proc. the 2nd Int. Workshop on Privacy-Aware Location-based Mobile Services (PALMS 2008)*, Beijing, China, April 2008.
95. D. Wang, J. Xu, J.-C. Liu, and F. Wang. "Mobile Filter: Exploring Migration of Filters for Error-Bounded Data Collection in Sensor Networks." In *Proc. the 24th IEEE Int. Conf. on Data Engineering (ICDE '08)*, Cancun, Mexico, April 2008. (Poster Paper; Acceptance ratio=31%)
96. Y. Xu, W.-C. Lee, and J. Xu. "Analysis of a Loss-Resilient Proactive Data Transmission Protocol in Wireless Sensor Networks." In *Proc. the 26th IEEE INFOCOM '07*, Anchorage, Alaska, USA, May 2007. (Acceptance ratio=252/1400=18%)
97. J. Du, J. Xu, X. Tang, and H. Hu. "iPDA: Supporting Privacy-Preserving Location-Based Mobile Services." In *Proc. the 8th Int. Conf. on Mobile Data Management (MDM '07)*, Mannheim, Germany, May 2007.
98. Z. Xiao, X. Meng, and J. Xu. "Quality-Aware Privacy Protection for Location-Based Services." In *Proc. the 12th Int. Conf. on Database Systems for Advanced Applications (DASFAA '07)*, Bangkok, Thailand, April, 2007. (Acceptance ratio=70/375=18.7%)
99. J. Chen, C. Lai, X. Meng, J. Xu, and H. Hu. "Clustering Moving Objects in Spatial Networks." In *Proc. the 12th Int. Conf. on Database Systems for Advanced Applications (DASFAA '07)*, Bangkok, Thailand, April, 2007. (Acceptance ratio=70/375=18.7%)
100. C. K. Lee, W.-C. Lee, J. Winter, B. Zheng, and J. Xu. "CS Cache Engine: Data Access Accelerator for Location-Based Services in Mobile Environments." In *Proc. the ACM SIGMOD Int. Conf. on Management of Data (SIGMOD '06)*, Chicago, IL, June 2006. (Demonstration Paper; Acceptance ratio=29.6%)
101. M. Wu, J. Xu, and X. Tang. "Processing Precision-Constrained Queries in Wireless Sensor Networks." *Proc. the 7th IEEE Int. Conf. on Mobile Data Management (MDM '06)*, Nara, Japan, May 2006. (Acceptance ratio=23%)
102. ***X. Tang and J. Xu. "Extending Network Lifetime for Precision-Constrained Data Aggregation in Wireless Sensor Networks." In *Proc. the 25th IEEE INFOCOM '06*, Barcelona, Spain, April 2006. (Acceptance ratio=18%)
103. ***Y. Xu, W.-C. Lee, J. Xu, and G. Mitchel. "Processing Window Queries in Wireless Sensor Networks." In *Proc. the 22nd IEEE Int. Conf. on Data Engineering (ICDE '06)*, Atlanta, GA, April 2006, 10 pages. (Acceptance ratio=19.5%)
104. **M. Wu, J. Xu, X. Tang, and W.-C. Lee. "Monitoring Top-k Query in Wireless Sensor Networks." In *Proc. the 22nd IEEE Int. Conf. on Data Engineering (ICDE '06)*, Atlanta, GA, April 2006, 3 pages. (Poster Paper; Acceptance ratio=31.1%)

105. **H. Hu, J. Xu, and D. L. Lee. "Fast Nearest Neighbor Search on Road Networks." In *Proc. the 10th International Conference on Extending Database Technology (EDBT '06)*, Munich, Germany, March 2006, pp. 186-203. (Acceptance ratio=16%)
106. C. K. Lee, W.-C. Lee, B. Zheng, and J. Xu. "Caching Complementary Space for Location-Based Services." In *Proc. the 10th International Conference on Extending Database Technology (EDBT '06)*, Munich, Germany, March 2006, pp. 1020-1038. (Acceptance ratio=16%)
107. Q. Gao, S. Li, and J. Xu. "Performance Evaluation of Air Indexing Schemes for Multi-Attribute Data Broadcast." In *Proc. the 2nd Int. Conf. on Embedded Software and Systems (ICCESS '05)*, Xian, China, December 2005, Springer-Verlag LNCS, vol. 3820, pp. 512-521. (Acceptance ratio=18%)
108. **Y. Xu, W.-C. Lee, J. Xu, and G. Mitchell. "PSGR: Priority-based Stateless Geo-Routing in Wireless Sensor Networks." In *Proc. the 2nd IEEE Int. Conf. on Mobile Ad-Hoc and Sensor Systems (MASS '05)*, Washington, DC, November 2005, pp. 673-680.
109. J. Xu, X. Tang, and W.-C. Lee. "EASE: An Energy-Efficient In-Network Storage Scheme for Object Tracking in Sensor Networks." In *Proc. IEEE Conf. on Sensor and Ad Hoc Communications and Networks (SECON '05)*, Santa Clara, CA, September 2005, pp. 396-405. (Acceptance ratio=27%)
110. ***H. Hu, J. Xu, and D. L. Lee. "A Generic Framework for Monitoring Continuous Spatial Queries over Moving Objects." In *Proc. the ACM SIGMOD Int. Conf. on Management of Data (SIGMOD '05)*, Baltimore, MD, June 2005, pp. 479-490. (Acceptance ratio=15%)
111. **H. Hu, J. Xu, W. S. Wong, B. Zheng, D. L. Lee, and W.-C. Lee. "Proactive Caching for Spatial Queries in Mobile Environments." In *Proc. the 21st IEEE Int. Conf. on Data Engineering (ICDE '05)*, Tokyo, Japan, April 2005, pp. 403-414. (Acceptance ratio=13%)
112. J. Xu, J. Xu, S. Li, G. Peng, and Q. Gao. "Adaptive Data Dissemination for Wireless Sensor Networks." Accepted to appear in *Proc. the 2nd Int. Symp. on Parallel and Distributed Processing and Applications (ISPA '04)*, Hong Kong, Dec. 2004, Springer-Verlag LNCS, vol. 3358, pp. 156-168.
113. J. K. Ng and J. Xu. "On-Demand Broadcast Algorithms on Improving Response Time for Real-Time Information Dispatch Systems." In *Proc. the 10th Int. Conf. on Real-Time and Embedded Computing Systems and Applications (RTCSA '04)*, Gothenburg, Sweden, August 2004, Springer-Verlag LNCS.
114. **J. Xu, W.-C. Lee, and X. Tang. "Exponential Index: A Parameterized Distributed Indexing Scheme for Data on Air." In *Proc. the 2nd ACM/USENIX Int. Conf. on Mobile Systems, Applications, and Services (MobiSys '04)*, Boston, MA, June 2004, pp. 153-164. (Acceptance ratio=14%)
115. J. Xu, Y. Zhu, J. Xu, B. Li, and L. Ni. "A Cooperative Caching Algorithm for Multi-Cell Data Access." In *Proc. the IEEE Int. Conf. on Communications (ICC '04)*, Paris, France, June 2004, pp. 4072- 4076. (Acceptance ratio=29%)
116. J. Xu, W.-C. Lee, and J. Liu. "Scheduling Web Requests in Broadcast Environments." In *Poster Proc. the 13th Int. World Wide Web Conf. (WWW '04)*, New York, May 2004, ACM Press, pp. 280-281.
117. B. Zheng, J. Xu, W.-C. Lee, and D. L. Lee. "Energy-Conserving Air Indexes for Nearest Neighbor Search." In *Proc. the 9th Int. Conf. on Extending Database Technology (EDBT '04)*, Heraklion, Crete, Greece, March 2004, Springer-Verlag LNCS, vol. 2992, pp. 48-66. (Acceptance ratio=14%)
118. **X. Tang and J. Xu. "On Replica Placement for QoS-Aware Content Distribution." In *Proc. IEEE the 23rd Annual Conference INFOCOM '04*, Hong Kong, March 2004, pp. 806-815. (Acceptance ratio=18%)
119. J. Liu, X. Chu, and J. Xu. "Proxy Cache Management for Fine-Grained Scalable Video Streaming." In *Proc. IEEE the 23rd Annual Conference INFOCOM '04*, Hong Kong, March 2004, pp. 1490-1500. (Acceptance ratio=18%)
120. ***J. Xu, B. Zheng, W.-C. Lee, D. L. Lee. "Energy Efficient Index for Querying Location-Dependent Data in Mobile Broadcast Environments." In *Proc. IEEE 19th Int. Conf. on Data Engineering (ICDE '03)*, Bangalore, India, March 2003, pp. 239-250. (Acceptance ratio=13%)
121. K. K. Hoi, D. L. Lee, and J. Xu. "Document Visualization on Small Displays." In *Proc. the 4th Int. Conf. on Mobile Data Management (MDM '03)*, Melbourne, Australia, Jan. 2003, Springer-Verlag LNCS, vol. 2574, pp. 262-278.

122. H. Hu, J. Xu, and D. L. Lee. "Adaptive Power-Aware Prefetching Schemes for Mobile Broadcast Environments." In *Proc. the 4th Int. Conf. on Mobile Data Management (MDM '03)*, Melbourne, Australia, Jan. 2003, Springer-Verlag LNCS, vol. 2574, pp. 374-380.
123. Y. Niu, S. Li, and J. Xu. "Enabling Web-based Location-Dependent Information Services in Mobile Environments." In *Proc. the 4th Int. Conf. on Mobile Data Management (MDM '03)*, Melbourne, Australia, Jan. 2003, Springer-Verlag LNCS, vol. 2574, pp. 408-412.
124. J. Xu, B. Li, and D. L. Lee. "Optimal Replica Placement on Transparent Replication Proxies for Read/Write Data." In *Proc. the 21st IEEE Int. Performance, Computing, and Communications Conference (IPCCC '02)*, Phoenix, AZ, USA, April 2002, pp. 103-110.
125. J. Xu, D. L. Lee, and B. Li. "Bandwidth Allocation for Data Dissemination in Multi-Cell Environments." In *Proc. the 21st IEEE Int. Performance, Computing, and Communications Conference (IPCCC '02)*, Phoenix, AZ, USA, April 2002, pp. 233-240.
126. J. Xu, B. Zheng, M. Zhu, and D. L. Lee. "Research Challenges in Information Access and Dissemination in a Mobile Environment." In *Proc. Pan-yellow-sea Int. Workshop on Information Technologies for Network Era*, Saga, Japan, March 2002, pp. 1-8. (Invited paper)
127. J. Xu, Q. Hu, W.-C. Lee, and D. L. Lee. "An Optimal Cache Replacement Policy for Wireless Data Dissemination under Cache Consistency." In *Proc. the 30th Int. Conf. on Parallel Processing (ICPP '01)*, Valencia, Spain, Sept. 2001, IEEE Press, pp. 267-274.
128. **J. Xu, Q. Hu, D. L. Lee, and W.-C. Lee. "SAIU: An Efficient Cache Replacement Policy for Wireless On-demand Broadcasts." In *Proc. the 9th ACM Int. Conf. on Information and Knowledge Management (CIKM '00)*, McLean, VA, USA, Nov. 2000, pp. 46-53.
129. J. Xu, X. Tang, D. L. Lee, and Q. Hu. "Cache Coherency in Location-Dependent Information Services for Mobile Environments." In *Proc. the 1st Int. Conf. on Mobile Data Access (MDA '99)*, Hong Kong, Dec. 1999, Springer-Verlag LNCS, vol. 1748, pp. 182-193.
130. J. Xu, S. Li, and D. Ma. "Another Solution to Publish Distributed SGML/XML Documents onto the Web." In *Proc. Asia Pacific World Wide Web Conference (APWeb '98)*, Beijing, PRC, Sept. 1998, pp. 325-330.
131. D. Ma, S. Li, J. Xu, and S. Wang. "Distributed SGML Document Viewer and Publisher." In *Proc. Int. Symp. on Future Software Technology (ISFST '98)*, Hangzhou, PRC, 1998, pp. 58-62.

E. Others

1. "Special issue on Web information management and applications." (with Yi Cai). *World Wide Web*, 23(3): 2129-2130, 2020.
2. "Special Issue of APWeb-WAIM 2018." (with Yi Cai and Qing Li). *Springer Journal of Data Science and Engineering*, 4(1): 1-2, March 2019.
3. "Community Search over Big Graphs: Models, Algorithms, and Opportunities." (with Xin Huang and Laks V.S. Lakshmanan). Tutorial presented at *The 33rd IEEE International Conference on Data Engineering (ICDE '17)*, San Diego, April 2017.
4. "移动社交网络中的位置隐私保护."(with H. Hu and Q. Chen). *中国计算机学会通讯*, 100(6): 58-63, June 2014.
5. "Flash-Based Database Systems: Experiences from the FlashDB Project." (with X. Meng and L. Yue). In *Proc. the International Workshop on Flash-based Database Systems (FlashDB '11)*, April 2011. (Invited Talk)
6. "Editorial for Special Section: Scalable Information Systems." (with W.-C. Lee, Jianzhong Li, and F. Silvestri). *Elsevier Journal of Future Generation Computer Systems (FGCS)*, 25(1): 51-52, January 2009.
7. "Data Access Techniques in Location-Based Services." (with W.-C. Lee and B. Zheng). Tutorial presented at *The 7th Int. Conf. on Mobile Data Management (MDM '06)*, Nara, Japan, May 2006.
8. "Data Management in Location-Based Services." (with W.-C. Lee and B. Zheng). Tutorial presented at *The 20th IEEE International Conference on Data Engineering (ICDE '04)*, Boston, March 2004.

INVITED TALKS

1. J. Xu, "Introduction to Blockchain." *VLDB Summer School*, July 13-17, 2020. (**Invited Lecturer**)
2. J. Xu, "Blockchain Data Management: Challenges and Opportunities." *The 36th National Database Conference (NDBC)*, Oct. 11-13, 2019. (**Invited Keynote**)
3. J. Xu, "Blockchain Data Management." *The 8th Forum of Future Data (FFD)*, Nov 21-22, 2019. (**Invited Talk**)
4. J. Xu, "Towards Searchable Blockchain", *The ACM Turing Celebration Conference - China (ACM TURC 2019)*, May 17-19, 2019. (**Invited Keynote**)
5. J. Xu, "Data Security and Privacy in Blockchain", *The 3rd National Annual Conference on Data Security and Privacy Protection (DSPP)*, September 27-29, 2018. (**Invited Talk**)
6. J. Xu, "Towards Trustworthy and Interactive Queries on Big Spatial Data", *The 2nd IEEE International Conference on Data Science in Cyberspace (DSC)*, June 26-29, 2017. (**Invited Talk**)
7. J. Xu, "Big Spatial Data: Towards Interactive, Trustworthy and Social-Aware Search", *The 2nd HKUST CSE Alumni Homecoming Workshop on Systems, Applications, Networks, and Data (SAND)*, June 17, 2017. (**Invited Talk**)
8. J. Xu, "Towards Interactive and Social-Aware Spatial Query Services", *The 18th Asia-Pacific Web Conference*, September 23-25, 2016. (**Distinguished Lecture**)
9. J. Xu, "Querying Cloud Data with Confidentiality and Integrity Assurance", *The First Europe-China Workshop on Big Data Management*, Helsinki, Finland, May 16, 2016. (**Invited Talk**)
10. J. Xu, "Secure Query Services in Outsourced Cloud Environments", *International Workshop on Ubiquitous Cyber Security*, Oct 29-30, 2015. (**Invited Plenary Talk**)
11. J. Xu, "Authenticated Query Services in Data Outsourcing and Integration", *The 17th Asia-Pacific Web Conference*, September 18-20, 2015. (**Distinguished Young Lecture**)
12. J. Xu, "Secure Query Services in Outsourced Cloud Environments", *CCF YOCSEF Shenzhen-HK Forum on Big Data*, Shenzhen, June 12, 2015. (**Invited Talk**)
13. J. Xu, "Privacy-Aware Query Processing." *International Workshop on Big Data Privacy Management*, Beijing, May 14, 2015. (**Invited Talk**)
14. J. Xu, "Location Privacy Protection in Geo-Social Networks." *CCF YOCSEF Forum on Privacy Protection in Social Networks*, Beijing, Feb. 28, 2014. (**Invited Talk**)
15. J. Xu, "Research Experience Sharing through a Case Study on Authenticated Query Processing in Cloud ." *The 30th National Database Conference (NDBC)*, Haerbin, August 2013. (**Invited Tutorial Talk**)
16. J. Xu, "Optimizing Transaction Logging and Recovery Performance with Phase-Change Memory", *Dagstuhl Seminar on Robust Query Processing*, August 2012. (**Invited Talk**)
17. J. Xu, "Managing Data Effectively on Flash Memory Disks." *The 2011 International Workshop on Advanced Data Management (ADM 2011)*, December 2011. (**Invited Talk**)
18. J. Xu, "Flash-Based Database Systems: Experiences from the FlashDB Project." *The First International Workshop on Flash-based Database Systems (FlashDB '11)*, April 2011. (**Invited Talk**)

US PATENTS

1. "Method for Index-based and Integrity-assured Search in a Blockchain" (with C. Xu and C. Zhang). US Non-Provisional Patent Application No. 16/828,982, filed on March 25, 2020.
2. "Method and Apparatus for Assuring Location Data Integrity with Minimum Location Disclosure" (with H. Hu and Q. Chen). US Non-Provisional Patent No. 9,973,514, filed on Oct. 26, 2015, granted on May 15, 2018.
3. "System and Method for Providing Proximity Information" (with H. Hu). US Non-Provisional Patent No. 9,351,116, filed on May 30, 2013, granted on May 24, 2016.
4. "Method and Apparatus for Authenticating Location-based Services without Compromising Location Privacy" (with H. Hu and Q. Chen). US Non-Provisional Patent No. 9,043,927, filed on Feb. 19, 2013, granted on May 26, 2015.

TEACHING (Ranging from year one fundamental courses to final year and postgraduate advanced courses)

- COMP1160/2016: Database Management (Spring 2006-2007, 2014; Fall 2007-2012, Spring 2013-2020)
- COMP2440: Database Systems II (Spring 2003-2005)

- COMP2840: Computer Architectures (Fall 2002, 2005)
- COMP2860: Web Systems Application Development (Fall 2003-2004)
- COMP3140: Computer and Network Security (Fall 2009)
- COMP3220/4035: Database System Implementation (Spring 2007-2017)
- COMP3670: Mobile Computing (Fall 2014)
- COMP3820: Information Systems Security and Auditing (Spring 2003-2005, 2011)
- COMP7640: Database Systems and Administration (Fall 2005, 2010, 2012-2013, 2015-2018)
- COMP7160: Research Methods in Computer Science (Fall 2019)
- I.T.1510: World Wide Web Application Development (Fall 2006)

ADVISING

A. Students/Postdoctoral Fellows

- Haixin Wang, MPhil Student, Started in Fall 2019, Research Topic: “Blockchain As A Service.”
- Xiaoguo Li, Postdoctoral Fellow, 2019-, Research Topic: “Federated Data Analysis.”
- Cheng Xu, Postdoctoral Fellow, 2019-, Research Topic: “Blockchain Systems.”
- Qing Liu, Postdoctoral Fellow, 2017-, Research Topic: “Graph and Spatial Query Processing.”
- Yang Ji, PhD Student, Started in Fall 2018, Research Topic: “Blockchain and Trusted Hardware.”
- Ce Zhang, PhD Student, Started in Fall 2017, Research Topic: “Verifiable Search in Distributed Computing.”
- Xiaoyi Fu, PhD Student, Graduated in Dec. 2019, Research Topic: “Social-aware Ridesharing.” (*first employment, Lecturer, Hong Kong Baptist University, Hong Kong*)
- Cheng Xu, PhD Student, Graduated in Feb. 2019, Research Topic: “Query Authentication.” (*first employment, Postdoc Fellow, Hong Kong Baptist University, Hong Kong*)
- Shangwei Guo, Postdoctoral Fellow, 2018-2019, Research Topic: “Verifiable Multimedia Search.” (*first employment, Postdoc Fellow, Nanyang Technological University, Singapore*)
- Lei Chen, PhD Student, Graduated in Dec 2016, Thesis Title: “Answering Why-Not Questions on Spatial Keyword Top- k Queries.” (*first employment: Researcher, Huawei Noah’s Ark Lab, Hong Kong*)
- Jingjing Chen, PhD Students, Graduated in Summer 2016, Thesis Title: “Enhancing Student Engagement and Interaction in E-learning Environments through Learning Analytics and Wearable Sensing.” (*first employment: Assistant Professor, Zhejiang University of Technology, China*)
- Yafei Li, PhD Student, Graduated in Summer 2015, Thesis Title: “Efficient Group Queries in Location-based Social Networks.” (*first employment: Assistant Professor, Zhengzhou University, China*)
- Qian Chen, PhD Student, Graduated in Summer 2015, Thesis Title: “Query Authentication in Data Outsourcing and Integration Services.” (*first employment: Senior R&D Engineer, NetEase Games, Hangzhou, China; current employment: Software Engineer, Google*)
- Zhe Fan (Co-supervisor), PhD Student, Graduated in Summer 2015, Thesis Title: “Secure Subgraph Query Services” (*first employment: Senior Software Engineer, Huawei, Shenzhen, China*)
- Xiaofeng Ding, Postdoctoral Fellow, 2014, Research Topic: “Privacy Management for Big Data.” (Supported by the Hong Kong Scholars Program) (*first employment: Associate Professor, Huazhong University of Science and Technology, Wuhan, China*)
- Dingming Wu, Postdoctoral Fellow, 2011-2013, Research Topic: “Social-aware Spatial Keyword Queries.” (*first academic employment: Assistant Professor, Shenzhen University, Shenzhen, China*)
- Xin Lin, Postdoctoral Fellow, 2011-2013, Research Topic: “Mobile Query Authentication.” (Supported by the First Hong Kong Scholars Program) (*first employment: Associate Professor, East China Normal University, Shanghai, China*)

- Yun Peng (Co-supervisor), PhD Student, Graduated in Summer 2013, Thesis Title: “Estimation Techniques for Advanced Database Application.” (*first employment: Postdoc Fellow, Nanyang Technological University, Singapore; current employment: Advisory Researcher, Lenovo Big Data Research Centre, HK*)
- Shen Gao, MPhil Candidate, Graduated in Summer 2013, Thesis Title: “Transaction Logging and Recovery for Phase-Change Memory.” (*first placement: PhD student at University of Zurich; current employment: Software Engineer, Google, Zurich*)
- Hong Ping Li, MPhil Candidate, Graduated in Spring 2013, Thesis Title: “Secure Proximity Queries in Mobile Geo-Social Services” (*first employment: ICT Graduate Trainee, PCCW, HK*)
- Yu Li, PhD Student, Graduated in Summer 2011, Thesis Title: “Indexing and Query Processing for Flash-based Database Systems.” (*first employment: Senior Software Engineer, Tencent, China; current employment: Solution Engineer, Facebook*).
- Jintian Deng (Co-supervisor), MPhil Student, Graduated in Summer 2011, Thesis Title: “Incremental Maintenance of Minimal and Minimum Bisimulation of Cyclic Graphs” (*first employment: Software Engineer, Alibaba, China*)
- Chushi Ren, FYP Student, Graduated in Summer 2011 with First-Class Honor, Undergraduate Thesis Title: “iGreen: Enabling Privacy-Preserving Location-based Services.” (*first placement: Postgraduate Student at University of Pennsylvania*).
- Sai Tung On, MPhil Student, Graduated in Summer 2010, Thesis Title: “Efficient Transaction Recovery in Flash-based Databases.” (*first employment: System Developer, Vegasoul Fund, HK*)
- Haibo Hu, Postdoctoral Fellow, 2006-2008, Research Topic: “Trustworthy Monitoring of Continuously Moving Objects.” (*first employment: Research Assistant Professor, HKBU; current employment: Assistant Professor, Hong Kong Polytechnic University*)
- Jing Du, MPhil Student, Graduated in Summer 2007, Thesis Title: “Privacy-Preserving Data Access in Mobile Computing Environments.” (*first employment: R&D Leader, Rose Datasystems, China*)
- Minji Wu, MPhil Student, Graduated in Summer 2006, Thesis Title: “Energy-Efficient Query Processing in Wireless Sensor networks.” (*first placement: PhD student at Rutgers University; current employment: Software Engineer, Microsoft*)
- MSc Students: Qinghui Liu (2009), Cheong Chi Joey Li (2008), Zhijun Li (2008), Yan Lu (2008), Ruming Wu (2007), Yicong Huang (2007), Tak Chung Lee (2007), Kwok Cheong Tang (2007), Nan Huang (2007)

B. Student Achievements

- PhD supervisor, Ce Zhang won **Student Travel Award** from **IEEE ICDE 2019**
- PhD supervisor, Cheng Xu won **Student Travel Award** from **ACM SIGMOD 2018**
- Supervisor, Wenzhou Wei and Haixin Wang won the **Third Prize** in **2017 HSBC FinTech (Safeguard App) Competition**
- PhD supervisor, Yafei Li won **2016 ACM China Doctoral Dissertation Award Chapter Winner**
- PhD supervisor, Lei Chen won **Student Travel Award** from **IEEE ICDE 2015**
- PhD supervisor, Qian Chen won **Student Travel Awards** from **ACM SIGMOD 2012** and **IEEE ICDE 2013**
- FYP & MPhil Supervisor, FlashDB project (by Gao Shen) won the **First-Class Award in the 12th National Challenge Cup Contest**, October 2011. (8% of the shortlisted projects were awarded First-Class Awards)
- FYP Supervisor, Chushi Ren won the **2nd Runner-up Prize** in Hong Kong and **Bronze Prize** in the Final Round of the 2011 Amway Pan-Pearl River Delta Region Universities IT Project Competition (participated by 136 universities in the Pan-Pearl River Delta Region)
- FYP Supervisor, Shen Gao won a **Merit Prize** in the 2010 HKEIA Innovation & Technology Project Competition Award (10 awarded out of 30+ project submissions from all local universities)
- FYP Supervisor, Shen Gao won the **3rd Runner-up Prize** in Hong Kong and **Bronze Prize** in the Final Round of the 2010 Amway Pan-Pearl River Delta Region Universities IT Project Competition
- Co-advisor, Xingjie Liu won the **Best Student Paper Award Runner-up** in the 15th Intl. Conference on Database Systems for Advanced Applications (DASFAA), 2010

- Coach, five student teams won the **Champion University Award** in 2008 IBM DB2 Inter-University Programming Contest, which consists of 28 teams from eight universities in Hong Kong and Macau
- Co-advisor, Haibo Hu won the **ACM-HK Best PhD Paper Award**, 2005

C. PhD Thesis External Examiners

- 30+ PhD theses for Technical University of Kaiserslautern (Germany), Queensland University (Australia), University of New South Wales (Australia), University of Technology Sydney (Australia), National University of Singapore (Singapore), Nanyang Technological University (Singapore), University of Hong Kong, Hong Kong University of Science and Technology, Chinese University of Hong Kong, City University of Hong Kong, Hong Kong Polytechnic University

PROFESSIONAL SERVICES

A. Journal Editorship

- Associate Editor, *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, 2014 – 2020
- Associate Editor, *Proceedings of the VLDB Endowment (PVLDB)*, 2017 – 2018
- Associate Editor, *International Journal of Information Science and Engineering (JISE)*, 2016 – Present
- Editor, *International Journal of Distributed Sensor Networks (IJDSN)*, Hindawi, 2010 – 2014
- Review Board Member, *Proceedings of the VLDB Endowment (PVLDB)*, 2013-2014, 2016-2017, 2018-2021
- Guest Editor, *World Wide Web Journal (WWWJ)*, Springer, 2020
- Guest Editor, *Distributed and Parallel Databases (DAPD)*, Springer, 2020
- Guest Editor, *Data Science and Engineering (DSE)*, Springer, 2019
- Guest Editor, *Future Generation Computer Systems*, Elsevier, 2009

B. Department/Faculty/University Services

- Convenor, University Research Cluster on Data Analytics and AI, HKBU, 2019 – 2022
- Senate Member, HKBU, 2018 – 2020
- Member of e-Learning Committee, HKBU, 2018 – 2020
- Associate Head (Research & Development), Department of Computer Science, HKBU, 2017 –
- Management Committee Member, Data and Media Communication (DMC) Interdisciplinary Concentration, 2017 –
- Chair, Departmental Research Committee, HKBU, 2016 –
- TA/Instructor Coordinator, Department of Computer Science, HKBU, 2018 –
- Coordinator, Departmental Research Postgraduate Programme, HKBU, 2016 –
- Member of Departmental Management Committee, 2013 –
- Acting Associate Head, Department of Computer Science, HKBU, January – July 2016
- Acting Chair of Departmental Undergraduate Management Committee, January – July 2016
- Acting Programme Coordinator, BSc (Hons) in Computer Science, January – July 2014
- Member of Faculty Review Panel, 2014 – 2016
- Member of Departmental Review Panel, 2013 – 2017
- Member of Faculty Task Force on Research Assessment Exercise, 2012 – 2014
- Member of Faculty Task Force on PhD Fellowship Scheme, 2013 - 2014
- Member, Science Elite Programme, 2013 – 2014
- Member of Accreditation Panel for HKBU-UIC Computer Science & Technology Program, 2013
- Coordinator of HKIE Accreditation Exercise on BSc (Hons) Degree in CS / IS Programme, 2012
- Departmental Coordinator for RGC's Visit, 2011
- Chinese Medicine & Science Specialist Panel, 2008 – 2018
- Departmental Four-Year Curriculum Committee (chairing Task Force Group #1 with focus on fundamental courses), 2008 – 2011
- Final Year Project (Computer Science) Coordinator and Faculty Project Committee Member, 2004 – 2016

- External Examiner of HKBU-UIC Computer Science & Technology Program, 2010 – Present
- Faculty & Department System Security Review Task Force Co-Chair, 2008
- University Complementary Studies Committee Member, 2005 – 2006
- Computer Science Program Committee Member, 2002 – Present
- PG-Day Coordinator, 2005 – 2006
- Departmental Colloquium Coordinator, 2002 – 2006
- Faculty Safety / Workshop Committee Member, 2003 – 2004

C. Professional Organization Services

- Member, Hong Kong RGC Engineering Panel, 2016 –
- Advisory Committee Member, School of Decision Sciences, Hang Seng University of Hong Kong, 2017 – 2019
- Vice Chairperson, ACM SIGMOD Hong Kong Chapter, 2013 – 2016
- Vice Chairperson, ACM Hong Kong Chapter, 2008 – 2010
- Executive Committee Member, ACM Hong Kong Chapter, 2003 – 2010
- Judge, ACM-HK Collegiate Programming Contest, 2008
- Proposal Reviewer, Hong Kong Research Grants Council, 2008

D. Conference / Workshop Organization

- General Co-Chair, The 22nd IEEE International Conference on Mobile Data Management (MDM '21), Toronto, Canada, June 2020.
- TPC Co-Chair, The 37th National Database Conference (NDBC '20), October 2020.
- TPC Co-Chair, The 2nd IEEE International Workshop on Blockchain and Data Management (BlockDM '20), in conjunction with ICDE, April 2020.
- TPC Co-Chair, The 20th IEEE International Conference on Mobile Data Management (MDM '19), Hong Kong, June 2019.
- TPC Co-Chair, The 1st IEEE International Workshop on Blockchain and Data Management (BlockDM '19), in conjunction with ICDE, April 2019.
- TPC Co-Chair, The 2nd APWeb-WAIM Joint Conference on Web and Big Data, Macau, July 2018.
- TPC Co-Chair, The 17th International Conference on Web-Age Information Management (WAIM '16), Nanchang, China, June 2016.
- TPC Co-Chair, The Third IEEE International Conference on Cyber-Physical Systems, Networks, and Applications (CPSNA'15), Hong Kong, August 2015.
- TPC Track Chair, The 2014 National Conference on Social Media Processing (SMP '14), Beijing, China, November 2014.
- TPC Co-Chair, The Second International Workshop on Big Data Management on Emerging Hardware (HardBD '14), Macau, China, June 2014.
- TPC Co-Chair, The 2013 IEEE International Workshop on Big Data Analytics in Mobile Social Networks (BigMSN '13), Fuzhou, China, December 2013.
- TPC Vice-Chair, The 32nd IEEE International Conference on Distributed Computing Systems (**ICDCS 2012**), Macau, China, June 2012.
- TPC Vice-Chair and Best Paper Selection Committee Member, The 18th IEEE International Conference on Parallel and Distributed Systems (ICPADS 2012), Singapore, November 2012.
- TPC Co-Chair, The 2nd Intl. Workshop on Flash-based Database Systems (FlashDB 2012), Busan, South Korea, April 2012.
- TPC Co-Chair, The 2nd ACM Intl. Workshop on Cloud Data Management (CloudDB 2010), Toronto, Canada, October 2010.
- TPC Co-Chair, The 2nd Intl. Workshop on Peer-to-Peer Computing for Information Search (P2PSearch '08), Hainan Island, China, December 2008.
- TPC Co-Chair, International Workshop on P2P Information Management (P2PIM '06), Hong Kong, May 2006.

- Local Organizing Team Member, ICDE 2019, Macau, April 2019
- Best Paper Committee Member, DASFAA 2017, Suzhou, China, March 2017
- Publicity Co-Chair, Int'l Conf. on Privacy-Aware Computing (PAC 2017), Washington DC, USA, August 2017
- Publication Co-Chair, NDBC 2016, Shenzhen, China, Oct 2016
- Publicity Co-Chair, BigCOMP 2016, Hong Kong, China, Jan. 2016
- Student Activities Co-Chair, INFOCOM 2015, Hong Kong, China, April 2015
- Workshop Co-Chair, The 15th International Conference on Web-Age Information Management (WAIM), Macau, China, June 2014
- Publication Co-Chair, The 14th International Conference on Web-Age Information Management (WAIM), Beidaihe, China, June 2013
- Demo Co-Chair, The 18th Intl. Conference on Database Systems for Advanced Applications (DASFAA), Wuhan, China, April 2013
- Workshop Co-Chair, The 14th IEEE International Conference on Mobile Data Management (MDM), Milan, Italy, June 2013
- Workshop Co-Chair, The 16th Intl. Conference on Database Systems for Advanced Applications (DASFAA), Hong Kong, April 2011
- Publicity Co-Chair, The 10th Intl. Conf. on Mobile Data Management (MDM '09), Taipei, Taiwan, May 2009
- Seminar Co-Chair, The 9th Intl. Conf. on Mobile Data Management (MDM '08), Beijing, China, April 2008
- Publication Chair, The 2nd Intl. Conf. on Mobile Ad-hoc and Sensor Networks (MSN '06), Hong Kong December 2006.
- Organizing Committee Member, IEEE ICDM '06 / WI '06 / IAT '06, Hong Kong, December 2006.
- Local Arrangement Co-Chair, IEEE INFOCOM '04, Hong Kong, March 2004.

E. Conference/Workshop Technical Program Committee (TPC) Member

- International Conference on Very Large Data Bases (VLDB): 2014, 2017, 2019, 2020, 2021
- IEEE International Conference on Data Engineering (ICDE): 2009-2012, 2015-2016 (Demo), 2018-2021
- International World Wide Web Conference (WWW): 2008, 2009, 2018
- ACM SIGMOD International Conference on Management of Data (SIGMOD): 2011 (Demo), 2015
- IEEE International Conference on Big Data (BigData): 2013, 2014, 2017-2018 (Senior PC Member)
- ACM Conference on Information and Knowledge Management (CIKM): 2009, 2010, 2019 (Senior PC Member)
- The APWeb-WAIM Joint Conference on Web and Big Data: 2017 (Senior PC Member)
- IEEE International Conference on Mobile Data Management (MDM): 2004, 2006, 2008-2019
- International Conference on Database- and Expert Systems Applications (DEXA): 2009, 2010
- International Conference on Database Systems for Advanced Applications (DASFAA): 2010-2021
- International Conference on Web-Age Information Management (WAIM): 2006, 2007, 2009-2015
- International Conference on Distributed Computing in Sensor Systems (DCOSS): 2015
- International ACM Workshop on Data Engineering for Wireless and Mobile Access (MobiDE): 2012
- ACM International Workshop on Mobile Geographic Information Systems (MobiGIS): 2012-2015
- IFIP international conference on Distributed Applications and Interoperable Systems (DAIS): 2009
- ACM Symposium on Applied Computing (SAC): 2003-2015
- Asia-Pacific Web Conference (APWeb): 2007-2016
- ICDE Workshop on Uncertain Data Management: 2009
- IEEE International Conference on Sensor Networks, Ubiquitous, and Trustworthy Computing (SUTC): 2008
- International Conference on Embedded Software and Systems (ICCESS): 2008
- VLDB Workshop on Data Management for Sensor Networks (DMSN): 2006, 2007, 2008, 2010
- ICDE Workshop on RFID Data Management (RFDM): 2008
- ICDE Workshop on Ambient Intelligence, Media, and Sensing (AIMS): 2007

- MDM Workshop on Privacy-Aware Location-based Mobile Services (PALMS): 2007, 2008, 2009
- SIGMOD PhD Workshop on Innovative Database Research (IDAR): 2007
- IFIP International Conference on Embedded and Ubiquitous Computing (EUC): 2006, 2007, 2008, 2009
- Annual International Conference on Mobile and Ubiquitous Systems (MobiQuitous): 2007
- International Conference on Communications and Networking in China (CHINACOM): 2007, 2008
- SIWN International Conference on Complex Open Distributed Systems (CODS): 2007
- International Conference on Scalable Information Systems (INFOSCALE): 2007, 2009
- International workshop on DataBase Management and Application over Networks (DBMAN): 2007
- ICDCS Workshop on Mobile Distributed Computing (MDC): 2004-2007
- Annual IEEE Consumer Communications and Networking Conference (CCNC): 2007
- ICDM Workshop on Spatial and Spatio-temporal Data Mining (SSTDM): 2006
- IEEE TENCON Conference: 2006
- International Workshop on INformation Processing over Evolving Networks (WINPEN): 2006
- International Symposium on Pervasive Computing and Applications: 2006
- International Conference on Mobile Ad-hoc and Sensor Networks (MSN): 2005
- IEEE International Conference on e-Business Engineering (ICEBE): 2005, 2011
- International Symposium on Parallel and Distributed Processing and Applications (ISPA): 2005
- International Conference on Real-Time and Embedded Computing Systems and Applications (RTCSEA): 2005
- International Workshop on Web Based Collaboration (WBC): 2003, 2004, 2005
- International Human.Society@Internet Conference (HSI): 2003, 2005
- Annual IEEE Conference INFOCOM: 2004

F. Reviewer/Referee

- ACM Transactions on Database Systems (TODS)
- ACM Transactions on Storage
- IEEE Transactions on Knowledge and Data Engineering (TKDE)
- IEEE Transactions on Parallel and Distributed Systems (TPDS)
- IEEE Transactions on Wireless Communications (TWC)
- IEEE Transactions on Mobile Computing (TMC)
- IEEE Transactions on Multimedia (TMM)
- IEEE Transactions on Vehicular Technology (TVT)
- IEEE Transactions on Systems, Man and Cybernetics (SMC)
- IEEE Transactions on Industrial Informatics (TII)
- Very Large Data Base Journal (VLDBJ)
- ACM Journal of Wireless Networks (WINET)
- Information Systems
- World Wide Web Journal
- IEEE Personal Communications Magazine
- IEEE Communications Letters
- Wireless Communications and Mobile Computing (WCMC) Journal
- Information Sciences