Journal Papers

- All articles below are international and have been externally refereed.
- A “[I]” before the publication indicates that the paper is important (i.e., published in top international journals or conferences).


[J11] [I] D. He, S. Wang, X. Zhou, and R. Cheng. GLAD: A Grid and Labelling Framework with Scheduling for Conflict-Aware kNN Queries. In the Transactions on Knowledge and Data Engineering (IEEE TKDE), 33(4):
1554-1566 (2021). (My contribution: 20%: I am involved in problem definition, solution development, and paper writing.)


[22] [I] Y. Chen*, Y. Fang, R. Cheng, Y. Li, X. Chen, and J. Zhang. Exploring Communities in Large Profiled Graphs. In the Transactions on Knowledge and Data Engineering (IEEE TKDE), 31(8), pp. 1624-1629, 1 Aug, 2019. (My contribution: 20%: I am involved in problem definition, solution development, and paper writing.)

[23] [I] Y. Fang, X. Huang, L. Qin, Y. Zhang, W. Zhang, R. Cheng, and X. Lin. A survey of community search
over big graphs. In the Very Large Data Bases Journal (VLDBJ), Springer, first online: Jul 2019. (My contribution: 15%: I am involved in giving directions for structuring the survey and giving advice.)


[J32] [I] Y. Zheng*, G. Li, Y. Li, C. Shan*, and R. Cheng*. Truth Inference in Crowdsourcing: Is the Problem Solved? [Experiments and Analyses]. In Proceedings of the VLDB Endowment (PVLDB), 10(5), pp. 541-552, Jan 2017, ISSN 2150-8097. Also presented in the Very Large Databases Conf. (VLDB 2017), Munich, Germany, Aug 28-Sep 1, 2017. Impact factor: 2.23 (RG), cited 117 times (My contribution: 15%: This is a joint work with Tsinghua University. I am involved in experiment design and paper writing.)

[J33] [I] Y. Zheng*, G. Li, and R. Cheng*. DOCS: Domain-Aware Crowdsourcing System. In Proceedings of the VLDB Endowment (PVLDB), 10(4), pp. 361-372, Dec 2016, ISSN 2150-8097. Also presented in the Very Large Databases Conf. (VLDB 2017), Munich, Germany, Aug 28-Sep 1, 2017. Impact factor: 2.23 (RG), cited 60 times (My contribution: 30%: This is a joint work with Tsinghua University. I am involved in problem definition, solution development, and paper writing.)

presented in the 43rd Intl. Conf. on Very Large Data Bases (VLDB), Munich, Germany, August 2017. (My contribution: 40%; I am involved in interface design and paper writing.)


[J40] [I] Z. He, P. Wong, B. Kao, E. Lo, R. Cheng, and Z. Feng. Efficient Pattern-Based Aggregation on Sequence Data. In the Transactions on Knowledge and Data Engineering (IEEE TKDE), ISSN: 1041-4347, 29(2), pp. 286-299, Feb 2017. (My contribution: 10%; I give advice to the paper.)


[J42] [I] Z. Li, Y. Fang*, Q. Liu, J. Cheng, R. Cheng, and J. C.S. Lui. Walking in the Cloud: Parallel SimRank at Scale. In the Proceedings of the VLDB Endowment (PVLDB), 9(1), ISSN 2150-8097. Also presented in the Very Large Databases Conf. (VLDB 2016), New Delhi, India, Sep 5-9, 2016. Impact factor: 2.23 (RG), cited 26 times (My contribution: 20%; this is a joint work with Huawei Noah’s Ark Lab Hong Kong, where my student Yixiang Fang did this work during his internship in Huawei. I am involved in the solution design and paper writing.)

[J43] C. Dai, S. Nutanong, C.Y. Chow, and R. Cheng. Entropy-based Scheduling Policy for Cross Aggregate Ranking Workloads. In the IEEE Transactions on Services Computing (IEEE TSC), ISSN: 1939-1374, June 2016. (My contribution: 15%; This is a joint work with City University of Hong Kong. I participated in discussions and edited the paper.)


[J45] Z. Wang, B. Yao, R. Cheng, X. Gao, L. Zou, H. Guan, and M. Guo. SME: Explicit and Implicit Constrained-Space Probabilistic Threshold Range Queries for Moving Objects. July 2015, ISSN 1384-6175, Geoinformatica. (My contribution: 15%; This is a joint work with Shanghai Jiao tong University. I am responsible for giving high-level ideas and editing the paper.)
[J46] C. J. Zhu*, K. Y. Lam, R. Cheng, and C. K. Poon. On Using Broadcast Index for Efficient Execution of Shortest Path Continuous Queries. In Information Systems (IS), Volume 49, April 2015, pp. 142-162. (My contribution: 20%; This is a joint work with City University of Hong Kong. I am responsible for giving high-level ideas and editing the paper.)


[J48] X. Xie*, M. L. Yiu, R. Cheng, and L. Hua. Scalable Evaluation of Trajectory Queries over Imprecise Location Data. In the Transactions on Knowledge and Data Engineering (TKDE), pp. 2029-2044, ISSN: 1041-4347, August 2014. (My contribution: 30%; I am involved in the design of the solution and writing of the paper.)


[J54] L. Sun*, R. Cheng, X. Li*, D. Cheung, and J. Han. On Link-based Similarity Join. In Proceedings of the VLDB Endowment (PVLDB), 4(11), pp. 714-725, ISSN 2150-8097. Also presented in the Very Large Databases Conf. (VLDB 2011), Seattle, Aug, 2011. Acceptance rate: 18.1% (100 out of 553 papers); Impact factor: 2.23 (RG), cited 31 times. (My contribution: 30%; I am involved in the problem definition, solution and experiment design, and writing of the paper.)


[J58] R. Cheng, E. Lo, X. Yang*, M. Luk, X. Li*, and X. Xie*. Explore or Exploit? Effective Strategies for Disambiguating Large Databases. In Very Large Databases Conf. (VLDB 2010), Singapore, Sep, 2010; also appeared in Volume 3 of the Journal “Proceedings of the VLDB Endowment”. (PVLDB), ISSN 2150-8097. Acceptance rate: 18.4% (48 out of 261 papers) (My contribution: 60%: I am the first author, involved in the problem definition, solution design, and writing of the paper.)


Conference and Workshop Papers

* All articles below are international and have been externally refereed.

[C1] [I] C. Ma*, Y. Fang, R. Cheng, L. Lakshmanan, and X. Han. A Convex-Programming Approach for Efficient Directed Densest Subgraph Discovery. ACM SIGMOD Conference 2022, June 2022, Philadelphia, PA, USA.

[C2] [I] X. Lin*, R. Cheng, T. Grubenmann, S. Maniu, and C. Ma*. Leveraging Contextual Graphs for Stochastic Weight Completion in Sparse Road Networks. In SIAM International Conference on Data Mining (SDM 2022), April 2022, Alexandria, Virginia, US. (My contribution: 20%: I am involved in designing the solutions and writing the paper.)


Knowledge Management (ACM CIKM 2020), October 2020, Ireland (virtual). (My contribution: 30%: I am responsible for problem definition, system design, and writing of the paper.)


[C14] B. Li*, R. Cheng, J. Hu, Y. Fang, M. Ou, R. Luo, K. Chang, and X. Lin. MC-Explorer: Analyzing and Visualizing Motif-Cliques on Large Networks (Demo paper.) In the 36th IEEE Intl. Conf. on Data Engineering (IEEE ICDE 2020), Dallas, Texas, Apr 2020. (My contribution: 30%: I am responsible for demo design and development, and writing of the paper.)


[C17] Y. Fang, X. Huang, L. Qin, Y. Zheng, W. Zhang, R. Cheng, and X. Lin. A Survey of Community Search Over Big Graphs (Poster). In the Very Large Databases Conf. (VLDB 2019), Los Angeles, Aug 2019. (My contribution: 10%: I give advice to the organization of the paper.)


[C20] Y. Fang*, Z. Wang, R. Cheng, H. Wang, and J. Hu*. Effective and Efficient Community Search over Large Directed Graphs (Extended Abstract). In the 35th IEEE Intl. Conf. on Data Engineering (TKDE poster, IEEE ICDE 2019), Macau SAR, China, Apr 2019. (My contribution: 30%: I am responsible for experiment design and implementation, and writing of the paper.)

[C21] Y. Chen*, Y. Fang*, R. Cheng, Y. Li, X. Chen, and J. Zhang. Exploring Communities in Large Profiled Graphs (Extended Abstract). In the 35th IEEE Intl. Conf. on Data Engineering (TKDE poster, IEEE ICDE 2019), Macau SAR, China, Apr 2019. (My contribution: 30%: I am responsible for experiment design and implementation, and writing of the paper.)


[C24] I] S. Luo*, B. Kao, X. Wu, and R. Cheng. MPR – A partitioning-republication framework for multi-processing kNN Search on Road Networks. In the 35th IEEE Intl. Conf. on Data Engineering (IEEE ICDE 2019), Macau SAR, China, Apr 2019. (My contribution: 15%: I am responsible for experiment design and implementation, and writing of the paper.)


[C26] Y. Fang*, Z. Wang, R. Cheng, H. Wang, and J. Hu*. Effective and Efficient Community Search over Large Directed Graphs (Extended Abstract). In the 35th IEEE Intl. Conf. on Data Engineering (TKDE poster, IEEE ICDE 2019), Macau SAR, China, Apr 2019. (My contribution: 15%: I am responsible for experiment design and implementation, and writing of the paper.)


[C31] Y. Fang*, R. Cheng, J. Wang*, Budiman*, G. Cong, and N. Mamoulis. SpaceKey: Exploring Patterns in Spatial Databases (Demo). In the 34th IEEE Intl. Conf. on Data Engineering (IEEE ICDE 2018), Paris, France, Apr 2018. (My contribution: 30%; I am responsible for experiment design and implementation, and writing of the paper.)


[C33] [I] X. Li*, R. Cheng, Y. Fang*, J. Hu*, and S. Maniu. Scalable Evaluation of k-NN Queries on Large Uncertain Graphs. In the 21st Intl. Conf. on Extending Database Technology (EDBT 2018), Vienna, Austria, Mar 2018. (My contribution: 40%; I am responsible for experiment design and implementation, and writing of the paper.)


[C39] [I] Z. Huang*, Y. Zheng*, R. Cheng, Y. Sun, N. Mamoulis, and X. Li. Meta Structure: Computing Relevance in Large Heterogeneous Information Networks. In the 22nd ACM SIGKDD Intl. Conf. on Knowledge Discovery and Data Mining (KDD 2016), San Francisco, US, August 2016, cited 63 times (My contribution: 30%; I am involved in problem definition, solution development, and paper writing.)

[C40] [I] H. Hu, Y. Zheng*, Z. Bao, G. Li, J. Feng, and R. Cheng. Crowdsourced POI Labelling: Location-Aware Result Inference and Task Assignment. In Intl. Conf. on Data Engineering (IEEE ICDE 2016), Helsinki, Finland, May 2016, pp. 61-72 (My contribution: 15%; This is a collaboration with Tsinghua University. I am involved in problem definition, solution development, and paper writing.)


[C43] Z. Li, Y. Fang*, Q. Liu, J. Cheng, R. Cheng, and J. C.S. Lui. *PASCO: Parallel SimRank Computation at Scale (Poster).* In the ACM Symposium on Cloud Computing (SoCC 2015), Hawaii, August 27-29, 2015. (My contribution: 20%; this is a joint work with Huawei Noah’s Ark Lab Hong Kong, where my student Yixiang Fang did this work during his internship in Huawei. I am involved in the solution design and paper writing.)

[C44] [I] S. Lei*, S. Maniu*, L. Mo*, R. Cheng, and P. Senellart. *Online Influence Maximization.* In the 21th ACM SIGKDD Intl. Conf. on Knowledge Discovery and Data Mining (KDD 2015), Sydney, Australia, August 2015. Acceptance rate: 19.4% (159 out of 819 papers), cited 79 times (My contribution: 30%; I am involved in the design of the solution, experiment design and implementation, and writing of the paper.)

[C45] J. Hu*, R. Cheng, D. Wu, and B. Jin. *Efficient Top-k Subscription Matching for Location-Aware Publish/Subscribe.* In the 14th Intl. Symposium on Spatial and Temporal Databases (SSTD 2015), Seoul, South Korea, August 2015. Acceptance rate: 37.5% (24 out of 64 papers) (My contribution: 30%; I am involved in the solution design and paper writing.)

[C46] T. Emrich, K. A. Schmid, A. Zuefle, M. Renz, and R. Cheng. *Uncertain Voronoi Cell Computation based on Space Decomposition.* In the 14th Intl. Symposium on Spatial and Temporal Databases (SSTD 2015), Seoul, South Korea, August 2015. (One of the selected best papers to be extended to be published in [32].) Acceptance rate: 37.5% (24 out of 64 papers) (My contribution: 20%; this is a joint work with University of Munich. I am involved in the solution design and paper writing.)

[C47] [I] Y. Zheng*, J. Wang, G. Li, R. Cheng, and J. Feng. *QASCA: A Quality-Aware Task Assignment System for Crowdsourcing Applications.* In ACM SIGMOD Intl. Conf. on Management of Data (SIGMOD 2015), Melbourne, Victoria, Australia, May 2015. Acceptance rate: 25.2% (106 out of 415 papers), cited 124 times. (My contribution: 20%; this is a joint work with Tsinghua University, where my student Yudian Zheng did this work during his internship in Tsinghua. I am involved in the solution design and paper writing.)


[C49] [I] Y. Zheng*, R. Cheng, L. Mo*, and S. Maniu*. *On Optimality of Jury Selection in Crowdsourcing.* In the 18th Intl. Conf. on Extending Database Technology (EDBT 2015), Brussels, Belgium, Mar 2015. Acceptance rate: 25.5% (47 out of 184 papers) (My contribution: 30%; I am involved in the problem definition, solution design, and writing of the paper.)


[C53] [I] C. Ren, L. Mo*, B. Kao, R. Cheng, and D. Cheung. *CLUD: An Efficient Algorithm for LU Decomposition over a Sequence of Evolving Graphs.* In the 17th Intl. Conf. on Extending Database Technology (EDBT 2014), Athens, Greece, Mar 2014. Acceptance rate: 20%. (My contribution: 20%; I am involved in the problem definition, solution design, and writing of the paper.)
[C54] Y. Sun, H. Xu, and R. Cheng. Privacy Preserving Path Recommendation for Moving User on Location Based Service. In the 10th IEEE Intl. Conference on Ubiquitous Intelligence and Computing (UIC 2013), Italy, Dec 2013 (My contribution: 10%: I am involved in the problem definition, solution design, and writing of the paper.)

[C55] [I] L. Mo*, R. Cheng, B. Kao, X. Yang*, C. Ren, S. Lei*, and E. Lo*. Optimizing Plurality for Human Intelligence Tasks. In the 22nd ACM Conf. on Information and Knowledge Management (ACM CIKM 2013), San Francisco, Oct 27 – Nov 1, 2013. Acceptance rate: 16.9% (143 out of 848 papers) (My contribution: 30%: I am involved in the problem definition, solution design, and writing of the paper.)

[C56] [I] Z. He, P. Wong, B. Kao, E. Lo, and R. Cheng*. Fast Evaluation of Iceberg Pattern-Based Aggregate Queries. In the 22nd ACM Conf. on Information and Knowledge Management (ACM CIKM 2013), San Francisco, Oct 27 – Nov 1, 2013. Acceptance rate: 16.9% (My contribution: 20%: I am involved in the problem definition, solution design, and writing of the paper.)

[C57] [I] X. Yang*, R. Cheng, L. Mo*, B. Kao, and D. Cheung. On Incentive-based Tagging. In Intl. Conf. on Data Engineering (IEEE ICDE 2013), Brisbane, Apr 2013. Acceptance rate: 19.6% (88 out of 450 papers) (My contribution: 30%: I am involved in the problem definition, solution design, and writing of the paper.)

[C58] [I] L. Mo*, R. Cheng, X. Li*, D. Cheung, and X. Yang*. Cleaning Uncertain Data for Top-K Queries. In Intl. Conf. on Data Engineering (IEEE ICDE 2013), Brisbane, Apr 2013. Acceptance rate: 19.6% (88 out of 450 papers) (My contribution: 30%: I am involved in the problem definition, solution design, and writing of the paper.)

[C59] [I] P. Zhang*, R. Cheng, N. Mamoulis, M. Renz, A. Zuefle, Y. Tang*, and T. Emrich. Voronoi-based Nearest Neighbor Search for Multi-Dimensional Uncertain Databases. In Intl. Conf. on Data Engineering (IEEE ICDE 2013), Brisbane, Apr 2013. Acceptance rate: 19.6% (88 out of 450 papers). (My contribution: 30%: I am involved in the problem definition, solution design, and writing of the paper.)

[C60] [I] Y. Jin*, R. Cheng, B. Kao, K. Y. Lam, and Y. Zhang*. A Filter-based Protocol for Continuous Queries over Imprecise Location Data. In the 21st ACM Conf. on Information and Knowledge Management (ACM CIKM 2012), Hawaii, Oct 2012. Acceptance rate: 13.4%. (My contribution: 30%: I am involved in the problem definition, solution design, and writing of the paper.)

[C61] [I] R. Li, B. Kao, B. Bi, R. Cheng, and E. Lo. DQR: A Probabilistic Approach to Diversified Query Recommendation. In the 21st ACM Conf. on Information and Knowledge Management (ACM CIKM 2012), Hawaii, Oct 2012. Acceptance rate: 13.4%. (My contribution: 20%: I am involved in the problem definition, solution design, and writing of the paper.)


[C63] X. Xie*, R. Cheng, and M. L. Yiu. Evaluating Trajectory Queries Over Imprecise Location Data. In the 24th Intl. Conf. on Scientific and Statistical Database Management (SSDBM 2012), Greece, June 2012. Acceptance rate: 51.6%. (My contribution: 40%: I am involved in the problem definition, solution design, and writing of the paper.)


B. Bi, S. D. Lee, B. Kao, and R. Cheng. CubeLSI: An Effective and Efficient Method for Searching Resources in Social Tagging Systems. In the IEEE Intl. Conf. on Data Engineering (IEEE ICDE 2011), Hannover, Germany, Apr, 2011. Acceptance rate: 19.6% (88 out of 450 papers). (My contribution: 20%: I am involved in the problem definition, solution design, and writing of the paper.)

L. Sun*, R. Cheng, D. W. Cheung, and J. Cheng*. Mining Uncertain Data with Probabilistic Guarantees. In the 16th ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (ACM SIGKDD 2010), Washington D.C., USA, Jul, 2010 (Full paper). Acceptance rate: 17%; cited 153 times. (My contribution: 40%: I am involved in the problem definition, solution design, and writing of the paper.)

L. Wang, D. W. Cheung, R. Cheng, and S. D. Lee. Accelerating Probabilistic Frequent Itemset Mining: A Model-Based Approach. In the ACM 19th Conf. on Information and Knowledge Management (ACM CIKM 2010), Toronto, Canada, Oct 2010. Selected as one of the best papers in CIKM’10 for extension in [J33]. Acceptance rate: 13.4%. (My contribution: 30%: I am involved in the problem definition, solution design, and writing of the paper.)

Y. Zhang*, R. Cheng, and J. Chen*. Evaluating Continuous Probabilistic Queries over Imprecise Sensor Data. In the Database Systems for Advanced Applications (DASFAA), Apr, 2010 (Full paper). Acceptance rate: 23.2%. (My contribution: 30%: I am involved in the problem definition, solution design, and writing of the paper.)


R. Cheng, X. Xie*, M. L. Yiu, J. Chen*, and L. Sun*. UV-diagram: A Voronoi Diagram for Uncertain Data. In the IEEE Intl. Conf. on Data Engineering (IEEE ICDE 2010), Long Beach, USA, Mar, 2010 (Full paper). Acceptance rate: 12.5%, cited 53 times. (My contribution: 30%: I am involved in the problem definition, solution design, and writing of the paper.)

R. Cheng, J. Gong*, and D. Cheung. Managing Uncertainty of XML Schema Matching. In the IEEE Intl. Conf. on Data Engineering (IEEE ICDE 2010), Long Beach, USA, Mar, 2010 (Full paper). Acceptance rate: 12.5%. (My contribution: 40%: I am involved in the problem definition, solution design, and writing of the paper.)

J. Ren, S. D. Lee, X. Chen, B. Kao, R. Cheng, and D. Cheung. Naïve Bayes Classification of Uncertain Data. In the IEEE Intl. Conf. on Data Mining (IEEE ICDM 2009), Miami, USA, Dec, 2009. Acceptance rate: 17.8%. (My contribution: 20%: I am involved in the problem definition, solution design, and writing of the paper.)

Z. Zhang, R. Cheng, D. Papadias, and A. Tung. Minimizing the Communication Cost for Continuous Skyline Maintenance. In Proc. ACM Conf. on Management of Data (SIGMOD 2009), Providence, RI, USA, July 2009. Acceptance rate: 15.9%. (My contribution: 30%: I am involved in the problem definition, solution design, and writing of the paper.)

R. Cheng, L. Chen, J. Chen*, and X. Xie*. Evaluating Probability Threshold k-Nearest-Neighbor Queries over Uncertain Data. In the 12th Intl. Conf. on Extending Database Technology (EDBT 2009), St. Petersburg, Russia, Mar 2009. Acceptance rate: 32.5%. (My contribution: 30%: I am involved in the problem definition, solution design, and writing of the paper.)


[C79] J. Chen* and R. Cheng. Quality-Aware Probing of Uncertain Data with Resource Constraints. In 20th Intl. Conf. on Scientific and Statistical Database Management (SSDBM 2008), Hong Kong, Jul 2008. Lecture Notes in Computer Science 5069, pp. 491-408, Acceptance rate: 34.5%. (My contribution: 50%: I am involved in the problem definition, solution design, and writing of the paper.)


[C83] S. Lee, B. Kao, and R. Cheng. Reducing UK-means to K-means. In the 1st Workshop on Data Mining of Uncertain Data (DUNE), co-located with the IEEE Conf. on Data Mining (IEEE ICDM 2007), USA, Oct, 2007 (My contribution: 30%: I am involved in the problem definition, solution design, and writing of the paper.)


[C85] Y. Liu and R. Cheng. Intelligent Tutoring System Based on Semantic Multimedia Browsing and Retrieval. In the 5th Intl. Conf. on Intelligent Multimedia & Ambient Intelligence (IMAI 2007), Information Sciences, 10th Joint Conference, Salt Lake City, Utah, USA, July 2007. (My contribution: 20%: I am involved in the solution design and writing of the paper.)

[C86] [I] J. Chen* and R. Cheng. Efficient Evaluation of Imprecise Location-Dependent Queries. In the IEEE Intl. Conf. on Data Engineering (IEEE ICDE 2007), Istanbul, Turkey, Apr, 2007. Acceptance rate: 18.5%; cited 140 times. (My contribution: 50%: I am involved in the problem definition, solution design, experiment design, and writing of the paper.)

[C87] [I] J. Ngai, B. Kao, C. Chui, R. Cheng, M. Chau, and K. Yip. Efficient Clustering of Uncertain Data. In the IEEE Intl. Conf. on Data Mining (IEEE ICDM 2006), Hong Kong, Dec, 2006. Acceptance rate: 10%; cited 304 times. (My contribution: 13%: I am involved in the design of the solution, experiment design, and writing of the paper.)

USA, Nov 2006. Acceptance rate: 15%; cited 113 times. (My contribution: 60%: I am involved in the design of the solution, experiment design and implementation, and writing of the paper.)


[C90] [I] M. Chau, R. Cheng, B. Kao, and J. Ng. Uncertain Data Mining: An Example in Clustering Location Data. In the Methodologies for Knowledge Discovery and Data Mining, Pacific-Asia Conference (PAKDD 2006), Singapore, April 2006, pp. 199-204. Acceptance rate: 13.4%; cited 210 times. (My contribution: 30%: I am involved in the design of the solution, experiment design, and writing of the paper.)


[C93] [I] Y. Tao, R. Cheng, X. Xiao, W. Ngai, B. Kao, and S. Prabhakar. Indexing Multi-Dimensional Uncertain Data with Arbitrary Probability Density Functions. In Very Large Databases Conf. (VLDB 2005), Norway, Aug 2005, pp. 922-933. Acceptance rate: 16.5% (53 out of 322 papers); cited 358 times. (My contribution: 30%: I am involved in the design of the solution, experiment design and implementation, and writing of the paper.)

[C94] [I] R. Cheng, S. Singh, and S. Prabhakar. U-DBMS: A Database System for Managing Constantly-Evolving Data (Software Demonstration). In Very Large Databases Conf. (VLDB 2005), Norway, Aug 2005, pp.1271-1274. Acceptance rate: 16.5% (53 out of 322 papers); cited 131 times. (My contribution: 40%: I am involved in the design of the solution, system design and implementation, and writing of the paper.)


[C100] R. Cheng and S. Prabhakar. Using Uncertainty to Provide Privacy-Preserving and High-Quality Location-Based Service. In the Mobile HCI 2004 workshop on Location Systems Privacy and Control, Glasgow, Sep 2004. (My contribution: 70%: I am involved in the design of the solution, experiment design and implementation, and writing of the paper.)


[C105] C. Yip, K. Loo, B. Kao, D. Cheung, and R. Cheng. LGen - A Lattice-Based Candidate Set Generation Algorithm for I/O Efficient Association Rule Mining. In Methodologies for Knowledge Discovery and Data Mining, Third Pacific-Asia Conference (PAKDD 1999), pp. 54-63, Beijing, Apr 1999. Acceptance Rate: 18.3% (My contribution: 20%: I am involved in the experiment design and implementation, and writing of the paper.)

Scholarly Books, Monographs, and Chapters


Knowledge Exchange Articles


R. Cheng. Scalable Continuous Query Processing on Imprecise Location Data (移動位置資料庫的連續性查詢處理). Research Frontiers, the Research Grants Council (RGC) of the University Grants Committee (UGC), Issue 23, Oct 2012. URL: http://www.ugc.edu.hk/rgc