Ruilin Liu

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Homepage:

http://ruilinliu.com/

Key Qualifications

- 5+ years' research and development experience in security area of database and data mining.
- Strong in Java, C/C++, and JavaScript programming languages.
- Strong leadership and communication skills.
- Initiative, independent and responsible.

Technical Skills

Experienced C/C++, Java, LaTeX, JavaScript, PHP, Shell Script, Vim, Eclipse, git, MySQL Familiar JSP, d3.js, gnuplot, PostgreSQL intermediate jQuery, Node.js, MongoDB

Education

2008–Present	PhD in Computer Science, Stevens Institute of Technology, USA.
2003 – 2007	BSc in Computer Science, Outstanding Scholar Graduate, Southwest University of Science and
	Technology, China.

Professional Experience

2008-Present

Research Assistant at Stevens Institute of Technology, USA.

Research Interests:

- Integrity verification of outsourced data mining computation
- Privacy-preserving data publishing
- XML databases

Implemented all algorithms, systems in our papers.

Presented my papers in several conferences including SDM '13, CIKM '10, ICDE '10, DASFAA '10, PASSAT '09.

 $2010\mathrm{-Present}$

Teaching Assistant at Stevens Institute of Technology, USA.

Courses include: Automata and Computation, Algorithms (Algorithms Lab), Software Engineering, Data Mining, Database Management Systems II, Secure Systems, Cybersecurity Lab and Network Forensics.

2007 - 2008

Assistant Developer at Sichuan Research Center of Computer Application (SR-CCA), China.

Developed several Information Management Systems using PHP/JSP, lead the development of two projects(Information Acquisition & Organization, Large-scale Data Management)

Publications

Journal

2013

• Xiuyuan Zheng, Yingying Chen, Wendy Hui Wang, Hongbo Liu, and **Ruilin Liu**. Neighborhood prediction based decentralized key management for mobile wireless networks. *Wireless Network*.

2011

- Ruilin Liu, Xiuyuan Zheng, Hongbo Liu, Wendy Hui Wang, and Yingying Chen. Metadataguided evaluation of resource-constrained queries in content caching based wireless networks. Wireless Network, 17(8):1833–1850, 2011.
- Wendy Hui Wang and Ruilin Liu. Privacy-preserving publishing microdata with full functional dependencies. *Journal of Data & Knowledge Engineering (DKE)*, 70(3):249–268, 2011.

Conference

2014

- Ruilin Liu, Wendy Hui Wang, and Changhe Yuan. Result Integrity Verification of Outsourced Bayesian Network Structure Learning. In *Proceedings of the SIAM International Conference on Data Mining (SDM)*, 2014.
- Ruilin Liu, Wendy Hui Wang, and Flip Korn. iCoDA: Interactive Exploratory Data Completeness Analysis. In *Proceedings of the International Conference on Data Engineering (ICDE)*, 2014.

2013

- Boxiang Dong, Ruilin Liu, and Wendy Hui Wang. Integrity Verification of Outsourced Frequent Itemset Mining with Deterministic Guarantee. In *Proceedings of the IEEE International Conference on Data Mining (ICDM)*, 2013.
- Boxiang Dong, Ruilin Liu, and Wendy Hui Wang. Result Integrity Verification of Outsourced Frequent Itemset Mining. In *The 27th Annual IFIP WG 11.3 Working Conference on Data and Applications Security and Privacy*, 2013.
- Ruilin Liu, Wendy Hui Wang, Philippos Mordohai, and Hui Xiong. Integrity Verification of K-means Clustering Outsourced to Infrastructure as a Service (IaaS) Providers. In *Proceedings of the SIAM International Conference on Data Mining (SDM)*, 2013.

2012

- Flip Korn, Ruilin Liu, and Wendy Hui Wang. Understanding data completeness in network monitoring systems. In *Proceedings of the IEEE International Conference on Data Mining (ICDM)*, 2012.
- Ruilin Liu, Wendy Hui Wang, Anna Monreale, Dino Pedreschi, Fosca Giannotti, and Wenge Guo. AUDIO: An integrity auditing framework of outlier-mining-as-a-service systems. In Proceedings of the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML/PKDD), 2012.

2011

• Wendy Hui Wang, **Ruilin Liu**, Dimitri Theodoratos, and Xiaoying Wu. Efficient storage and temporal query evaluation in hierarchical data archiving systems. In *Proceedings of the 23rd Scientific and Statistical Database Management Conference (SSDBM)*, 2011.

- 2010
- Xiuyuan Zheng, Wendy Hui Wang, Yingying Chen, Hongbo, and **Ruilin Liu**. A decentralized key management scheme via neighborhood prediction in mobile wireless networks. In *Proceedings of the 7th IEEE International Conference on Mobile Ad-hoc and Sensor Systems* (MASS), 2010.
- Ruilin Liu. Privacy-preserving data publishing. In ICDE 2010 PhD Workshop, 2010.
- Angela Bonifati, Wendy Hui Wang, and Ruilin Liu. SP^{AC} : A distributed, peer-to-peer, secure and privacy-aware social space. In *Proceedings of the 19th International Conference on Information and Knowledge Management (CIKM)*, Demo track, 2010.
- Angela Bonifati, Wendy Hui Wang, and **Ruilin Liu**. Distributed and secure access control in p2p databases. In *Proceedings of the 24th Annual IFIP WG 11.3 Working Conference on Data and Applications Security (DBSec)*, 2010.
- Wendy Hui Wang and Ruilin Liu. Privacy-preserving publishing data with full functional dependencies. In *Proceedings of the International Conference on Database Systems for Advanced Applications (DASFAA)*, 2010.

2009

- Wendy Hui Wang, **Ruilin Liu**, Xiuyuan Zheng, Yingying Chen, and Hongbo Liu. To do or not to do: Metadata-guided query evaluation in content caching networks. In *Proceedings of the IEEE Global Telecommunications Conference (GLOBECOM)*, 2009.
- Ruilin Liu and Wendy Hui Wang. Integrity verification of outsourced xml databases. In *Proceedings of the IEEE International Conference on Privacy, Security, Risk and Trust (PASSAT)*, 2009.
- Wendy Hui Wang and Ruilin Liu. Hiding distinguished ones into crowd: Privacy-preserving publishing data with outliers. In *Proceedings of the International Conference on Extending Database Technology (EDBT)*, 2009.