

CURRICULUM VITAE

Feifei Li

1004 Academic Way, Computer Science Dept
Tallahassee, FL, 32306 USA
Webpage: <http://www.cs.fsu.edu/~lifeifei/>

Voice: (617) 233-9269, (850) 645-2356
Fax: (850) 644-0058
E-mail: lifeifei@cs.fsu.edu

Research Interests

Query processing in both streaming and relational database systems, management and indexing of large databases in general. Specifically, spatio-temporal database applications, stream and sensor databases, uncertain databases, query authentication and data privacy issues in data management.

Education

September 2002 - August 2007 Ph.D. in Computer Science, Computer Science Department, Boston University.

September 1998 - Jan 2002 B.S. in Computer Engineering, School of Computer Engineering, Nanyang Technological University, Singapore.

Awards

- Best Presenter Award, in research summer interns Seminar@Luch Series, IBM T.J. Watson Research Center, August, 2006.
- Best Paper Award, in 20th International Conference on Data Engineering(ICDE), March, 2004.

Professional Experience

- **Computer Science Department, Florida State University, Tallahassee, FL, USA**
Assistant Professor **Aug, 2007 - Present**
- **Database Research Group, Microsoft Research, Redmond, WA, USA**
Research Summer Intern **May, 2007 - August, 2007**
- **Database Management Research Department, AT&T Shannon Research Lab, Florham Park, NJ, USA**
Research Consultant **Since Sep, 2006**
- **Database Research Group, IBM T.J.Watson Research Center, Hawthorne, NY, USA**
Research Summer Intern **June, 2006 - September, 2006**
- **SQL Server Group, Microsoft, Redmond, WA, USA**
Summer Intern **June, 2005 - September, 2005**

Research Grant

1. "Building Trustworthy Database Systems", PI, FSU CRC Planning Grant, 12/01/07-11/30/08, \$12,000.
2. "Query Verification", PI, FSU CRC First Year Assistant Professor Grant, 05/08-08/08, \$16,000.
3. "CT-ISG: Collaborative Research: Towards Trustworthy Database Systems", PI, NSF Cyber Trust Program, 10/08-09/11, \$150,620.

Publications

Book Chapters

1. “Authenticated Index Structures for Outsourced Databases”, by **F. Li**, M. Hadjieleftheriou, G. Kollios, L. Reyzin, *Handbook of Database Security*, ISBN: 978-0-387-48532-4, *Springer*, November, 2007. Link: <http://www.springer.com/computer/security+and+cryptology/book/978-0-387-48532-4>
2. “Trip Planning Queries in Road Network Databases”, by **F. Li**, M. Hadjieleftheriou, G. Kollios, D. Cheng, S. H. Teng, *Encyclopedia of GIS*, ISBN: 978-0-387-30858-6 (Print), 978-0-387-35973-1 (Online), *Springer*, February, 2008. Link: <http://www.springerlink.com/content/h01539/>

Refereed Conferences

1. Finding Frequent Items in Probabilistic Data, by Q. Zhang, **F. Li**, K. Yi, In Proceedings of 27th ACM SIGMOD International Conference on Management of Data (**SIGMOD2008**, Acceptance rate: 78/435, 17.9%), Vancouver, Canada, June 2008.
2. Randomized Synopses for Query Assurance on Data Streams, by K. Yi, **F. Li**, M. Hadjieleftheriou, D. Srivastava, G. Kollios, (Full Paper, Full Presentation) In Proceedings of 24th International Conference on Data Engineering (**ICDE2008**, Acceptance rate: 75/617, 12.1%), Cancun, Mexico, April 2008.
3. Efficient Processing of Top-k Queries in Uncertain Databases, by K. Yi, **F. Li**, D. Srivastava, G. Kollios, (Poster Paper) In Proceedings of 24th International Conference on Data Engineering (**ICDE2008**, Poster paper acceptance rate: 31%), Cancun, Mexico, April 2008.
4. Proof-Infused Streams: Enabling Authentication of Sliding Window Queries On Streams, by **F. Li**, K. Yi, M. Hadjieleftheriou, G. Kollios, In Proceedings of the 33rd International Conference on Very Large Databases(**VLDB 2007**, Acceptance rate: 91/538, 16.9%), Vienna, Austria, September 2007.
5. Time Series Compressibility and Privacy, by S. Papadimitriou, **F. Li**, G. Kollios, P. S. Yu, In Proceedings of the 33rd International Conference on Very Large Databases (**VLDB 2007**, Acceptance rate: 91/538, 16.9%), Vienna, Austria, September 2007.
6. Hiding in the Crowd: Privacy Preservation on Evolving Streams through Correlation Tracking, by **F. Li**, J. Sun, S. Papadimitriou, G. Mihaila, and I. Stanoi. In Proceedings of the 23rd IEEE International Conference on Data Engineering (**ICDE 2007**, Acceptance rate: 122/659, 18.5%), Istanbul, Turkey, April 2007.
7. Dynamic Authenticated Index Structures for Outsourced Databases, by **F. Li**, M. Hadjieleftheriou, G. Kollios, and L. Reyzin. In Proceedings of the 2006 ACM SIGMOD International Conference on Management of Data (**SIGMOD 2006**, Acceptance rate: 58/446, 13%), Chicago, Illinois, USA, June 2006.
8. Characterizing and Exploiting Reference Locality in Data Stream Applications, by **F. Li**, C. Chang, G. Kollios, and A. Bestavros. In Proceedings of the 22nd IEEE International Conference on Data Engineering (**ICDE 2006**, Acceptance rate: 89/456, 19.5%), Atlanta, Georgia, USA, April 2006.
9. On Trip Planning Queries in Spatial Databases, by **F. Li**, D. Cheng, M. Hadjieleftheriou, G. Kollios, and S.-H. Teng. In Proceedings of the 9th International Symposium on Spatial and Temporal Databases (**SSTD 2005**, Acceptance rate: 28.7%), Angra dos Reis, Brazil, August, 2005.

10. Approximate Aggregation Techniques for Sensor Databases, by J. Considine, **F. Li**, G. Kollios, and J. Byers. In Proceedings of the 20th IEEE International Conference on Data Engineering (**ICDE 2004**, Acceptance rate: 63/441, 14.3%), Boston, MA, March 30 - April 2, 2004. **Best Paper Award**
11. Spatio-Temporal Aggregation Using Sketches, by Y. Tao, G. Kollios, J. Considine, **F. Li**, and D. Papadias. In Proceedings of the 20th IEEE International Conference on Data Engineering (**ICDE 2004**, Acceptance rate: 63/441, 14.3%), Boston, MA, March 30 - April 2, 2004.
12. WICCAP Data Model: Mapping Physical Websites to Logical Views, by Z. Liu, **F. Li**, and W. Ng. In Proceedings of the 21st International Conference on Conceptual Modeling (**ER 2002**, Acceptance rate: 24%), Tampere, Finland, October 8-10, 2002. Springer.
13. Web Information Collection, Collaging and Programming, by **F. Li**, Z. Liu, Y. Huang, and W. Ng. In Proceedings of the 3rd IEEE International Conference on Information, Communications & Signal Processing (**ICICS 2001**, Acceptance rate:?), Singapore, October 15-18, 2001.

Refereed Journals

1. Efficient Processing of Top-k Queries in Uncertain Databases with x-Relations, by K. Yi, **F. Li**, G. Kollios, D. Srivastava. (To Appear) IEEE Transaction on Knowledge and Data Engineering.
2. Robust Aggregation in Sensor Networks, by G. Kollios, J. Byers, J. Considine, M. Hadjieleftheriou, and **F. Li**. IEEE Data Engineering Bulletin, Vol. 28, No. 1, March 2005.
3. Towards Building Logical Views of Websites, by Z. Liu, W. Ng, E. Lim, **F. Li**. Data & Knowledge Engineering, Vol. 49, No 2, May 2004, Elsevier. (Invited by WIDM 2002).

Refereed Workshops

1. A Visual Tool for Building Logical Data Models of Websites, by Z. Liu, W. Ng, **F. Li**, and E. Lim. In Proceedings of the Fourth International Workshop on Web Information and Data Management (**WIDM02**), in conjunction with the Eleventh International Conference on Information and Knowledge Management (CIKM2002), McLean, Virginia, November 4-9, 2002.
2. An Information Concierge for the Web, by **F. Li**, Z. Liu, Y. Huang, and W. Ng. In Proceedings of the First International Workshop on Internet Bots: Systems and Applications (**INBOSA 2001**), in conjunction with the 12th International Conference on Database and Expert System Applications (**DEXA 2001**), Munich, Germany, September 3-8, 2001.

Technical Reports

1. Authenticated Index Structures for Aggregation Queries in Outsourced Databases, by **F. Li**, M. Hadjieleftheriou, G. Kollios, and L. Reyzin, BUCS-TR-2006-011, May, 2006.
2. GreedyDual-Join: Locality-Aware Buffer Management for Approximate Join Processing Over Data Streams, by **F. Li**, C. Cheng, A. Bestavros, and G. Kollios, BUCS-TR-2004-028, April, 2004.

Professional Service

- Program committees:
 1. ICDM'08, IEEE 8th International Conference on Data Mining, Pisa, Italy.
 2. WIDM'08 ACM 10th International Workshop on Web Information and Data Management, co-located with CIKM'08.
 3. ICDE'09 IEEE 25th International Conference on Data Engineering, Shanghai, China.

4. CIKM'08 ACM 17th Conference on Information and Knowledge Management, Napa Valley, California.
 5. SSDBM'08 20th International Conference on Scientific and Statistical Database Management, HongKong, China.
 6. NetDB'08 Networking Meets Databases, co-located with IEEE ICDE 2008 in Cancun, Mexico.
- Reviewers for the following journals: ACM Transaction on Database Systems (TODS), Data & Knowledge Engineering (DKE), IEEE Transaction on Knowledge and Data Engineering (TKDE), IEEE Transaction on Parallel and Distributed Systems (TPDS), International Journal of Information Security, Journal of Medical System, Very Large Database Journal (VLDBJ).
 - Reviewers for the following conferences: VLDB 2008, SSDBM 2008, NetDB 2008, ICDE 2008, ESA 2007, VLDB 2007, ICDE 2007, VLDB 2006, ICDE 2006, VLDB 2005.
 - Conference Volunteers for the following conferences: ICDE2004, SSDBM 2003.

Teaching Experience

- Instructor, Computer Science Department, Florida State University, Fall, 2008.
Graduate Course: Advanced Topics in Data Management, URL: <http://www.cs.fsu.edu/~lifeifei/CIS5930/>.
- Instructor, Computer Science Department, Florida State University, Fall, 2008.
Undergraduate Course: Introduction to Databases, URL: <http://www.cs.fsu.edu/~lifeifei/COP4710/>.
- Instructor, Computer Science Department, Florida State University, Spring, 2008.
Undergraduate Course: Introduction to Databases, URL: <http://www.cs.fsu.edu/~lifeifei/COP4710/>.
- Instructor, Computer Science Department, Florida State University, Fall, 2007.
Graduate Course: Database Systems, URL: <http://www.cs.fsu.edu/~lifeifei/COP5725/>.
- Teaching Assistant, Computer Science Department, Boston University, Fall, 2002.
Course: Introduction to Computer Science.
- Teaching Assistant, Computer Science Department, Boston University, Spring, 2003.
Course: Introduction to C++.
- Teaching Assistant, Computer Science Department, Boston University, Fall, 2003.
Course: Advanced Database Systems.
- Teaching Assistant, Computer Science Department, Boston University, Spring, 2004.
Course: Introduction to Database Systems.

Research Advising

Doctoral Advising

- Bin Yao, Since September 2007.
- Jeffrey Jestes, Since September 2008.
- Kun Hou, Since January 2008.

Master's Project, Adviser

- Neha Sinha, Since May 2008.
- Vibhor Goyal, Since January 2008.
- Yashas Shankar, Since January 2008.

Master's Thesis and Project, Examining Committee Member

- Evan Hollander, "e-Voting Software Review Methodologies".
- Michael Cornor, "A Simple, Thread-Safe, Approximate Nearest Neighbor Algorithm".

External Presentations

1. 08/2008, Approximate Aggregation in Sensor Networks, China 973 Wireless Sensor Network Lab, Shanghai Jiao Tong University, Shanghai, China.
2. 06/2008, Finding Frequent Item in Probabilistic Data, School of Computing Science, Simon Fraser University, Vancouver, Canada.
3. 04/2008, PIRS: Query Verification on Data Streams, ICDE 2008, Cancun, Mexico.
4. 04/2008, Efficient Query Processing of Top-k Queries on Uncertain Data (poster), ICDE 2008, Cancun, Mexico.
5. 09/2007, Authenticating Sliding Window Queries over Data Streams, VLDB 2007, Vienna, Austria.
6. 07/2007, Optimized Transaction Time Versioning Inside a Database Engine, Microsoft Research, Redmond, WA.
7. 04/2007, Privacy Preservation on Evolving Streams through Correlation Tracking, ICDE 2007, Istanbul, Turkey.
8. 03/2007, Data and Query Security for the Data Publishing Model, AT&T Labs - Research, Florham Park, NJ.
9. 03/2007, Data and Query Security for the Data Publishing Model, IBM T. J. Watson Research Center, Hawthorne, NY.
10. 02/2007, Data and Query Security for the Data Publishing Model, Florida State University, Tallahassee, FL.
11. 08/2006, Privacy Preservation on Evolving Streams through Correlation Tracking, IBM T. J. Watson Research Center, Hawthorne, NY.
12. 06/2006, Dynamic Authenticated Index Structures for Outsourced Databases , SIGMOD 2006, Chicago, IL.
13. 04/2006, Characterizing and Exploiting Reference Locality in Data Stream Applications, ICDE 2006, Atlanta, GA.
14. 04/2004, Spatio-Temporal Aggregation Using Sketches, ICDE 2004, Boston, MA.

Patents

- Co-Inventor, Method of Privacy-Preserving Data Stream Publishing using Dynamic Correlations, US patent YOR9-2006-0786
- Co-Inventor, Method of Privacy-Preserving Data Stream Publishing using Dynamic Autocorrelation, US patent YOR9-2006-0787