

# Shawn R. Jeffery

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## Research Interests

Distributed data management, RFID technology, wireless sensor networks

## Education

- 9/2003 - Present    **University of California, Berkeley**    Berkeley, CA
- Ph.D. Candidate in Computer Science
  - Advisor: Professor Michael J. Franklin
  - Focus: Database Management Systems
- 9/1998 - 12/2002    **University of Wisconsin, Madison**    Madison, WI
- Major: Computer Science
  - GPA: 3.96/4.0
  - Coursework focus on database management systems

## Research and Professional Experience

- 6/2004 - Present    *Graduate Student Researcher*    Berkeley, CA  
                          **University of California, Berkeley**
- Working on the HiFi Project, a data management infrastructure for receptor-based data (hifi.cs.berkeley.edu)
  - Research focus on processing data at the edges of the system, in particular RFID and sensor-based data
  - Built prototypes for demonstration at the 2004 VLDB and 2005 SIGMOD Conferences
- 6/2006 - present    *Software Engineer Intern*    Mountain View, CA  
                          **Google, Inc.**
- Working on research and development in support of a Dataspace Support Platform
  - Mentor: Alon Halevy
- 1/2005 - 8/2005    *Research Intern*    Berkeley, CA  
                          **Intel Research Lab, Berkeley**
- Researched techniques to access, process, and manage receptor (e.g., RFID, sensor networks) data
  - Mentor: Wei Hong

- 6/2002 - 8/2002, *Extreme Blue Technical Intern* San Jose, CA  
 1/2003 - 4/2003 **IBM - Almaden Research Center**
- Designed and implemented an Open Grid Services Architecture (OGSA)-compliant grid service for data replication across heterogeneous data sources
  - Led the architectural and infrastructure design
  - Utilized open technologies including OGSA, Globus, WSDL, and SOAP
  - Helped validate and define the emerging OGSA and Grid Data Management standards
  - Presented our project to senior IBM executives, including the CEO
  - Worked as part of a four-person team to deliver both the technical solution and the business plan within an aggressive time-frame
- 8/2001 - 12/2002 *Undergraduate Researcher* Madison, WI  
**Professor David J. DeWitt, University of Wisconsin, Madison**
- Assisted in designing, implementing, and testing a peer-to-peer query processing system for XML data
  - Developed algorithms for efficient search and data propagation in a peer-to-peer network
  - Created a simulator to demonstrate scalability and to test new algorithms

## Selected Publications

- Shawn R. Jeffery, Minos Garofalakis, Michael J. Franklin: *Adaptive Cleaning for RFID Data Streams*. VLDB 2006
- Anish Das Sarma, Shawn R. Jeffery, Michael J. Franklin, Jennifer Widom: *Estimating Data Stream Quality for Object-Detection Applications*. IQIS 2006
- Shawn R. Jeffery, Gustavo Alonso, Michael J. Franklin, Wei Hong, Jennifer Widom: *Declarative Support for Sensor Data Cleaning*. Pervasive 2006
- Minos Garofalakis. Kurt P. Brown, Michael J. Franklin, Joseph M. Hellerstein, Daisy Zhe Wang, Eirinaios Michelakis, Liviu Tancau, Eugene Wu, Shawn R. Jeffery, and Ryan Aipperspach. *Probabilistic Data Management for Pervasive Computing: The Data Furnace Project*. IEEE Data Engineering Bulletin, Vol. 29, No. 1, March 2006
- Shawn R. Jeffery, Gustavo Alonso, Michael J. Franklin, Wei Hong, Jennifer Widom: *A Pipelined Framework for Online Cleaning of Sensor Data Streams*. ICDE 2006 (Poster)
- Shariq Rizvi, Shawn R. Jeffery, Sailesh Krishnamurthy, Michael J. Franklin, Nathan Burkhart, Anil Edakkunni, Linus Liang: *Events on the Edge*. SIGMOD 2005 (Demonstration)
- Michael J. Franklin, Shawn R. Jeffery, Sailesh Krishnamurthy, Frederick Reiss, Shariq Rizvi, Eugene Wu, Owen Cooper, Anil Edakkunni, Wei Hong: *Design Considerations for High Fan-in Systems: The HiFi Approach*. CIDR 2005
- Owen Cooper, Anil Edakkunni, Michael J. Franklin, Wei Hong, Shawn R. Jeffery, Sailesh Krishnamurthy, Frederick Reiss, Shariq Rizvi, Eugene Wu: *HiFi: A Unified Architecture for High Fan-in Systems*. VLDB 2004 (Demonstration)
- Leonidas Galanis, Yuan Wang, Shawn R. Jeffery, David J. DeWitt: *Locating Data Sources in Large Distributed Systems*. VLDB 2003

## Teaching Experience

1/2004 - 5/2004     *Graduate Student Instructor, Introduction to Database Systems (CS186)*     Berkeley, CA

**University of California, Berkeley**

- Conducted weekly discussion sections and office hours
- Prepared and supported a large project involving implementing new functionality in the PostgreSQL open-source DBMS

## Extracurricular Activities

- Masters Swimming: 2004 All-American, 2004 Pacific Masters LCM Champion, 2001 Star of the North Games Champion, 2001 Badger State Games Champion, Minnesota Masters State Record Holder
- CS Grad Student Association Social Committee, 2003-2004

## References

- Available on request