

XIAOYONG CHAI

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OBJECTIVE

To seek an R&D position where I can leverage my knowledge and experience in applying database, Web, and machine learning techniques to data management problems.

EDUCATION

- Ph.D.** Computer Science, University of Wisconsin-Madison 2011
Thesis: Toward an End-to-End Platform for Building Structured Web Portals (expected)
Minor: Statistics
- M.S.** Computer Science, Hong Kong University of Science and Technology 2005
Thesis: Sensor-Based Multiple-Goal Recognition
- B.S.** Computer Science, Fudan University, China 2002

RESEARCH AND WORK EXPERIENCE

Graduate Fellow, University of Wisconsin-Madison Sept. 2009 – present
Developed a software platform for building structured Web portals; adopted the platform to build applications for a Web company and a scientific research community:

- Built an online system that generates natural language profiles for musical artists; the system is being used in production at Kosmix.com;
- Built a Web portal for limnologists to study lake eco-systems in the United States.

Research Assistant, University of Wisconsin-Madison Jan. 2007 – Aug. 2009
Worked in the development team of DBLife, a Web portal for the database research community:

- Designed and implemented a temporal entity-relationship store;
- Prototyped a Wiki-style interface for editing both structured data and free text;
- Co-developed a publication citation aggregation subsystem.

Research Assistant, Hong Kong University of Science and Technology Sept. 2003 – July 2005
Conducted thesis research on probabilistic indoor location estimation and activity recognition:

- Adopted machine learning techniques to improve the accuracy of wireless location estimation and to reduce data-collection effort in calibrating localization systems;
- Developed probabilistic graphical models for inferring human activities based on sensor data.

Intern, Microsoft Research Asia July 2003 – Sept. 2003
Designed and implemented a prototype troubleshooting tool for Microsoft Office products.

SKILLS

Java, C/C++, Perl, CGI, JSP, SQL, PostgreSQL, MySQL, Matlab, R

PROFESSIONAL ACTIVITIES

Administrator of DBWorld, the main mailing list for the database community

External reviewer for VLDB 2010, EDBT 2010, VLDB 2009, VLDB 2008, SIGMOD 2006

AWARDS

Anthony C. Klug NCR Fellowship, University of Wisconsin-Madison, 2009-2011

Kreed Award, Kosmix Inc., 2011

SELECTED PUBLICATIONS

1. Xiaoyong Chai, Ba-Quy Vuong, AnHai Doan, and Jeffrey F. Naughton, "Efficiently Incorporating User Feedback into Information Extraction and Integration Programs," *Proceedings of the ACM Conference on Management of Data (SIGMOD-09)*, 2009.
2. Eric Chu, Akanksha Baid, Xiaoyong Chai, AnHai Doan, and Jeffrey F. Naughton, "Combining Keyword Search and Forms for Ad Hoc Querying of Databases," *Proceedings of the ACM Conference on Management of Data (SIGMOD-09)*, 2009.
3. Xiaoyong Chai, Mayssam Sayyadian, AnHai Doan, Arnon Rosenthal, and Len Seligman, "Analyzing and Revising Data Integration Schemas to Improve Their Matchability," *Proceedings of the Int. Conference on Very Large Databases (VLDB-08)*, 2008.
4. Pedro DeRose, Xiaoyong Chai, Byron Gao, Warren Shen, AnHai Doan, Philip Bohannon, and Jerry Zhu, "Building Community Wikipedias: A Human-Machine Approach," *Proceedings of the IEEE Int. Conference on Data Engineering (ICDE-08)*, 2008.
5. AnHai Doan, Jeffrey Naughton, Raghu Ramakrishnan, Akanksha Baid, Xiaoyong Chai, Fei Chen, Ting Chen, Eric Chu, Pedro DeRose, Byron Gao, Chaitanya Gokhale, Jiansheng Huang, Warren Shen, and Ba-Quy Vuong, "Information Extraction Challenges in Management Unstructured Data," SIGMOD Record, Special Issue on Managing Information Extraction, 2008.
6. AnHai Doan, Philip Bohannon, Raghu Ramakrishnan, Xiaoyong Chai, Pedro DeRose, Byron J. Gao, and Warren Shen, "User-Centric Research Challenges in Community Information Management Systems," *IEEE Data Eng. Bulletin*, Special Issue on Data Management in Social Networks, 2007.
7. Xiaoyong Chai and Qiang Yang, "Reducing the Calibration Effort for Probabilistic Indoor Location Estimation," *IEEE Transactions on Mobile Computing*, 6(6), 2007.
8. Xiaoyong Chai and Qiang Yang, "Multiple-Goal Recognition from Low-Level Signals," *Proceedings of the Twentieth National Conference on Artificial Intelligence (AAAI-05)*, 2005.
9. Xiaoyong Chai and Qiang Yang, "Reducing Calibration Effort for Location Estimation Using Unlabeled Samples," *Proceedings of the IEEE Int. Conference on Pervasive Computing and Communications (PERCOM-05)*, 2005.
10. Jie Yin, Xiaoyong Chai, and Qiang Yang, "High-Level Goal Recognition in a Wireless LAN," *Proceedings of the Nineteenth Conference on Artificial Intelligence (AAAI-04)*, 2004.
11. Xiaoyong Chai, Ling Deng, Qiang Yang, and Charles Ling, "Test-Cost Sensitive Naïve Bayesian Classification," *Proceedings of IEEE Int. Conference on Data Mining (ICDM-04)*, 2004.