

Wei Tang

Current Position 02/2004-now, Software Development Engineer, NCR Corp. Teradata Division.

- Education & Certification**
- 2006, Teradata Certified Design Architect
 - 2003, Georgia Institute of Technology (Atlanta, GA), **PhD** in Computer Science with Minor in Business Management (Thesis: Internet-Scale Information Monitoring: A Continual Query Approach.)
 - 1998, University of Alberta (Edmonton, Alberta, Canada), **MS** in Computer Science
 - 1996, Peking University (Beijing, China), **BS** in Computer Science

Work Experience 02/2004-now, Software Developer Engineer, Query Processing Group, NCR Corp. Teradata Division.

General work description: design and implement new features for new releases of the Teradata Database Management System software product, and also provide maintenance fixes for the existing supported releases. The group's focus is on the optimizer component of the software. As a software development engineer, I am responsible for the design, code, and test enhancements for Teradata database software. My job responsibilities also include writing feature design and test specifications, planning and managing projects, establishing technical direction for complex Teradata feature development, performing related requirement analysis, performance analysis, and competitive analysis of competing database management systems.

- 2006
Project coordinator for offshore testing for two V2R7.0 database kernel features. Responsible for process & technical training and infrastructure setup.
- 2005
Beta Site Manager for Teradata DBMS V2R6.1. Responsible for managing beta testing activities of new software release at Teradata customer site.
Feature developer for Teradata DBMS V2R6.1 Partial Group By Performance Enhancement feature. Author of Teradata Orange Book "Partial Group By Optimization". Awarded *Outstanding Contribution Award* for my role in the project.
- 2004
Feature testing lead for Teradata DBMS V2R6.0 TopN feature. Conducted extensive functional and performance testing. Awarded *Outstanding Contribution Award* for my role in the project.

Research Interests Database Query Optimization, Distributed Data Intensive Systems, Information Monitoring (IM), Information Retrieval (IR), Information

Filtering (IF), Information Extraction (IE), Data Modeling, Integration and Visualization, Data Mining, Web Services, Mobile Computing.

Research and Teaching Experience

Research assistant

- 05/2003-12/2003, Georgia Tech
- 09/1999-08/2002, Georgia Tech
- 09/1998-08/1999, Oregon Graduate Institute
- 05/1998-08/1998, University of Alberta
- 05/1997-08/1997, University of Alberta

Teaching Assistant

- 01/2003-05/2003, *Database Implementation*, Georgia Tech
- 08/2002-12/2002, *Internet Computing*, Georgia Tech
- 09/1997-04/1998, *Intro. to File and Database Management*, U. of Alberta
- 09/1996-04/1997, *Introductory Pascal*, University of Alberta

Summer intern

- 05/2001-08/2001, IBM T.J. Watson Research Center: Data mining and cost-sensitive learning

Past research projects at Georgia Tech

- Continual Queries (<http://disl.cc.gatech.edu/CQ>)
Update Monitoring for Structured/Semi-structured Data
Principle architect/developer
- WebCQ (<http://disl.cc.gatech.edu/WebCQ>): open source
Personalized Info Change Monitoring and Notification on the Web
Principle architect/developer
- XWRAP Elite (<http://disl.cc.gatech.edu/XWRAPElite>): open source
an eXtensible Wrapper Generation System
- Omini (<http://disl.cc.gatech.edu/Omini>): open source
Object Mining and Extraction System
- AQR (<http://disl.cc.gatech.edu/QR>)
an Adaptive Query Routing Middleware System

Professional Activities

Member of ACM (Association for Computing Machinery) since 1998

- 2006
Reviewer for DKE (Data and Knowledge Engineering)
Technical Program Committee Member for ICWI'06 (IADIS International Conference on WWW/Internet)
Publicity Chair for ICDE'06 (International Conference on Data Engineering)
- 2005
Technical Program Committee Member for ICWI'05 (IADIS International Conference on WWW/Internet)
Demo PC member for ICDE'05 (International Conference on Data Engineering)
- 2004
Invited session chair for IEEE ICWS'04 (International Conference on

Web Services)

Reviewer for WWWJ (World Wide Web Journal)

Member of IEEE (The Institute of Electrical and Electronics Engineers)

- 2003

Reviewer for ACM CIKM'03 (International Conference on Information and Knowledge Management)

Reviewer for IJCAI'03 (Eighteenth International Joint Conference on Artificial Intelligence)

- 2002

Reviewer for WISE'02 (International Conference on Web Information Systems Engineering)

- 2001

Student volunteer for ACM CIKM'01 (International Conference on Information and Knowledge Management) at Atlanta, GA

- 2000

Reviewer for IEEE TKDE (Transaction on Knowledge and Data Engineering)

- 1999

Reviewer for ACM SIGMOD Record

Reviewer for ACM ICDE'99 (International Conference on Data Engineering)

Community Services

- 2006 - VP Programs of 4A-LA (Asian/Pacific American Association for Advancement, LA Chapter), NCR Corp.

- 2005 - VP Membership of 4A-LA (Asian/Pacific American Association for Advancement, LA Chapter), NCR Corp.

- 2001 - Graduate Student Council member for Distinguished Lecture Series, Georgia Tech

- 2000 - President of the Chinese Friendship Association, Georgia Tech

Programming Skills

- Programming: C, Java, Perl, SQL, Python, JavaScript, Shell, XML, DHTML, UML, Latex, Matlab

- DB management: Teradata, Oracle, SQL Server, DB2, Informix, MySQL, Hsqldb, Instant DB, Cloudscape, Pointbase.

- Favorite IDE's: Eclipse, IBM VisualAge for Java, NetBeans, Delphi.

- Wireless App. Development: J2ME, Java Servlet/JSP.

Publication

- *BizCQ: Using Continual Queries to Cope with Changes in Business Information Exchange* (with Kipp Jones, Ling Liu and Calton Pu) In the Proceedings The 13th International World Wide Web Conference, New York City, NY USA, 2004. (p. 470-471)

- *Internet-Scale Information Monitoring: A Continual Query Approach*, PhD Thesis, Georgia Institute of Technology, 2003.

- *Trigger Grouping: A Scalable Approach to Large Scale Information Monitoring* (with Ling Liu and Calton Pu) In the Proceedings The 2nd IEEE International Symposium on Network Computing and Applications (NCA'03), Cambridge, MA, USA, 2003. (p. 148-155)

- *Information Monitoring on the Web: A Scalable Solution* (with Ling

- Liu, David Buttler, and Calton Pu) World Wide Web Journal (by Kluwer Academic Publishers), Volume 5, No. 4, 2002. (p. 263-304)
- *WebCQ: Detecting and Delivering Information Changes on the Web* (with Ling Liu and Calton Pu) In the Proceedings of Conference on Information and Knowledge Management (CIKM'00), Washington D.C., 2000. (p. 512-519)
 - *Supporting Internet Applications Beyond Browsing: Trigger Processing and Change Notification* (with Ling Liu and Calton Pu) In the Proceedings of International Computer Science Conference (ICSC'99), Hong Kong, China. (p. 294-304)
 - *Continual Queries for Internet Scale Event-Driven Information Delivery* (with Ling Liu and Calton Pu) Special issue on Web Technologies, IEEE Transactions on Knowledge and Data Engineering (TKDE), 1999. (p. 610-628)
 - *Building an Extensible Wrapper Repository System: A Metadata Approach* (with Ling Liu, Calton Pu, Wei Han, and David Buttler) In the Proceedings of IEEE Metadata Conference, Maryland, 1999.
 - *An XML-based Software Toolkit for Constructing Data Wrappers* (with Ling Liu, Calton Pu, Wei Han, and David Buttler) In the Proceedings of the ACM SIGMOD Conference, 1999. (p. 540-543)
 - *Conquer: A Continual Query System for Update Monitoring in the WWW* (with Ling Liu, Calton Pu, and Wei Han) Special Issue on Web semantics, International Journal of Computer Systems, 1999. (p. 99-112)
 - *Personalized Update Monitoring Toolkit Using Continual Queries: System Design and Implementation* Master thesis, University of Alberta, Canada, 1998.
 - *CQ: A Personalized Update Monitoring Toolkit* (with Ling Liu, Calton Pu, Dave Buttler, John Biggs, Paul Benninghoff, Wei Han, and Fenghua Yu) In the Proceedings of the ACM SIGMOD Conference, 1998. (p. 547-549)

Languages

Excellent communication skills in English and Chinese (Mandarin)