

Yuan Wang

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EDUCATION

- **Ph.D. in Computer Sciences**, University of Wisconsin-Madison, May 2000 – present, (expected August 2004).
Advisor: Professor David J. DeWitt.
Thesis Topic: Internet Peer-to-Peer Search Engines.
- **M.S. in Computer Sciences**, University of Wisconsin-Madison, August 1998 – May 2000.
- **B. Engr. in Computer Science and Technology**, Tsinghua University, Beijing, September 1991 – July 1996.

RESEARCH AND WORK EXPERIENCE

- **Research Assistant** in Computer Sciences, University of Wisconsin. August 1999 – present.
The GALANX Internet Peer-to-Peer Search Engine Project
 - Designed distributed PageRank algorithms to construct a crawling-free P2P Internet search Engine.
 - Designed peer-document indexing techniques for fast data source location.
 - Created the GALANX Peer-to-Peer full text search engine, implemented on Apache Web server and BerkeleyDB storage system. The system successfully runs on a 100+-node cluster.*The NIAGARA XML Query Engine Project*
 - Designed and implemented X-Diff, the first and only XML data change detection algorithm using unordered tree model and guaranteeing optimal results; code base adopted in multiple commercial applications.
 - Worked in the NiagaraCQ subsystem - fast processing large scale continuous queries (triggers).
 - Developed query engine operators.
- **Summer Intern**, IBM T.J. Watson Research Center, May 2001 – August 2001.
Supervisor: Sriram Padmanabhan, George A. Mihaila.
 - Investigated methods of mapping XML data into relational format, particularly translating XML schema constraints into relational table validation constraints.
- **Summer Intern**, GTE Laboratories, Waltham, MA., May 1998 – August 1998.
- **System Engineer**, Tsinghua Information Technology Co., Beijing, China, July 1996 – July 1997.

PAPERS

- *Computing PageRank in a Peer-to-Peer Internet Search System*, Yuan Wang, David J. DeWitt, in *Proceedings of the 30th International Conference on Very Large Data Bases (VLDB'04)*, 2004.
- *GALANX: An Efficient Peer-to-Peer Search Engine*, Yuan Wang, Leonidas Galanis, David J. DeWitt, submitted for publication, 2003.

- *Locating Data Sources in Large Distributed Systems*, Leonidas Galanis, Yuan Wang, Shawn R. Jeffery, David J. DeWitt, in *Proceedings of the 29th International Conference on Very Large Data Bases (VLDB'03)*, 2003.
- *Mixed Mode XML Query Processing*, Alan Halverson, Josef Burger, Leonidas Galanis, Ameet Kini, Rajasekar Krishnamurthy, Ajith Nagaraja Rao, Feng Tian, Stratis Viglas, Yuan Wang, Jeffery F. Naughton, David J. DeWitt, in *Proceedings of the 29th International Conference on Very Large Data Bases (VLDB'03)*, 2003.
- *Processing Queries in a Large Peer-to-Peer System*, Leonidas Galanis, Yuan Wang, Shawn R. Jeffery, David J. DeWitt, in *Proceedings of the 15th International Conference of Advanced Information Systems Engineering (CAiSE'03)*, 2003.
- *X-Diff: An Efficient Change Detection Algorithm for XML Documents*, Yuan Wang, David J. DeWitt, Jin-Yi Cai, in *Proceedings of the 19th International Conference on Data Engineering (ICDE'03)*, 2003.
- *The Niagara Internet Query System*, Jeffrey F. Naughton, David J. DeWitt, David Maier, Ashraf Aboulnaga, Jianjun Chen, Leonidas Galanis, Jaewoo Kang, Rajasekar Krishnamurthy, Qiong Luo, Naveen Prakash, Ravishankar Ramamurthy, Jayavel Shanmugasundaram, Feng Tian, Kristin Tufte, Stratis Viglas, Yuan Wang, Chun Zhang, Bruce Jackson, Anurag Gupta, Rushan Chen, *IEEE Data Engineering Bulletin* 24(2), 2001.
- *NiagaraCQ: A Scalable Continuous Query System for Internet Databases*, Jianjun Chen, David J. DeWitt, Feng Tian, Yuan Wang, in *Proceedings of the 2000 ACM SIGMOD International Conference on Management of Data (SIGMOD'00)*, 2000.

COMPUTER SKILLS

- Programming languages: Unix/Linux system and network programming in C, system programming in C++ and Java, proficient utility programming in Perl.
- Operating Systems: Unix/Linux, MS Windows.
- Developing experiences on: Apache Web server, BerkeleyDB, Xerces XML.

AWARDS

- Graduate Fellowship, University of Wisconsin - Madison, 1998 – 1999.

REFERENCES

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