

Alan Dale Halverson

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RESEARCH INTEREST Data management systems. Within this broad interest area, I am currently investigating data storage optimizations, hierarchical data management, query processing, specialized query workloads and integration of heterogeneous data sources.

EDUCATION **University of Wisconsin-Madison**, Madison, WI.
Ph.D. in Computer Science, August 2006 (expected).
Minor in Statistics, December 2004.
M.S. in Computer Science, May 2003.

Luther College, Decorah, IA.
B.A. in Computer Science, May 1994.
Minors in Math and Physics.

Fellowship

Three time recipient of the Anthony C. Klug NCR Fellowship in Databases (2003, 2004 and 2005).

RESEARCH **Computer Science Department, University of Wisconsin-Madison**
Research Fellow Fall 2003 – present
Investigated storage optimization techniques for hierarchically-organized data in the context of relational databases for specialized query workloads under the supervision of Prof. Jeff Naughton and supported by the Anthony C. Klug NCR Fellowship in Databases.

IBM Almaden Research Center

Summer Intern Summer 2003
Designed and implemented a simple SQL-to-XQuery translation layer for evaluating SQL queries over XML data stored in a native XML prototype together with Guy Lohman and Vanja Josifovski. Managed an undergraduate co-op who assisted our research efforts.

Computer Science Department, University of Wisconsin-Madison

Research Assistant Spring 2002 – Summer 2003
Designed and implemented XML schema for saving and loading query plans for the Niagara Native XML Query System. Investigated combining navigation- and structure-based XPath evaluation strategies. Research conducted under the supervision of Profs. Jeff Naughton and David DeWitt.

PUBLICATIONS **Refereed Conferences**

Alan Halverson et al. *Mixed Mode XML Query Processing*. In Proceedings of the 29th International Conference on Very Large Data Bases (VLDB), Berlin, Germany, September 2003.

Alan Halverson, Vanja Josifovski, Guy Lohman, Hamid Pirahesh and Mathias Moerschel. *ROX: Relational Over XML*. In Proceedings of the Thirtieth International Conference on Very Large Data Bases (VLDB), Toronto, Canada, September 2004.

Jennifer L. Beckmann, Alan Halverson, Rajasekar Krishnamurthy, and Jeffrey F. Naughton. *Extending RDBMSs To Support Sparse Datasets Using An Interpreted Attribute Storage Format*. To appear in Proceedings of the 22nd International Conference on Data Engineering, (ICDE), Atlanta, Georgia, April 2006.

Under Review

Alan Halverson, Jennifer L. Beckmann, Jeffrey F. Naughton, and David J. DeWitt. *A Comparison of C-Store and Row-Store in a Common Framework*.

TEACHING

University of Wisconsin-Madison

Teaching Assistant

September 2001 – May 2002

Introduction to Computer Programming – one section in Fall 2001, two sections in Fall 2002. Responsible for lectures, office hours, assisting with lesson preparation and grading, and exam administration.

University of Wisconsin-Madison

Substitute Lecturer

September 2003 – present

Database Management Systems: Design and Implementation (2 – 3 times each semester)

WORK

Microsoft Corporation

EXPERIENCE

Software Design Engineer, Microsoft Access

December 1996 – April 2001

Designed, implemented and maintained new and existing features of Microsoft Access using Visual C++ over two release cycles. Managed contractors and the “wizard” development process. Interfaced with Program Managers to ensure specified features were realistic and well defined. Coordinated integration of a major piece of component software into Access and worked with component developers to ensure correct behavior.

Microsoft Corporation

Software Test Lead, Microsoft Access

November 1995 – December 1996

Provided managerial and technical leadership for members of the Access test team. Created and maintained large portions of testcase automation libraries using Visual Basic. Provided quality assurance for major functional areas of the product.

Microsoft Corporation

Software Test Engineer, Microsoft Access

June 1994 – November 1995

Provided quality assurance for a major area of the product. Created and maintained testcase suites and library code using Visual Basic. Managed quality assurance for the release of the Microsoft Access Developer’s Toolkit.

REFERENCES

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