Michael J. Donahoo

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Objective To apply my research experience in the area of networking and information integration to the development and optimization of information access/distribution applications

Job Experience

Department of Computer Science, Baylor University Waco, Texas
August, 1998–Present

Assistant Professor.

College of Computing, Georgia Tech Atlanta, Georgia
September, 1996–June, 1998

Graduate Research Assistant for Mostafa Ammar, Ph.D.: Research with Synchrologic Inc. in scalable database replication in intermittently connected environments.

Intel Architectures Lab, Intel Portland, Oregon
June, 1996–September, 1996

Summer Intern for Business Communications Group: IETF and ITU standards work on multimedia conferencing and development of 32-bit Windows applications for Internet conferencing.

College of Computing, Georgia Tech Atlanta, Georgia
January, 1995–June, 1996

Graduate Research Assistant for Ellen Zegura, Ph.D.: Research with on optimization of multicast routing protocols.

College of Computing, Georgia Tech Atlanta, Georgia
September, 1993–December, 1995

Graduate Research Assistant for Shamkant Navathe, Ph.D.: Research on the ARPA funded I3 (Intelligent Integration of Information) Project. The project involves development of an integration framework for heterogeneous information systems.

Information Sciences Corporation Houston, Texas
April, 1993–August, 1993

Database System Consultant: Dataflow and data processing requirements analysis for a law firm. My responsibilities included targeting company processes for automation and developing prototype applications to demonstrate database technique applicability.

Baylor University Waco, Texas
August, 1991–February, 1993

Graduate Research Assistant for Gregory Speegle, Ph.D.: Worked on Docent Project studying query optimization via result reuse in library information systems distributed over wide area networks. Optimization focused on reduction of network retransmission overhead.

Computer Sciences Corporation Houston, Texas
Summer/Christmas 1990, Summer 1991

IBM Mainframe ADABAS Database Administrator. Worked in Database Administration Group maintaining engineering databases for NASA on IBM mainframe under VM and MVS.

Barrios Technologies Houston, Texas
Summer/Christmas 1988, Summer/Christmas 1989

Summer Intern. Developed library catalog database applications in RBASE for DOS.

System Experience

Platforms(Operating Systems): SUN (SunOS, Solaris), HP (HP/UX), SGI (IRIX), ALPHA (VMS, UNIX), VAX (VMS), Amdahl (VM, MVS), PC (Win3.1, Win95, WinNT3.51, WinNT4.0), Macintosh (Mac OS), Linux, FreeBSD

Languages/Software: C, C++, Pascal, Cobol, M68K Assembly, Perl, HyperTalk, Fortran, Ada, Oracle, RBASE, INFORMIX, JCL, REXX, CLIST, LaTeX, HTML, Java

Education

Ph.D — Georgia Tech, Atlanta, Georgia
August, 1993–August, 1998
Major: Computer Science (GPA 4.0/4.0) — Advisor: Ellen Zegura, Ph.D.

Masters of Science (Thesis Option) — Baylor University, Waco, Texas
August, 1991–February, 1993
Major: Computer Science (GPA 4.0/4.0) — Advisor: Gregory Speegle, Ph.D.

Bachelor of Science — Baylor University, Waco, Texas
August, 1987–May, 1991
Major: Computer Science (GPA: 3.9/4.0, Magna Cum Laude)

Memberships and Honors

Alpha Chi Honor Society, Golden Key Honor Society, Upsilon Pi Epsilon Computer Science Honor Society, Association of Computer Machinery, IEEE, IEEE Computer Science Society

Publications

Michael J. Donahoo and Sunila R. Ainapure. Scalable multicast representative member selection. Submitted to INFOCOM 2001.

Michael J. Donahoo and Kenneth L. Calvert. *The Pocket Guide to TCP/IP Sockets: C Version.* Morgan Kaufmann, 2001. ISBN: 1-55860-686-6.

Wai Gen Yee, Michael J. Donahoo, and Shamkant B. Navathe. A framework for server data fragment grouping to improve server scalability in intermittently synchronized databases. Accepted to CIKM 2000, November 2000.

Michael J. Donahoo, Mostafa H. Ammar, and Ellen W. Zegura. Multiple-channel multicast scheduling for scalable bulk-data transport. In *INFOCOM'99*, March 1999.

Michael J. Donahoo, Gary N. Boone, and Tucker Balch. On the directional correlation of axial rotation in inverted felines and planetary spin: Coriolis revisited. *The Journal of Irreproducible Results*, 44(5-6):37–39, 1999.

Michael J. Donahoo. *Application-based Enhancements to Network-Layer Multicast.* PhD thesis, Georgia Institute of Technology, Atlanta, GA, September 1998.

J. W. Murdock, A. K. Goel, M. J. Donahoo, and S. B. Navathe. Method specific knowledge compilation: Towards practical design support systems. In *Proceedings of the Fifth International Conference on Artificial Intelligence and Design (AID'98)*, July 1998.

Sameer Mahajan, Michael J. Donahoo, Shamkant B. Navathe, and Mostafa Ammar. Grouping techniques for update propagation in intermittently connected databases. In *Fourteenth International Conference on Data Engineering*, pages 46–53. IEEE, February 1997.

Ellen W. Zegura, Kenneth L. Calvert, and Michael J. Donahoo. A quantitative comparison of graph-based models for internet topology. *Transactions on Networking*, 5(6), December 1997.

Michael J. Donahoo, Kenneth L. Calvert, and Ellen W. Zegura. Center selection and migration for wide-area multicast routing. *Journal of High-Speed Networking*, 6(2), 1997.

Michael J. Donahoo, J. William Murdock, Ashok K. Goel, Shamkant B. Navathe, and Edward Omiecinski. From data to knowledge: Method-specific transformations. In *Proceedings of the Tenth International Symposium on Methodologies for Intelligent Systems (ISMID'97)*, October 1997.

Michael J. Donahoo and Ellen W. Zegura. Core migration for dynamic multicast routing. In *Proceedings of the ICCCN '96*, pages 92–98. IEEE, IEEE Computer Society Press, October 1996.

Kenneth L. Calvert, Ellen W. Zegura, and Michael J. Donahoo. Core selection methods for multicast routing. In *Proceedings of the ICCCN '95*, pages 638–642. IEEE, IEEE Computer Society Press, September 1995.

Shamkant B. Navathe and Michael J. Donahoo. Towards intelligent integration of heterogeneous information sources. In *Proceedings of the 6th International Workshop on Database Re-engineering and Interoperability*, March 1995.

Michael J. Donahoo. Integration of information in heterogeneous library information systems. Master's thesis, Baylor University, May 1993.

Gregory Speegle and Michael J. Donahoo. Using statistical sampling for query optimization in heterogeneous library information systems. In *Proceedings of the 21st Annual Computer Sciences Conference*, February 1993.

Gregory Speegle and Michael J. Donahoo. Resolving result set contention in heterogeneous library information systems. Technical Report CS-1993-1, Baylor University, July 1993.