

Michael J. Brim

Address:

Computer Sciences
1210 W. Dayton St.
Madison, WI 53706

Phone: (608) 262-6622**Fax:** (608) 262-9777

mjbrim@cs.wisc.edu

<http://www.cs.wisc.edu/~mjbrim>**OBJECTIVE**

A position in computer science research where I can utilize my problem solving, analysis, communication, and software development skills to make valuable contributions to the high-performance computing community.

EDUCATION

Ph.D. in Computer Sciences, University of Wisconsin-Madison: August 2010 (expected completion)

- Ph.D. minor in Business, with focus on Information Systems

M.S. in Computer Sciences, University of Wisconsin-Madison: May 2003

- Cumulative GPA: 3.75/4.00

B.S. in Computer Science, Ohio Northern University: May 2000

- Minors: Mathematics, Business Administration

- Cumulative GPA: 3.96/4.00

- Numerous University and Departmental Academic Honors & Awards (4 years)

EXPERIENCE

Research Assistant – 2001 to present

Computer Sciences Department, University of Wisconsin-Madison

While pursuing M.S. and Ph.D. degrees, performed various research in support of many projects within the Paradyn group led by Professor Barton P. Miller. Specific areas of research include dynamic instrumentation of commodity operating systems, scalable communication and data aggregation infrastructure, and novel paradigms for group operations on large numbers of distributed files.

Research Scientist – 2000 to 2001

Department of Computer Science, University of Tennessee

Computer Science & Mathematics Division, Oak Ridge National Laboratory

Contracted to perform various research related to cluster computing within the division. Specific projects included evaluating, designing, and developing cluster administration tools, Gigabit Ethernet network benchmarking, and administration and maintenance of the TORC and HighTORC Linux clusters.

Cooperative Intern – Summer 1998 & 1999

Mainframe Support Services, American Electric Power Company

Completed various projects for the group including a visual database application of the mainframe environment connection topology, batch job maintenance, and general programming.

Teacher's Assistant, Computer Lab Manager – 1997 to 2000

Computer Science Department, Ohio Northern University

Assisted students in freshman, sophomore, and junior level CS courses; graded accompanying homework and laboratories. Supervised departmental computer labs; maintained both hardware and software for PC and Macintosh systems.

PUBLICATIONS

M.J. Brim and B.P. Miller, "Group File Operations for Scalable Tools and Middleware", *16th International Conference on High Performance Computing (HiPC) 2009*, Cochin, India, December 2009. (Best Paper Award)

M. Brim, R. Flanery, A. Geist, B. Luethke, and S. Scott, "Cluster command & control (c3) tool suite", *Parallel and Distributed Computing Practices* **4**, 4, Nova Science Publishers, December 2001.

M.J. Brim, T.G. Mattson, and S.L. Scott, "OSCAR: Open Source Cluster Application Resources", *Ottawa Linux Symposium 2001*, Ottawa, Canada, July 2001.

M. Brim, A. Geist, B. Luethke, J. Scwidder, and S.L. Scott, "M3C: Managing and monitoring multiple clusters", *1st ACM/IEEE International Symposium on Cluster Computing and the Grid (CCGrid 2001)*, pp. 386-393, Brisbane, Australia, May 2001.

PRESENTATIONS

TBON-FS Name Space Aggregation, FAST-OS BOF, SC 2009, Portland, OR, November 2009.

Scalable Distributed Process Group Control and Inspection via the File System, 2009 TCPP Ph.D. Forum, IPDPS 2009, Rome, Italy, May 2009.

TBON-FS: Scalable Group File Operations

- Paradyn/Dyninst Week, University of Maryland, College Park, MD, April 2009.
- FAST-OS Workshop, ICS 2009, IBM T.J. Watson Research Center, NY, June 2009.

TBON-FS: A New Infrastructure for Scalable Tools and Runtimes, Paradyn/Condor Week, Madison, WI, April 2008.

Group File Operations: A New Idiom for Scalable Tools, Paradyn/Condor Week, Madison, WI, April 2007.

OSCAR Tutorial, Linux Clusters: the HPC Revolution, Urbana-Champaign, IL, June 2001.

PROFESSIONAL ACTIVITIES

Association for Computing Machinery

- Ohio Northern University Student Chapter Vice President (2000)
- Ohio Northern University Collegiate Programming Contest Team (3 years)

Institute of Electrical and Electronics Engineers

- Computer Society member

Scalable Tool Communication Infrastructure (STCI): Participating member

Paper Reviewer: Computation and Concurrency: Practice and Experience (Scalable Tools for High-End Computing) 2009, EuroPVM/MPI 2005/2006, HPDC 2007, IPDPS 2007, LCI-ICC 6/7, PACT 2009, SuperComputing 2007/2008.