

VIJAY MENON

EDUCATION

- 8/94 - 5/00 Cornell University Ithaca, NY
Ph.D. in Computer Science with minor in Applied Mathematics
- Advisor: Keshav Pingali
 - Thesis: Symbolic Program Transformation for Numerical Codes
- M.S. in Computer Science*
- GPA: 4.09 out of 4.00
- 8/90 - 5/94 University of California Berkeley, CA
B.S. in Electrical Engineering and Computer Science, Magna Cum Laude
- GPA: 3.82 out of 4.00
 - GRE: 2280 (Math: 800 Verbal: 680 Analytical: 800)
 - SAT: 1490 (Math: 800 Verbal: 690)

PROFESSIONAL EXPERIENCE

- 6/98 - 9/98 Silicon Graphics, Inc. Mountain View, CA
Engineering Intern
- Investigated cache performance of dynamically allocated memory on MIPS architecture. Designed and implemented general-purpose profile and feedback tool included in next release of SGI MIPSpro compiler.
- 5/96 - 8/96 Intel Microcomputer Research Labs Santa Clara, CA
Engineering Intern
- Studied and implemented different code size reduction strategies for Merced/IA64 programs. Developed tool to analyze and reschedule instructions in IA64 binaries to reduce code size. Made recommendations to Intel architecture and compiler groups.
- 1/95 - 5/98 Cornell University Ithaca, NY
Teaching Assistant
- Assisted in instruction of courses from introductory programming to graduate compilers. Presented lectures, led discussions, and met with students one on one.
- 6/93 - 5/94 Geoworks Berkeley, CA
Engineering Intern
- Added double-byte support for international version of GEOS operating system. Designed and implemented front-end input driver interface with Japanese engineers from Toshiba.
- 6/92 - 8/92 Abbott Laboratories North Chicago, IL
Engineering Intern

ACADEMIC RESEARCH

- 1/98 - MAJIC Programming Environment
- Collaborated with researchers at University of Illinois to develop MAJIC just-in-time compiler/ interpreter for MATLAB programming language. Researched and implemented general performance optimizations in a MATLAB setting.
- 6/95 - 12/97 Bernoulli Sparse Compiler
- Assisted in development of compiler to generate efficient sparse matrix codes from high-level specifications
- 8/95 - 12/97 MultiMATLAB Toolkit
- Designed and implemented MultiMATLAB distributed programming toolkit in use at research institutions and companies.
- 1/95 - 5/95 Fault Tolerant Replicated Web Server
- With other students, designed and implemented a fault tolerant, replicated, distributed web server using the Horus toolkit

SELECTED PUBLICATIONS

Vijay Menon, Keshav Pingali. A Case for Source-Level Transformations in MATLAB. In *The 2nd Conference on Domain-Specific Languages*. The USENIX Association. Austin, Texas. October, 1999.

Vijay Menon, Keshav Pingali. High-Level Semantic Optimization of Numerical Codes. In the *1999 ACM Conference on Supercomputing*. ACM SIGARCH. Rhodes, Greece. June, 1999.

Vijay Menon, Anne Trefethen. MultiMATLAB: Integrating MATLAB with High-Performance Parallel Computing. In *Supercomputing 1997*. IEEE Computing and ACM SIGARCH. San Jose, California. November, 1997.

AWARDS AND HONORS

- 5/95 Cornell Outstanding Teaching Assistant Award
- 8/94 - 5/97 Cornell Computer Science Field Scholarship
- 5/94 DoD Graduate Fellowship Honorable Mention
- 5/92 Eta Kappa Nu Honor Society
- 11/91 ACM Region Programming Contest - 2nd Place
- 11/90 E. F. Kraft Scholarship for Top 100 Berkeley Freshmen

References available upon request.