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

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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. Enhanced the CERN web server and the NCSA Mosaic browser as part of this work.

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.

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