

Biographical Sketch

Phillip R. Merkey

Assistant Professor Mathematical Sciences

<http://www.math.mtu.edu/~merk>

Assistant Professor Computer Science

<http://www.cs.mtu.edu/~merk>

Director Computational Science and Engineering Research Institute

Phone: 906-487-2220

Michigan Technological University

Fax: 906-487-2830

1400 Townsend Drive, Houghton, MI 49931

email: merk@mtu.edu

Education

Ph.D., Mathematics, University of Illinois, 1978-1986

Dissertation: Topics in Coding Theory Advisor: Robert J. McEliece

Graduate studies, California Institute of Technology, 1982-1986

Graduate studies, Michigan Technological University, 1977-1978

B.S., Mathematics, Michigan Technological University, 1974-1977

Appointments

2003-present, MichiganTech : Assist. Prof. in Mathematics and in Computer Science

2002-present, Director, Computational Science and Engineering Research Institute, MichiganTech

1999-2003, MichiganTech : Res. Asst. Professor, Computer Science

1994-1999, Senior Staff Scientist, CESDIS:USRA at NASA's Goddard Space Flight Center

1994-present, IDA : Center for Computing Sciences (Adjunct Research Staff Member)

1986-1994: Research Staff Member: IDA's Supercomputing Research Center, Bowie, MD

Selected Publications: 5 related

“Atomic Memory Operations for PGAS Programming”, HPCS: PGAS conference, Oct 2006

L.R. Thimm, D.L. Kreher, and P. Merkey, “A Parallel implementation for the maximum clique problem”, JCMCC, (accepted)

Invited Talk: “Atomic Memory Operations in UPC”, High Productivity Conference, Oct 2005

SC2005 Tutorial: Tarek El-Ghazawi, Steve Seidel and Phil Merkey, “Advanced Programming in UPC”, Nov 2005

Amaral, J., Gao, G., Merkey, P., Sterling, T., Ruiz, Z., Ryan, S., “Performance Prediction for the HTMT: A Programming Example,” Proceedings, IEEE Frontiers 99, 1999

Synergistic Activities

Associations:

- American Mathematical Society
- IEEE Computer
- SIAM
- Cray Users Group

Participation in Professional Meetings and Workshops

- Participation in HPCS workshop [2005-2006]
- Annual UPC developers workshop [2000-2006]
- UPC presentations for the UPC Booth at SC01, SC02, SC03, SC04, SC05
- Annual Cray Users Group [2004-2005]
- HTMT workshops (1998-2002)

Committee and Review Activities

- Program Committee for IEEE Cluster Computing [2001,2,3,4,6]
- Review Panel for NASA AIST project [2003.01]
- Reviewer for ACM, SIAM, IEEE Cluster Computing
- Reviewer Symposium on Applied Computing SAC'03 [2002.09]
- Poster Chair, IEEE Cluster Computing 2001
- Reviewer Frontiers in High Performance Computing [1997]

Collaborations and Other Affiliations

Recent Collaborators

- Coke Reed
- UPC: William Carlson (IDA/CCS), Steve Seidel (MTU), Chuck Wallace (MTU), Kathy Yelick (LBL), Tarek El-Ghazawi(GWU)
- Beowulf: Becker, Donald (Penguin Computing)
- HTMT: William Carlson (IDA/CCS), Thomas Sterling (CACR), Coke Reed (IDA)

PhD Advisor

- Robert J. McEliece

MS student advisees

Kian Giap Lee, Matt Miller, Chris Pinnow, Rachel Robertson, Kyle Rokos

PhD student advisees

Christopher Cischke, Lisa Thimm, Alicia Thorsen