

Michael Rainey

Department of Computer Science
1100 E 58th Street
Hinds 055
University of Chicago
Chicago, IL 60637

Phone: (309) 255-7773
Fax: (773) 702-8487
mrainey@cs.uchicago.edu
<http://www.cs.uchicago.edu/~mrainey/>

Education

M.S. Computer Science, University of Chicago, 2007

B.S. Computer Science, Indiana University, 2004

B.S. Cognitive Science, Indiana University, 2004

Experience

Research Assistant Summer 2003
Principle Investigator: David S. Wise Indiana University
Designed and evaluated performance of cache-aware and multiprocessor matrix-factorizing algorithms. Supported by NSF Grant CRI: “A Paradigm of Parallel Programming for Morton-Ordered Matrices.”

Programmer Summer 2005
John H. Reppy University of Chicago
Implemented the SML-style module system and maintained the type checker for the Moby programming language.

Programmer Summer 2006
Principle Investigators: David MacQueen and University of Chicago
John H. Reppy
Extended the MLRISC code generator to support the AMD64. Supported by NSF Grant CRI: “Standard ML Software Infrastructure.”

Teaching

Teaching Assistant, Introduction to Computer Systems (Ph.D.), University of Chicago, Spring 2006

Teaching Assistant, CSPP Unix Systems Programming (Ph.D.), University of Chicago, Fall 2006

Teaching Assistant, CSPP Networks (Ph.D.), University of Chicago, Winter 2007

Working Papers

“Manticore: A heterogeneous parallel language,” with M. Fluet, J. Reppy, A. Shaw, and Y. Xiao, in the Proceedings of the Workshop on Declarative Aspects of Multicore Programming (DAMP) 2007, January 2007.

“The Manticore runtime model,” Master’s dissertation at the University of Chicago, January 2007.

“A Paradigm for Parallel Matrix Algorithms: Scalable Cholesky,” with D. Wise, C. Citro, J. Hursey, F. Liu, in the Proceedings of Euro-Par 2005, August 2005.

“Embedding Quadtree Matrices in a Functional Language,” with D. Wise, Submitted for publication in 2004

Michael Rainey

Presentations

“The Manticore runtime model,” University of Chicago, 10 December 2006.

“Equality and Subtyping in Moby,” Toyota Technological Institute, 21 April 2006.

References

Available upon request.