

BENJAMIN A. ROSE

Private Information Removed
bar234@vt.edu
<http://people.cs.vt.edu/~bar234>

OBJECTIVE

A research and/or development position for emerging hardware platforms

EDUCATION

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY, Blacksburg, VA
M.S. Computer Science and Applications, Expected May 2009
G.P.A. 3.91/4.0

THE PENNSYLVANIA STATE UNIVERSITY, THE BEHREND COLLEGE, Erie, PA
B.S. Software Engineering, May 2007
G.P.A. 3.73/4.0 (in major)
Dean's List 6 semesters

EXPERIENCE

RESEARCH ASSISTANT

PEARL Research Lab, Department of Computer Science, Virginia Tech, Blacksburg, VA
Fall 2007 - Present

- Three Publications
 - *A Comparison of Programming Models for Multiprocessors with Explicitly Managed Memory Hierarchies*. At the 14th ACM SIGPLAN Symposium on Principles and Practice of Parallel Programming, Raleigh, NC, February 2009.
 - *CellMR: A Framework for Supporting MapReduce on Asymmetric Cell-Based Clusters*. At the 23rd IEEE International Parallel and Distributed Processing Symposium, Rome, Italy, May 2009.
 - *Supporting MapReduce on Asymmetric Multicore Clusters*. ACM Operating Systems Review - The Interaction Among the OS, the Compiler, and Multicore Processors Special Issue, April 2009.
- Experiment with various levels of data parallelism on heterogeneous multi-core hardware
- Researched and developed Linux scheduler modifications specific for the Cell Broadband Engine
- CellStream - High speed framework for streaming data inside of the Cell Broadband Engine

SOFTWARE ENGINEER CO-OP

General Electric Transportation, Erie, PA
Spring 2007

- Wrote Python scripts to parse locomotive test data from new software builds in a simulator.
- Implemented new hardware configuration selection in locomotive software

COMPUTER SKILLS

- Proficient with the C/C++, Python, and Perl programming languages and the LAM-MPI/OpenMPI communication libraries
- Comfortable with Java, C#, Visual C, PHP, MySQL, Bash
- Comfortable with areas of the Linux Kernel, such as the Completely-Fair Scheduler

HONORS/ACTIVITIES

Phi-Kappa-Phi Honors Fraternity, Deans List, ACM Student Member, IEEE Student Member