Austin Reilley Benson
Berkeley, CA
http://arbenson.github.com

Objective

- Fall 2012 admission to a computer science PhD program with a research emphasis in high-performance computing, numerical linear algebra, and/or distributed systems

Education

- University of California, Berkeley — Expected Graduation May 2012
  - B.S. Computer Science and Engineering
  - B.A. Applied Mathematics (algorithms emphasis)
  - GPA: 3.86/4.0
  - Coursework: (CS) Operating Systems, parallel computing, artificial intelligence, algorithms; (Math) Matrix computations, numerical analysis, probability theory, stohastic processes, algebra, analysis

Research and Work Experience

- **Google, Inc.** — May 2011-August 2011
  Software Engineering Intern, Google Chrome Team
  - Designed and implemented the nacl-mounts library: a pluggable user-space file system for Google's Native Client which allows for storage to various back-end devices
  - Increased the distribution of the naclports build system from 3 to 26 machines
- **University of California, Berkeley** — August 2011-Present
  Undergraduate Researcher, Computer Science Division, Berkeley Benchmarking and Optimization Group
  - Exploring methods in optimizing of communication-avoiding numerical linear algebra algorithms
  - Researching parallel algorithms for numerical linear algebra in cloud computing environments
- **Domestic Nuclear Threat Security Initiative** — June 2010-Present
  Research and Software Engineering Intern
  - Developing an object-oriented, parallel, and multi-platform framework for implementing nuclear detector software for detecting nuclear sources and preventing nuclear threats in real time
  - Responsible for data analysys module, dynamic code generation tools, and software tests
- **University of California, Berkeley** — April 2010-October 2010
  Undergraduate Researcher, Department of Industrial Engineering and Operations Research
  - Implemented Matlab software for analysis of MRI sequences of 160 patients from medical studies on patterns of development of knee osteoarthritis

Involvement

- Committer, Google Native Client Ports (naclports)
- Tech Lead, Developer Collective at Berkeley
- Lab Assistant, CS 61C–Great Ideas in Computer Architecture
- Member, Tau Beta Pi, The Engineering Honor Society
- Member, Eta Kappa Nu, The Electrical Engineering and Computer Sciences Honor Society
- Member, Alpha Pi Mu, The Industrial Engineering and Operations Research Honor Society

Skills

- Languages: (Proficient): C, C++, Java, Python, Matlab, bash; (Experience): Perl, JavaScript
- Misc. Computing Tools: Google App Engine, Hadoop, Qt, LaTeX, CUDA, OpenMP, MPI, svn, git
- Operating Systems: OS X, Linux, various UNIX flavors