

SAMUEL I. DAITCH

43 Edwards St. Apt. 2
New Haven, CT 06511
508-341-1875

<http://samdaitch.com/>
samuel.daitch@yale.edu

Education

- **Yale University**—New Haven, CT
MPhil, Computer Science, December 2007
MS, Computer Science, December 2007
 - Yale University Fellowship
 - Expected Completion of PhD: May 2009
- **Massachusetts Institute of Technology**—Cambridge, MA
MEng, Electrical Engineering and Computer Science, September 2004
SB, Computer Science and Engineering, February 2004
SB, Mathematics, June 2003
 - GPA: 5.0/5.0 (MEng overall), 4.8/5.0 (SB overall),
5.0/5.0 (CS major), 4.9/5.0 (Math major)

Experience

- **Argonne National Laboratory**—Lemont, IL
Givens Associate, Summer 2007
 - Worked with Matt Knepley in Mathematics and Computer Science Division
 - Developed a support-graph preconditioner module for PETSc, a numerical computation toolkit
- **Hebrew University of Jerusalem**—Jerusalem, Israel
Research Assistant, Summer 2005 & 2006
 - Worked with Gil Kalai of HUJI Math Department on analysis of boolean functions
- **Yale Computer Science Department**—Cambridge, MA
Teaching Assistant for CS462: Networks and Graphs, Fall 2006
Teaching Assistant for CS463, Machine Learning: Fall 2005
- **MIT Computer Science Department**—Cambridge, MA
Teaching Assistant for 6.001, Structure and Interpretation of Computer Programs: Spring 2004
Teaching Assistant for 6.042, Math for Computer Science: Spring 2003
- **MIT Computer Science and Artificial Intelligence Lab**—Cambridge, MA
Research Assistant: Fall 2003, Undergraduate Researcher: 2000-02
 - Member of Prof. Daniel Jackson's Software Design Group
 - Participated in development of Alloy Analyzer modeling tool

(cont.)

Research Papers

- “Faster Approximate Lossy Generalized Flow via Interior Point Algorithms”
with Daniel A. Spielman
 - To appear in proceedings of ACM Symposium on the Theory of Computing, May 2008
- “Preconditioners for 2-Dimensional Trusses” with Daniel A. Spielman
 - Available at <http://arxiv.org/abs/cs/0703119>
 - Contributed Talk, SIAM Workshop on Combinatorial Scientific Computing, Feb. 2007
- “Translating Alloy using Boolean Circuits”, MEng Thesis

Skills

- C, C++, Java, Lisp, ML, Fortran, Perl, \LaTeX , HTML, Matlab, SQL, PHP

Achievements and Activities

- Phi Beta Kappa, Tau Beta Phi, National Merit Scholar
- Ran MIT Kosher Ko-op daily kosher meal plan, 2000-03