

## Reid W. Barton

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- Experience**
- Mathematical Association of America** **Lincoln, NE**  
**Mathematical Olympiad Summer Program**  
*Summers 2002–2004*  
Junior Instructor for US International Mathematical Olympiad team. Gave lectures, prepared tests and graded papers. Observer at 2002 and 2004 IMOs.
- Duluth Summer Math Research Program for Undergraduates** **Duluth, MN**  
*June–August 2003*  
Performed independent research on a combinatorial packing problem. Presented results and submitted a paper for publication.
- Akamai Technologies, Inc.** **Cambridge, MA**  
**Systems Performance Group**  
*August 1999–September 2001, part-time*  
Developed an automated system for determining network topology and capacity in data-centers. Designed and implemented a methodology for measuring performance of streaming media servers.
- MIT Laboratory for Computer Science** **Cambridge, MA**  
**Supercomputing Technologies Group**  
*June 1997–August 1999, part-time*  
Worked as Research Affiliate on the Cilkchess parallel chess program, an application being developed in Cilk, a C-based language for programming parallel supercomputers. Developed text-based and graphical interfaces for Cilkchess and a Perl implementation of temporal difference learning.
- Education**
- Massachusetts Institute of Technology** **Cambridge, MA**  
Bachelor of Science in Mathematics expected in 2005. GPA: 5.0/5.0.
- Skills**
- Languages: Proficient in C/C++, Perl, Objective Caml, Haskell, TeX, Mathematica, bash. Familiar with Java, Scheme, SQL, HTML, Pascal, PHP.
- Environments: UNIX/Linux, Mac OS.
- Publications**
- Packing densities of patterns, *Electronic Journal of Combinatorics*, to appear.
- A simple special case of Sharkovskii’s theorem (with Keith Burns), *American Mathematical Monthly* **107** (2000), 932-933.
- Awards**
- ACM International Collegiate Programming Contest**  
5th place team, 2004 World Finals Prague, Czech Republic  
2nd place team, 2002 World Finals Honolulu, HI
- William Lowell Putnam Mathematics Competition**  
Putnam Fellow, 2001, 2002, 2003  
First place team, 2003  
Second place team, 2001
- TopCoder Algorithm Competition**  
2004 TopCoder Collegiate Challenge Finalist Boston, MA  
2003 TopCoder Open Semifinalist Uncasville, CT  
2002 TopCoder Invitational Semifinalist Uncasville, CT
- International Olympiad in Informatics**  
First place, 2001 IOI Tampere, Finland  
Gold medal, 2000 IOI Beijing, China
- International Mathematical Olympiad**  
Perfect score, 2001 IMO Washington, DC  
Gold medal, 2000 IMO Taejon, South Korea  
Gold medal, 1999 IMO Bucharest, Romania  
Gold medal, 1998 IMO Taipei, Taiwan