

# KAYLA D. JACOBS

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Education	<p><b>Massachusetts Institute of Technology</b>, Cambridge, MA (September 2002 – February 2007) Bachelor of Science in Mathematics (February 2007). Bachelor of Science in Physics (June 2006). GPA 4.1/5.0. MIT Society of Women Engineers Scholarship.</p> <hr/>
Work Experience	<p><b>MIT OpenCourseWare (OCW)</b> (February 2007 – June 2007) <i>Free course materials from MIT's curriculum, with <math>1.5 \times 10^6</math> monthly visitors.</i> &lt;<a href="http://ocw.mit.edu">http://ocw.mit.edu</a>&gt; Designed and planned new OCW initiative targeting secondary school students and educators as integral project team member. Recruited, trained and supervised student workers for initial feasibility research to evaluate course materials for relevancy. Presented project to MIT President Hockfield, faculty steering committee and website implementation team. Recruited and developed materials for undergraduate MIT math and physics courses for online publication, including enlisting many instructors previously unaffiliated with OCW.</p> <p><b>NormaTec, Inc.</b>, Philadelphia, PA &amp; Newton, MA (Summer 2002 – Spring 2004) <i>Medical device company treating circulation diseases.</i> Main programmer of <i>Pneumatic Medicine Report (PMR)</i>, medical documentation software for physicians that easily produces medical evaluations and device prescriptions. Used by dozens of doctors across the United States to significantly speed up patient documentation process, resulting in faster insurance reimbursements.</p> <hr/>
Research Experience	<p><b>Prof. Suzanne Flynn, MIT Department of Linguistics</b> (Summer 2003 – Fall 2004) Research assistant for study of bilingual speakers' MEG brain-scan responses to English grammar. Developed test data, including creating an automatic experiment program generator, trained new project members, and solved technical problems in both hardware and software. Results exhibited in two poster presentations at the Linguistic Society of America conferences.</p> <p><b>Prof. Isaac Chuang, MIT Media Lab Quanta Group</b> (Summer 2004) Research assistant for single-molecule transport project. Fabricated nanowires and test gates using electron-beam lithography.</p> <hr/>
Teaching & Leadership Experience	<p><b>MIT Experimental Study Group (ESG)</b> (Fall 2002 – Spring 2007) <i>Innovative freshman program emphasizing small-group learning.</i> &lt;<a href="http://web.mit.edu/esg/www">http://web.mit.edu/esg/www</a>&gt; Teaching assistant for freshman mathematics and physics courses. Co-created new undergraduate seminar. Served as freshman mentor and student advisor. Honored with MIT Anderson Award for Excellence in Teaching at ESG.</p> <p><b>Johns Hopkins Center for Talented Youth (CTY)</b> (Summers 2005 &amp; 2007) <i>Intensive 3-6 week academic summer courses for gifted middle- and high-school students.</i> Instructor and curriculum developer for intensive <i>Theory of Computation</i> course (Summer 2007). Co-ran all aspects of high-school course, including 8 hours of class daily, homework, exams, and evaluations. Published course materials online at &lt;<a href="http://web.mit.edu/kayla/tcom">http://web.mit.edu/kayla/tcom</a>&gt;. Teaching assistant for <i>Cryptology</i> (Summer 2005).</p> <p><b>MIT Educational Studies Program (ESP)</b> (Fall 2003 – Spring 2007) <i>Volunteer MIT student group offering inexpensive academic enrichment programs to local middle- and high-school students taught by MIT students and community members.</i> &lt;<a href="http://esp.mit.edu">http://esp.mit.edu</a>&gt; Co-founder and co-director of successful new <i>Delve</i> program offering high-school AP classes. Creator and teacher of popular high-school enrichment courses. Led initiative to publish ESP courses on MIT OpenCourseWare.</p> <hr/>
Skills	<p>Fluent in C++, Visual Basic, HTML, CSS, Scheme, LaTeX, DmDX, MS Windows &amp; Office. Extensive experience with website development. Excellent written and oral communication. Friendly team member and motivated independent worker.</p> <hr/>