Jonathan Ting
jonathan.ting@berkeley.edu
2700 Hearst Ave., Berkeley, CA 94720 | Building 1A, Room 26C | (805) 868-1586

Education

University of California, Berkeley
B.S. Electrical Engineering and Computer Science — expected June 2016

Skills

Programming/Markup

- Most proficient in: C, C++, Java, MIPS, Python
- Some experience in: HTML, CSS, JavaScript, LaTeX, MATLAB, Objective-C, Ruby, Scheme, x86

Software

- AutoCAD: created 2D engineering drawings in first-angle projection
- Adobe Photoshop, Illustrator, & InDesign: created a presentation of a house with complex entourage
- Logisim: Used to simulate digital logic circuits
- Multisim: Used for circuit design and analysis
- Rhinoceros: Created a 3D model of a case study house

Activities

Academic

- MESA: Entered various competitions in math and engineering projects — Spring 2012
- Journalism: Editor and website manager for school newspaper — Spring 2012
- PREP: Pre-engineering program, intensive preparation for calculus and physics — Fall 2012
- Lab assistant for CS 61A, UCB's introductory computer science course — Summer 2014

Personal

- 5+ years experience in martial arts, joined the Taekwondo club in Spring 2014
- Enjoy programming challenges from various websites, including Project Euler (number theory)
- Various personal projects, including:
  - Using Java's Swing and image processing algorithms to apply various types of filters (blur, sobel, median, sepia) to TIFF images
  - Using the Fast Fourier Transform algorithm to multiply polynomials

Related Coursework

University of California, Berkeley

- The Structure and Interpretation of Computer Programs — Fall 2012
- Structure and Interpretation of Systems and Signals — Fall 2013
- Data Structures — Spring 2013
  - Implemented an AI for a game using alpha-beta pruning
- Machine Structures — Spring 2014
  - Implemented MapReduce on Amazon EC2 servers
  - Parallelized using a variety of optimization methods
  - Designed a 2-stage pipelined processor in Logisim
- Discrete Mathematics and Probability Theory — Spring 2014
- Introduction to Microelectronic Circuits — Spring 2014
  - Built an EEG which measures electrical signals from the brain
- Computer Security — Fall 2014
  - Implemented rainbow tables to crack AES hashes
  - Implemented a simplified version of the SSL handshake
- Computer Graphics — Fall 2014
  - Created a ray tracer using C++, optimized using multi-threading and SSE intrinsics
  - Used OpenGL to perform subdivision on Bezier curves
- Efficient Algorithms and Intractable Problems — Fall 2014
- Programming Languages and Compilers — Spring 2015
- Artificial Intelligence — Spring 2015
- Software Engineering — Spring 2015