

# JEAN SUNG

<http://cs.hmc.edu/~jsung>

## EDUCATION

Harvey Mudd College (HMC), Claremont, CA  
B.S. Computer Science - Major GPA: 3.5

Expected May 2016

Woodinville High School, Woodinville, WA  
High School Diploma (Valedictorian) - GPA: 4.0

June 2012

## COURSEWORK

Algorithms (2015) | Digital Electronics & Comp. Engineering (2015) | Software Development  
Data Structures & Program Development | Domain Specific Languages (DSLs) | Programming Practicum  
Image Processing | Linear Algebra & Differential Equations II | Multivariable Calculus

## SKILLS

*Languages:* Java, C++, Python, Racket, Prolog, MATLAB, C, Objective-C, x86 Assembly, L<sup>A</sup>T<sub>E</sub>X  
*Tools:* Git, SVN, Unix/Command Line, Xcode, Eclipse, Mathematica  
*Software Development:* Agile methods, User Testing, MVC framework

**PROJECTS**, all located at <http://cs.hmc.edu/~jsung>

### Sum Plus Plus

Fall 2014

Created a domain specific language to better express weighed sums with custom constraints

- Wrote a translation suite for English rules to Excel formulas

### Pipe Dream!, free download from iTunes Store

Fall 2014

Created an educational iPad game to teach middle school students about computer security

- Gained experience in agile development process, teamwork, architecture design and user testing

### Wake Me When

Fall 2014

Designed an app that is an alarm clock based on a user's distance from a set location

- Implemented an Android application using Google Maps API and native alarm clock functionality

### Sudoku

Fall 2014

Designed an iOS compatible software architecture for the game of Sudoku

- Implemented and tested game in Objective-C as iPad application

## RESEARCH EXPERIENCE

### Programming Languages Researcher, HMC

Summer 2014

- Applied a programming language approach to making software tools
- Focused on extensibility and re-usability for domain experts
- Created a physics simulator to help students draw and visualize force vectors in Java with jMonkey

### Educational iPad App Developer, HMC

Summer 2013

- Re-factored, added new features to, and published educational iPad apps for middle school students
- Primary app: HammyCoaster, free on the iTunes Store
- Presented work at the *Celebration of Women in Computing in Southern California Conference*

## ADDITIONAL EXPERIENCE

### Intern for Office of Institutional Diversity, HMC

Fall 2014 -Present

- Initiated and implemented office task automation projects
- Streamlined the RSVP system with Google Apps, saving one hour of staff time per event
- Helped plan events that promoted awareness of social justice issues

### Computer Science Grader & Tutor, HMC

Fall 2013 -Present

- Held tutoring hours for students and graded homeworks

**LEADERSHIP** Girls Who Code Lead Instructor | Dorm Social Representative | Blood Drive Coordinator