



[michellerubyhwang@gmail.com](mailto:michellerubyhwang@gmail.com)  
[www.github.com/michellehwang](http://www.github.com/michellehwang)  
805.827.8380

2033 Haste Street  
Apt. 114  
Berkeley, CA 94704

## EDUCATION

*University of California, Berkeley* // Expected Graduation May 2015

B.A. in Computer Science and B.A. in Cognitive Science

*Coursework* // Structure and Interpretation of Computer Programs, Data Structures and Advanced Programming, Linear Algebra and Differential Equations, Discrete Mathematics and Probability Theory, Multivariable Calculus

## SKILLS

*Platforms* // Windows, Linux

*Languages* // Python, Java, Scheme, HTML, CSS, JavaScript

*Applications* // Microsoft Word, Excel, PowerPoint, Adobe Illustrator, Dreamweaver

## RESEARCH

*Walker Sleep and Neuroimaging Laboratory* // Research Assistant (July 2012 – Present)

- Currently aiding research in the relationship between sleep and cognition of the rapidly developing teenage brain
- Applied and monitored EEG equipment for overnight sleep recordings of research subjects
- Fostered the relationship between primary researchers and teenage subjects as to maximize efficiency for the researchers while maintaining a comfortable environment for the subjects

## PROJECTS

*Ants vs. Somebees* // July 2012

- Implemented a tower defense game inspired by PopCap Games' Plants vs. Zombies as well as a GUI to display simple two-dimensional animations

*Scheme Interpreter* // August 2012

- Implemented a subset of the Scheme language using Python

*Enigma Machine* // September 2012

- Built a simulator of the Enigma cipher system to take configurations (of eight rotors, and two reflectors) of the machine to encode or decode messages based on these configurations.

*Spatial Database* // November 2012

- Implemented a QuadTree API to sort large sets of data points provided to the spatial database
- Created an application to stimulate a vehicle moving through a large field of fixed observation posts, with posts broadcasting a pulse making the vehicle detectable, while recording the position of the vehicle

*Lines of Action* // December 2012

- Implemented the game, Lines of Action, invented by Claude Soucie, for play between two human players, a human and an AI, or two AI's using Minimax and Alpha-Beta pruning