michelle ruby hwang

email // michellehwang@berkeley.edu
github // www.github.com/michellehwang
phone // 805.827.8380

EDUCATION

University of California, Berkeley
Expected Graduation // May 2015
B.A. in Computer Science & B.A. in Cognitive Science
GPA // 3.71

SKILLS

Languages // Python, Java, HTML, CSS / SASS, CoffeeScript JavaScript, Ruby on Rails, jQuery
Applications // Adobe Illustrator, Photoshop, InDesign, Dreamweaver

PAST EXPERIENCE

MAY '13 – AUG '13 **Curious.com** // *Software Engineering Intern*
- Worked as a full stack engineer using Ruby on Rails, Coffeescript, SASS, Backbone.js, and Underscore.js
- Integrated social media for users to post likes and shares of videos and projects as well as tracking for internal growth
- Implemented a messaging platform, to create a centralized area for users to communicate

PROJECTS

MAR '13 **MapReduce**
- Used the large processing capabilities of Hadoop clusters to analyze data from real social networks to approximate the distance distribution between different people on Amazon EC2 servers.

DEC '12 **Lines of Action**
- 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

NOV '12 **Spatial Database**
- 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

SEPT '12 **Enigma Machine**
- Developed 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.

ACADEMIC EXPERIENCE

AUG '13 - PRESENT **Undergraduate Student Instructor** // Structure and Interpretation of Computer Programs
- Assisted in teaching an introductory computer science class of 1100 students
- Created course materials for labs, discussions, and exams
- Led two discussion sections and two labs a week for students in groups of ~40

JAN '13 – MAY '13 **Reader** // Structure and Interpretation of Computer Programs
- Assisted the teaching assistants in the introductory CS course at UC Berkeley
- Graded projects and homework assignments and provided one-on-one tutoring to students

AUG '12 – MAY '13 **Lab Assistant** // Data Structures & Structure and Interpretation of Computer Programs
- Tutored and facilitated students' understanding in their introduction to programming and data structures

RESEARCH EXPERIENCE

JULY '12 – PRESENT **Research Assistant** // Walker Sleep and Neuroimaging Laboratory
- Aided research in the relationship between sleep and cognition of the rapidly developing teenage brain
- Applied and monitored EEG equipment on young research subjects for overnight sleep recordings
- Fostered the relationship between primary researchers and teenage subjects as to maximize efficiency for the researchers while maintaining a comfortable environment for the subjects

EXTRACURRICULARS

MAY '13 – PRESENT **Publicity Officer** // Upsilon Pi Epsilon (UC Berkeley Computer Science Honors Society)
- Maintained communication for the chapter through weekly emails with details from all committees in UPE
- Used Adobe Illustrator to create flyers for corporate info sessions and hosted events

MAY '12 – PRESENT **Volunteer** // KALX (90.7 FM -- UC Berkeley's Radio Station)
- Helped maintain organization of records and CD's in KALX's music collection of over one million albums