michelle ruby hwang

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

EDUCATION

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

SKILLS

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

PAST EXPERIENCE

MAY '14 – PRESENT ***Facebook*** // *Software Engineering Intern*
- Currently working on the Mobile Logging and Analytics team within Internet.org

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

AUG '13 ***Comment Center***
- designed and implemented a message interface between Curious.com teachers and users, with comment filtering, sorting by name and date, and pagination

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.

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

MAR '14 - PRESENT ***Computer Security Research under Vern Paxson and Paul Pearce***
- Currently researching vulnerabilities in SSH tunneling on the internet
- Used nmap and zmap to scan ports on the internet to detect for insecure ports
- Wrote scripts for ssh host detection on open ports

JULY '12 – JAN '14 ***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 – JAN '13 ***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