Gary Cheng

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EDUCATION

University of California, Berkeley **GPA: 4.0**

B.A. Computer Science | Anticipated Graduation: 2018

- *Relevant Coursework*: Data Structures, Structure & Interpretation of Computer Programs, Discrete Math & Probability, Algorithms, Machine Structures, Linear Algebra and Differential Equations
- Awarded place on the Dean's List (Fall '15, Spring '16)

LANGUAGES

Proficient: Python, Java, C, SQL, Scheme, Swift (iOS)
Familiar: HTML, CSS, JavaScript, Node.js

PROJECTS

Vuepal (*facebook.com/vuepal)*

- Developing an iOS app using Swift, Cocoa Touch, Xcode, and Firebase that allows users to share the photos they have taken with one another as they travel together, integrated an offline backup feature so users will have access to all shared photos even in low-bandwidth areas
- Pitched to VCs at the European Innovation Academy accelerator, many expressed interest in our product

NLP Rap Generator (*github.com/garyxcheng/auto_rapper)*

- Using NLTK API to create a natural language processing Python program that generates rap lyrics
- Querying the Rap Genius API to learn grammatical sentence structure, using the Datamuse API to find rhyming words, implementing Markov Chains to create meaningful sentences

Roommate Messenger Bot (*github.com/garyxcheng/roommate_messengerbot)*

- Using Facebook webhooks, Node.js, and a Heroku Postgres database to create a Facebook messenger bot that tracks grocery lists for roommates

Fair Trade Update *(github.com/garyxcheng/fairtradeupdate)*

- Cooperated with Fair Trade USA to develop an email sending/parsing Python software using Django that enhanced communication to producers in third world countries
- Fair Trade USA expressed interest in using our product to enhance their communication software

EXPERIENCE

Research Assistant **Aug '16 – Present**

Jean Walrand, BLISS Lab, Berkeley Computer Science

- Working with Professor Walrand to optimize surgery room scheduling, exploring possibilities of using online scheduling techniques to adjust for delays, aiming to fit more surgeries into a day
- Creating an Object Oriented Python scheduler that plans surgeries dynamically, using historical surgery data to aid greedy algorithm, adapts scheduled patients to delays by moving them to other operating rooms

CS61a Tutor **Jan '16 – May '16**

Berkeley Computer Science, Berkeley

- Teaching students key concepts from Structure and Interpretation of Computer Programs 1 on 1, worked in office hours and labs to provide more help, and attended class learning about the theory of learning
- Shadowed Teaching Assistants, wrote reviews of their performances

President **Jan '16 – Aug '16**

Hackers@Berkeley

- Coordinated officer recruitment for fall 2016, conducted interviews, and organized info session
- Organized and presided over officer meetings, restructured club structure to ensure continuation H@B
- Managed all operations for Hacker Fair 2015, coordinated with our sponsor Facebook, recruited presenters from campus