# **Brian Su**

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#### **EDUCATION**

# B.A. COMPUTER SCIENCE, UC BERKELEY• C'O 2017 • GPA 3.48

- Member of Upsilon Pi Epsilon CS Honor Society Cal Leadership Award 2013 Recipient
- Courses Taken: Structure and Interpretation of Computer Programs, Data Structures, Machine Structures, Discrete Math and Probability Theory, Tech Firm Leadership, Algorithms, Linear Algebra, Multivariable Calculus, Operating Systems, Artificial Intelligence, Intro to Bioengineering, Machine Learning, Computer Networking, User Interface Design

## **WORK EXPERIENCE**

#### **UC BERKELEY**

Undergraduate Researcher | Professor Fearing's Biomimetics Millisystems Lab | Sept 2015 - present

• Investigating the use of force-based tactile sensing on Velociroach robot in cooperation with a Zumi robot to recognize obstacles and map terrain

## **APPLE**

Software Engineer Intern | Maps Evaluation | May 2015 - Aug 2015

- Developed a method to efficiently compare alternate routes and real navigation reroutes using a one-day snapshot of probe data and Hadoop Map Reduce
- Developed a data verification pipeline for detecting log loss using HDFS, Hive, and Oozie workflows & coordinators
- Intern project was awarded 2nd-place department wide and presentation was viewed by 100+ Maps Team members

### **EKO DEVICES**

Software Engineer Intern | Jan 2015 - May 2015

• Developed an open-sourced Ruby gem wrapper for integration with various Electronic Health/Medical Records (EHR/EMR) APIs, including Allscripts Touchworks/Professional EHR, Athena Health EMR, and DrChrono EHR

### **UC BERKELEY**

CS61B/CS61BL Reader & Senior Mentor for Computer Science Mentors | June 2014 - Aug 2015, Jan 2015 - May 2015

- Wrote BASH scripts to compile, run, and assign scores for CS61BL homework assignments
- Taught a small section; Held office hours; Graded projects and midterms; Wrote worksheets for review sections

# **UPSILON PI EPSILON - Cal Computer Science Honor Society**

Web Development Chair | May 2014 - May 2015

- Led team of 15 to design & develop a new website from scratch, including user profile, resume curation, & calendar
- Setup nginx, uwsgi, Django, Postgresql onto a 2005 iMac running Ubuntu

## **VIA ANALYTICS**

Software Engineer Intern | May 2014 - Aug 2014

- Developed data visualizations using realtime bus tracking data on Google Maps using d3.js and Google Maps API
- Created dashboard that allowed transit agencies to upload their GTFS files onto company servers and validate the files for conformity to GTFS specifications

### **PROJECTS**

**ATLAS** • Landmark recognition using TF-IDF and NMF to associate images with a set of tags (e.g. bridge, tower, etc.) obtained from Clarifai's Image Recognition API and a Linear SVM to classify images. Recognized images of Eiffel Tower, Golden Gate Bridge, Stonehenge, and the Colosseum with 100% accuracy. Built @ Hack MIT F'2015 **SMART POWER NAP** • Android app that detects when a user has fallen asleep using the device's accelerometer and sets an appropriate alarm time to optimize for the perfect power nap; Available on Google Play Store **HABITO** • Django app that matches apartment listings with preferences to simply apartment hunting experience **CAL AP CREDITS** • Django app that displays UC credits given for AP credits; Used by thousands of students to date

#### **SKILLS**

**Experienced** - Hadoop, Map Reduce, Hive, Oozie, Django, Python, Java, HTML, Javascript, CSS, BASH, Postgresql **Proficient** - Android, iOS, Spark, C, MIPS, AWS (EC2, S3, RDS), nginx, d3.js, Photoshop, Illustrator