

# Brian Su

bsu.me • brian@bsu.me • (925) 319-7408 • github.com/briansudo & github.com/bsuper

## 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
- Relevant Courses Taken: *Discrete Math and Probability Theory, Algorithms, Operating Systems, Artificial Intelligence, Machine Learning, Computer Networking, UI/UX, Computer Vision (IP), Practical Networking (IP)*

## WORK EXPERIENCE

### GOOGLE

Software Engineer Intern | Speech Recognition & Natural Language Processing | May 2016 - Aug 2016

### UC BERKELEY

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

- Investigating the use of force-based tactile sensing on Velociroach robot to recognize obstacles and map terrain

Undergraduate Researcher | Professor Baldocchi's Biometeorology Lab | Feb 2016 - present

- Investigating the use of ML models to perform spatial and temporal extrapolation of eddy covariance data

### 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

### 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

### 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 95% accuracy. Built @ Hack MIT F'2015

**MIT PLACES** • Scene classification using VGG & RESNET

**MNIST** • Hand-built Linear Regression, Logistic Regression, kNN, DNN, Decision Trees, Random Forests, and more

**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

**SPARROW** • Android app that sends/receives messages via Bluetooth, creating a Bluetooth mesh network

**MOOV GROOV** • Android & Wear App that allows users to create and synthesize beats and audio

## SKILLS

**Experienced** - Hadoop, Map Reduce, Hive, Oozie, Scikit-learn, Django, Python, Java, HTML/CSS/JS, BASH, PostgreSQL

**Proficient** - Tensorflow, Keras, Android, iOS, C, MIPS, AWS (EC2, S3, RDS), nginx, d3.js, Photoshop, Illustrator