Brian Su

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EDUCATION

B.A. COMPUTER SCIENCE, UC BERKELEY• C'O 2017 • GPA 3.54
• 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, Practical Networking

WORK EXPERIENCE

GOOGLE
Software Engineer Intern | Speech Recognition | May 2016 - Aug 2016
• Implemented multi-task training and soft label CLDNN (Conv+LSTM+DNN) models using DistBelief with promising results for improving voice endpointing
• Significantly reduced time spent debugging endpointer models by building web visualizations and an Android app for debugging endpointer model outputs

UC BERKELEY
Undergraduate Researcher | Professor Fearing's Biomimetics Millisystems Lab | Sept 2015 - present
• Investigating the use of force-based tactile sensing on a Velociroach robot to recognize obstacles and map terrain

Undergraduate Researcher | Professor Baldocchi's Biometeorology Lab | Feb 2016 - May 2016
• Investigated 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/C++, MIPS, AWS (EC2, S3, RDS), nginx, d3.js, Photoshop, Illustrator