

JAMES GUO

UCLA SCHOOL OF ENGINEERING AND APPLIED SCIENCES – COMPUTER SCIENCE MAJOR

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ABOUT ME

Programming Languages Python, Golang, Lisp, C/C++, React/JS, MATLAB, SQL, Git, Java, L^AT_EX

Technologies Figma, Vim, BigQuery, AWS/Google Cloud, Kubernetes, Docker, Dev Tools

Languages Fluent in Chinese; Conversational Proficiency in Spanish

Interests Basketball, Poker, AR/VR, Cooking, Boxing, Spikeball, Digital Visuals, Medium Articles

WORK EXPERIENCE

Uber

San Francisco, CA

Software Engineer Intern, Marketplace, UberEats Pricing

(June 2022 – Present)

- Building platform to streamline configuration of service fees generated by pricing models and operations strategy
- Programmed logic to calculate Postmates orders delivery fees based on hexagonal sector locations and radius
- Created an object-validation application to reduce inconsistency for UberEats protobuf message configurations
- Augmented pricing models by incorporating real-time delivery surge features like weather and city events

BigML Laboratory, UCLA

Los Angeles, CA

Machine Learning Student Researcher

(February 2022 – Present)

- Optimizing CRAIG algorithm for selecting optimal subset of training data to represent entire data set
- Implemented PyTorch adaptive subset reselection method to mimic full dataset loss gradient with 85% accuracy
- Designed ResNet model architecture to test CRAIG algorithm and reselection methods on CIFAR-10 dataset

iHerb, LLC

Irvine, CA

Machine Learning Engineer Intern, Internal ML Platform

(June 2021 – September 2021)

- Employed Tensorflow compute graph freezing functions to increase all models' initial prediction efficiency by 75%
- Created Flask endpoints to host NLP Transformers for review moderation with parallelization and tracing support
- Developed and isolated pattern matching, categorization, and flagging packages for product reviews
- Tested Google's VertexAI NNs for demand forecasting against internally-made Random Forest classifiers

Boeing

El Segundo, CA

Software Engineer Intern, Satellite Systems

(June 2020 – September 2020)

- Developed Pandas application to automate the analysis of employee management excel files for each satellite
- Devised C++ programs to improve communication interface to a ground systems simulation

COMPETITIONS AND PERSONAL PROJECTS

BruinBot

(December 2021 – Present)

- Built mapping architecture in JavaScript (Express) for food delivery robot using GPS location to find routes
- Trained CNN Vision models for obstacle recognition to be used on data received from LIDAR scanner
- Worked on Mobile Application Front-End React Native code for map and checkout display

Electronic Trading Competition Trading Bot

(December 2021 – February 2022)

- Developed quantitative strategy through analyzing anomalies in financial instruments using isolation forests
- Wrote a socket-connected trading bot in Python for market making by leveraging arbitrage for etfs and bonds
- Used discovered anomalies and leading indicators to execute trades on financial institution equities

Stock-Ed

(October 2021 – December 2021)

- Created a full stack Stock Trading Game and Education Web App written in React and NodeJS
- Built back-end on Express to retrieve financial data and write to SQL databases to handle stock trading logic
- Wrote game algorithm and Firebase authentication so users can compete with friends based on real market data

EDUCATION

University of California, Los Angeles

Los Angeles, CA

B.S. Computer Science, Electrical Engineering Breadth (Major GPA: 3.99/4.0)

(Expected Graduation: June 2024)

- Groups: Delta Sigma Pi Business Fraternity, DevX, Undergraduate Business Society Technology Committee
- Awards: Sandia National Labs Algorithms Hackathon (2nd), Boeing Design (1st), Jane Street ETC
- Research Experience: UCLA BigML Lab (Efficient ML), UCLA Anderson School (Political Finance)
- Coursework: Natural Language Processing, Bond and Market Theory, Neural Networks, Neural Signal Processing, Machine Learning, Data Science, Algorithms, Programming Languages, Operating Systems, Probability