Apollo Jain

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Technical Skills

Languages: Python, Matlab, Java, C++, C, Go
Frameworks: PyTorch, TensorFlow, SciKitLearn, CVXPy, OpenGL
Other: Active DoD Secret Clearance

Professional Experience

Anduril Industries *Software Engineer*
Irvine, CA November 2018 – October 2020
- Built out the company's maritime tower product, which includes radar and VHF transceiver serial processing code, general infrastructure, a boat-specific sensor fusion tracking model, and a sigmoid-based hostile boat classifier. Currently used in the field for drug trafficking prevention on the California coast. Written in C++, Golang, and NixOS.
- Built out radar integrations, tracking models, and software infrastructure for the company's drone tracking tower. Integrated various third-party RF Detection Sensors in order to improve the algorithm's confidence. Written in C++, Golang, and NixOS. Deployed both domestically and internationally.
- Created an EKF-based general purpose model for fusing high-confidence measurements (ADSB, AIS, GPS) into the system's global tracker. Prototyped in Matlab and written in C++.

UC San Francisco *Research Engineer*
San Francisco, CA August 2017 – November 2018
- Created an infrastructure pipeline in order to identify features to compute visual and text based features of MRIs using Python.
- Created a SVM-based classification model to differentiate between MRI DICOM image types and refined a CNN-based model for the same purpose. Recorded accurate classification rate of >90%, while reducing false-positive rate by 30% by fusing aforementioned text-based features. Used Python in conjunction with ScikitLearn and PyTorch frameworks.

Palantir Technologies *Forward Deployed Engineering Intern*
New York, NY May 2017 – August 2017
- Worked on comprehensive spreadsheet, including integration with internal tooling for code management, geographic data feature encoding frameworks, proprietary cloud services and database tools, and more.
- Won Palantir Hack Week for an NLP slang and synonym detection project, which also integrated the aforementioned spreadsheet project that I was involved with.

Tesla Motors *Engineering Intern*
Palo Alto, CA January 2016 – May 2016
- Focused on testing and verifying different properties of various parts of the Model 3 Powerboard.
- Created a web application using Django to keep track of and simulate car part lifetimes, which also served as a Parts Management tool internally.

Projects

Mediate (2019)
Worked in a four person team for YCombinator Hacks in order to build a pair of glasses for recording, searching, and querying conversations. Used an Arduino Feather, Bluetooth Module, Google Cloud Speech, and MongoDB.

Brainwalk (2018)
Worked in a four person team on a neurodegenerative disease diagnostics project in conjunction with the UCSF Bove Lab and the Fung Fellowship. Created infrastructure in Python (Scikitlearn and SciPy) to connect the three portions of the project: Eye tracking data, sound-based signal processing, and gait data.

Education

UC Berkeley May 2018
M.S. EECS GPA: 3.9
Teaching: Designing Information Devices and Systems II (Circuits, Controls, and Signal Processing)
Thesis: EV Infrastructure Planning and Grid Impact Assessment: A Case for Mexico

UC Berkeley May 2017
B.S. EECS GPA: 3.6
Organizations: ASUC Student Government (CTO), Robotics at Berkeley (Co-Founder, Vice President), Hackers at Berkeley (Director), Kairos Society
Awards: Cal Alumni Association Leadership Award, Oski Student Leadership Award, Fung Fellowship for Wellness and Technology