Ryan Liu

Pleasanton, CA| rliu4439@berkeley.edu|(925)-399-8248

Skills

Proficient in Python, Java, Spark. Familiar with Go, C, SQL, Docker, Linux, Git, Tensorflow, AWS

Education

University of California, Berkeley Expected Dec. 2019

Electrical Engineering and Computer Science BS ***Minor:*** *Data Science*

GPA: *3.85/4.0 | HKN (EECS Honor Society) Member | IEEE Member*

Coursework: *Corporate Finance, Investments, Machine Learning, Operating Systems, Computer Architecture, Databases, Deep Learning, Algorithms, Computer Security, Data Structures, Artificial Intelligence, Data Science*

Experience

Databricks - Data Science Intern Jan. 2019-Aug. 2019

- *Designed a LSTM-based churn prediction system with automated alerting for 100s of accounts, potentially increasing net revenue retention by 3-5%*
- *Partnered with marketing to analyze the impact of customer training on product usage*

Kaiser Permanente - Software Engineering Intern June 2018-Dec. 2018

- *Designed and implemented a scalable NLP and analytics API utilizing distributed systems using Spark in an Agile environment*
- *Partnered with Data and Infrastructure Teams to develop a document search engine and data pipeline with a 50-80x speedup over initial implementation*
- *Designed a patentable phone auto-authentication system potentially boosting profit by 50-60K per year*
- *Presented analysis and solutions to CTO/CDO and Infrastructure team*

Infinera - Software Engineering Intern June 2017-Aug. 2017

- *Created a real time web dashboard for interactive data visualization and switch configuration with Javascript and Python using network data from several RESTful switches*
- *Built an LSTM in TensorFlow to predict bandwidth requirements for equipment purchase recommendations*

Infinera - Firmware Engineering Intern June 2016-Aug. 2016

- *Developed a Linux CLI utility in C to retrieve and parse ASIC/FPGA parameters locally and from a server in a production environment*
- *Collaborated with firmware team to automate testing and script creation*

Projects

Exercise Pose Detector – Python, PyTorch, Docker

- *Developed a CNN model in PyTorch to determine exercise based on pose with 93% accuracy*
- *Deployed a REST API endpoint and website for predictions using Docker and Flask*

Secure File Store – Go, Computer Security

- *Built a high-performance, cryptographically secure cloud storage system in Go with sharing and access controls, meeting confidentiality and integrity requirements*

Weather Wear – Java, Android

- *Developed an Android App combining data from OpenWeatherMap API calls, past outfits and user feedback to provide personalized clothing suggestions*
- *Utilized the GCP Vision API to detect articles of clothing to determine outfit*

Honors

Eta Kappa Nu (HKN) Honor Society Member (Top ¼ of EECS Juniors)