Ryan Liu

rl6529@outlook.com | rliu4439.github.io

Skills

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

Experience

Veeva Systems – Software Engineer   Mar. 2021-Present

- *Led a team of junior engineers and architected a google drive integration supporting OAuth2 authentication to successfully support secure file transfer between Google Drive and Veeva, with 100s of users*
- *Enhanced usability of the document ingestion page and collaborated with the ML team to support using machine learning to categorize documents in real time, decreasing time to classify documents by 40+% versus manual classification*

Veeva Systems – Associate Software Engineer   Feb. 2019-Mar. 2021

- *Refactored bulk document creation and deletion, reducing runtime by 50% by optimizing database queries and decreasing unnecessary requests, leading to fewer support tickets*

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

- *Designed a LSTM-based churn prediction system using Keras, 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 and Python in an Agile environment*
- *Partnered with Data Science Team to develop a prescription anomaly detection system and data pipeline to process 500+ GBs of data with an 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*

Education

University of California, Berkeley   Dec. 2019

Electrical Engineering and Computer Science BS

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

Coursework: *Operating Systems, Databases, Computer Architecture, Algorithms, Computer Security, Data Structures, Artificial Intelligence, Data Science, Probability Theory, Corporate Finance, Machine Learning, Deep Learning, Designing Info Devices and Systems, Robotics*

Projects

Pintos OS Extension – C, OS

- *Extended an OS in C, designed and implemented thread scheduling, running user programs, a filesystem buffer cache and extensible file system with test-driven development in a team of 4*

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 AWS Sagemaker and Flask*

Lunar Lander Reinforcement Learning Agent – Python, Keras

- *Developed a reinforcement learning agent to solve the lunar lander OpenAI environment using Deep Q Learning with memory replay to successfully land the lander in at a specific location*