Anson Hu

ansonhu@mit.edu | 925-487-9625 | farmersrice.me

Experience

Jane Street
June - August 2022 | New York City
Software Engineering Intern

- Enhanced a trading-order-handling system by adding message recovery and rebuilding associated data structures on crash and restart
- Massively refactored a system to convert prices of stocks and their fungible ADRs to a common denominator and improved accessibility by adding RPC and python integrations

Facebook
June - August 2021 | Menlo Park
Software Engineering Intern

- Upgraded logging mechanism of the cluster management system to use databases for easier debugging
- Created a developer tool to visualize method call trees offline based on historical data, greatly improving debuggability and productivity

Okta
January - February 2021 | San Francisco
Software Engineering Intern

- Leveraged Envoy Proxy to route requests to an authentication microservice, reducing server load and making the system more modular

Salesforce
June - August 2019, 2020 | San Francisco
Data Science Intern

- Used deep learning to predict future revenue for individual customers
- Encoded time series data using a custom autoencoder to facilitate visualization and classification on the latent space
- Created pipelines and models to cluster and classify customers and predict win rates of business deals
- Built new model to predict trial customer conversion with 90% accuracy

University of Iowa, Hydroinformatics Lab
June - July 2018 | Iowa City, Iowa
Researcher

- Used Height Above the Nearest Drainage algorithm to help determine extent of flood inundation under guidance of Dr. Ibrahim Demir
- Decreased computation time by ~90% compared to previous models
- Published paper in *Hydrology* as first author in 2021

Projects

SaltZero 2020
Created an incredibly strong machine learning bot for Ultimate Tic-Tac-Toe based on DeepMind's AlphaGo Zero paper and inspired by similar open source projects. (Ultimate Tic-Tac-Toe is a complicated variant of tic-tac-toe played on a 9 by 9 grid.) Surpassed human play in 24 hours of training on consumer-grade hardware. Completely open source; code is at https://github.com/farmersrice/saltzero.

Education

Massachusetts Institute of Technology, 2023
BS, Computer Science, GPA 4.6

Relevant coursework:

- Adv. algorithms (grad level)
- Adv. data structures (grad)
- Applied cryptography (grad)
- NLP (grad)
- Distributed algorithms (grad)
- Machine learning
- Probability

Skills

Strong knowledge of algorithms and data structures

Languages
Java, C++, Python, OCaml, JS

Machine learning
PyTorch, TensorFlow, Keras, scikit-learn

Web technologies
Scrapy, Selenium, WebAssembly

Other
Git/Bitbucket, Amazon AWS

Awards and contests

Master on Codeforces (2110 elo, top 1.8% of all contestants)

Top 500 in Facebook Hacker Cup (2019, 2020, 2022)

USA Computing Olympiad Problem Author (2018)

USA Computing Olympiad National Finalist (2016)

Links

github/farmersrice
codeforces/farmersrice
linkedin
farmersrice.me