Raymond Yoo

Amazon Software Engineer II — Rutgers University B.S. CS Honors Track

Personal Site + Portfolio: raymondyoo.com

About Me

Technical Skills: Spring, Spark, SQL, Big Data Pipelines, ML Ops, AWS SageMaker, ECS, lambda, EMR
Web & Mobile: HTML/CSS/vanilla Javascript, NodeJS, ReactJs
Languages: Python, Java, Javascript, Haskell, C, Swift
Interests: Music, AI, Math, Mental Health, Philosophy, Reading Classics

Work Experience

Amazon   NYC (Current)
- Software Engineer II
  - Developing big data pipelines for ML recommendation services running spark on EMR.
  - Productionizing ML ETLs that applied scientists on the team create using spark SQL, EMR, Redshift, lambda, CDK, and SageMaker.
  - Working on a 100+ API service with a ReactJS frontend that saves account managers thousands of hours a year in creating managed service advertising campaigns.

Amazon   NYC (Mar 2022 - Dec 2023)
- Software Engineer I
  - full stack web dev: React, Redux, SQL + NoSQL, AWS, Redshift, EMR, data pipelines, Java backend
  - CI/CD using internal tools, git, REST, Agile

Amazon   NYC (Summer 2021)
- Software Engineer Intern

Adventure Co.   Remote (Summer 2020)
- AI/Web Intern
  - Analyzed audio data both traditionally and after converting audio data into spikes (event-based data) for the use of spiking neural networks for classification
  - Collaborated in developing a webpage game using React, based on music and emojis

Rutgers University (Computational Brain Lab + Machine Learning Lab)
Advisor: Konstantinos Michmizos and Sungjin Ahn   Piscataway, NJ (Jan 2020-Dec 2020)
- Undergraduate Research Assistant - ML, Deep Learning, Robotics, Deep Reinforcement Learning (DRL)
  - Developed several state of the art DRL algorithms with spiking actor networks using PyTorch
  - Wrote baselines for measuring the performance of neuromorphic versions of DRL algorithms
  - Worked on debugging deep learning models in PyTorch in a linux environment
  - Accepted publication at CoRL20 + TMLR22 (see below for link to published paper).

Personal Projects and Hackathons

Algorithmic Trading App
- Wrote a bot to trade stocks in Robinhood using the "Golden Cross" method
- Implemented the GUI using the PyQt5 library in Python
- Fetched live data from the Robinhood API to trade

React Path Finding Visualization App
- Created a visualizer app using React for some standard path finding algorithms to help myself getcomfortable with the topics and to get comfortable with React
- https://optimistic-torvalds-3a6284.netlify.app/

One Shot Learning
- Wrote a housing price predictor using C and the one-shot learning algorithm

HackDSC
- Worked with my friend remotely to develop an iOS app that only shows good news to lift the spirits ofpeople who are going through a hard time during the pandemic
- I worked on the ML model for sentiment analysis using swift and CoreML and helped with UI code
- https://github.com/connorray/GoodNews

Check my personal website for more projects I've worked on!

Education and Honors

Rutgers University New Brunswick   New Brunswick, NJ (2018-Present)
- GPA: 3.73
- **Publications**: https://arxiv.org/pdf/2010.09635.pdf + https://openreview.net/pdf?id=ZPBJPGX3Bz
- **Nicholas V Novielli Memorial Award**, one of six seniors chosen for an award for excellence in researchin computer science at Rutgers.
- **SAS Excellence Academic Scholarship 2020-2021**, among few students at RU for academic excellence