
EXPERIENCE

Bridgewater Associates, Product Integration Engineer

Feb. 2019 - Oct. 2019

- **Technical Product Engineer** providing operational expertise for investment research platform utilized firmwide by investment analysts, engineers, and traders to shape and systematize the investment strategy of the hedge fund.
- Collaborated with product managers and key stakeholders to shape product design, improve user experience, optimize investment logic engineering workflows, and enhance usability of logic authoring domain-specific language.
- Spearheaded and oversaw reorganization of computing platform with over 200 AWS EC2 instances assigned to research teams for running computationally intensive financial simulations.
- Wrote Scala code to aid software development teams and created technical documentation with code examples in DSL for new features to improve user experience for investment researchers in implementing investment logic.
- Left voluntarily due to role not aligning with long term career goals. Non-compete agreement until May 2020.

GE Digital (GE Healthcare), Software Engineering Intern

May 2018 - Aug. 2018

- Backend Engineer within analytics unit of Remote Services Technology org which enables remote monitoring, accessing, and repairing of CT and MRI machines in use at hospitals & medical facilities.
- Delivered Java Spring Boot microservices used to query analytics data store and retrieve stored records for analysis.
- Implemented time-based execution mode for Analytics Execution Engine using Python & Docker to speed up multiple executions of the same analytics function by 78% which led to more rapid data analysis cycles .

In-Video Impressions, Software Engineering Intern

Aug. 2017 - Dec. 2017

- Built full stack web application for acquired advertising technology startup that targeted ads at individuals based on video viewing patterns leading to increased Click Through Rates by up to 5.1x and View Rates by 3.7x for clients.
- Demo of application led to acquisition of accumulated rights to videos with over 5 billion combined views and deals with clients including Duke Basketball, prominent wellness companies, a Fortune 15 tech company, and the largest yoga mat provider in the U.S.

Daylight Data Consulting, Software Development Intern

May 2017 - Aug. 2017

- Worked with several startups to create microservices in Go and mobile applications based on business needs.

Duke University - Fuqua School of Business, Teaching Assistant

July 2018 - Sept. 2018

- Teaching assistant for Data Infrastructure course with ~250 students using SQL, Python (pandas), and R for Business Analytics in the Master of Quantitative Management program.

PROJECTS

Robinhood CLI View: Command line tool built in Go to quickly view current positions, open & fulfilled trades.

Robinhood Trading Bot: Developed trading bot in Python that executes trades on Robinhood based on strategies backtested on Quantopian.

IOU Money Tracker: Web app using Ruby on Rails to accurately track lending and borrowing between friends.

HardSubOCR: Command line tool built in Python using Tesseract-OCR Engine and OpenCV to extract hardcoded subtitles from video files and output them in the SubRip subtitle file format.

Am I Open?: Web app using JavaScript to check your external IP address and detect open ports on your connection.

CloudRenter: Cloud hosting company selling managed Virtual Private Servers with flexible pricing options.

EDUCATION

Duke University

Aug. 2015 - Dec. 2018

B.S. in Computer Science, Minors in Finance & Decision Sciences

PROGRAMMING SKILLS

Languages: Java, Python, JavaScript (Node.js), Go

Databases: MySQL, PostgreSQL, MongoDB

Frameworks: Spring Boot, Django, Flask, Vue.js

Tools: AWS, Linux, Apache Kafka, Docker, Kubernetes