

Work Experience

Capital One, Software Engineer Intern, Cambridge, MA

Jun 2023 - Aug 2023

- Modeled credit card transactions as knowledge graphs and generated embeddings for graph analytics tasks
- Enabled automatic hyperparameter tuning on extrinsic metrics to optimize downstream machine learning models' performances

Amazon, Software Engineer Intern, New York City, NY

Aug 2022 - Dec 2022

- Developed a serverless big data ingestion system running daily on AWS with EventBridge, Lambda, S3, and Glue Spark jobs to process terabytes of customer search data
- Enabled more relevant landing pages and better shopping experience for customers across 20+ countries/marketplaces
- Implemented operational excellence through AWS CloudWatch alarms and dashboards, automated recovery mechanism for Glue jobs, and runbook documentations for on-call

Capital One, Software Engineer Intern, McLean, VA

Jun 2022 - Aug 2022

- Developed a self-service application to automate clients' tokenization workflows for sensitive data; reduced the amount of on-call incidents by half
- Implemented backend REST APIs in Python that query a MySQL database and send notification emails
- Streamlined software development across teams; wrote extensive documentations, brainstormed ideas, gathered feedback, and presented weekly demos

Bayer, Software Developer Co-op, West Sacramento, CA (Remote)

Jun 2021 - Dec 2021

- Developed a web application for data analytics and visualization of bioassay data; automated the workflow of crop scientists and researchers
- Implemented CI/CD using GitHub, Docker, AWS CodeBuild, and AWS Fargate with Load Balancers
- Wrote Python ETL scripts to update millions of rows of taxonomy data on Amazon RDS for PostgreSQL

Khoury College of Computer Sciences, Teaching Assistant, Boston, MA

Jan 2021 - May 2021

- Held weekly office hours for CS 2810, which covered Python, linear algebra, machine learning, and statistics; assessed 300+ students and provided feedback on weekly assignments and exams
- Collaborated with Professor Kevin Gold and other TAs; responded daily to Piazza questions

Education

Northeastern University, Boston, MA

Sep 2019 - May 2023

- **Bachelor of Science in Computer Science**, 3.6/4.0, Dean's Scholarship, Dean's List, QuestBridge Finalist

Skills

Languages: Python, Java, SQL, JavaScript, TypeScript, HTML, CSS

Technologies: Git, Linux, Amazon Web Services (AWS), Spark, Flask, Plotly Dash, Lit, React, Docker

Projects

Discord Bots (Personal) - Python, TypeScript, SQLite

- Built various bots to help manage Discord communities (100,000+ members). Bots are hosted 24/7 to monitor text channels and automatically respond to messages or commands.

DetectiveASL (Group) - OpenCV, Keras, Scikit-learn, Pandas, Matplotlib

- Classified images of American Sign Language utilizing Convolutional Neural Network, Random Forest, and Adaboost. Designed CNN with max pooling and a DropOut layer to achieve 0.99 F1-score.