EDUCATION

Carnegie Mellon University Silicon Valley

M.S. in Software Engineering Aug. 2023 - Current Mountain View, CA

Texas A&M University

B.S. in Computer Science Minor in Economics Aug. 2020 - May 2023 College Station, TX GPA: 4.0/4.0

COURSEWORK

Graduate

Machine Learning Cloud Computing Software Engineering

Undergraduate

Data Structures & Algorithms
Competitive Programming (TA)
Artificial Intelligence
Networking
Database Systems
Computer Systems
Blockchains
Linear Algebra
Probability & Statistics
Multivariable Calculus
Financial Economics

SKILLS

Languages

Python, C++, Java, JavaScript, Solidity, Haskell, Scala, SQL, LaTeX

Full-stack

Mongo/Express/React/Node, Flask, Postgres, RDS

Data/ML

Spark, ETL, Numpy, Pandas, PyTorch, Scikit-learn

Cloud/DevOps

AWS/GCP/Azure, Docker, Kubernetes, Kafka, Linux, CI/CD, Terraform

Soft Skills

Bilingual Communication (English, Chinese), problem-solving

EXPERIENCE

Capital One | Software Engineer Intern June 2023 - Aug. 2023 | San Francisco, CA

- Implemented REST API endpoints for a system designed to uniquely identify web devices, prioritizing user privacy by eliminating reliance on device fingerprinting (Java Spring Boot, Docker)
- Created automated tests; built Jenkins jobs to create AWS infra and deploy service in a coded manner (YAML, ECS, EC2, ALB)

BRL-CAD | Software Developer

Feb. 2023 - May 2023 | College Station, TX

- Developed an automation tool for generating one-page reports from CAD files, saving "hours" of time for developers to share model data. Contributed to the open source BRL-CAD ecosystem (C++)
- Won 3rd/52 teams and \$500 at the TAMU CS Dept. Capstone Expo

Texas A&M Competitive Programming | Teaching Assistant Jan. 2023 - May 2023 | College Station, TX

- Supported 90+ students as a TA for a competitive programming class
- Held weekly office hours, debugging sessions (Python, C++), and led discussions; received all positive feedback from student evaluations

Capital One | Software Engineer Intern June 2022 - Aug. 2022 | Plano, TX

- Developed machine learning algorithms such as decision trees to identify hot leads out of 150K+ leads generated monthly (Python). Tuned model with cross validation, with 80% final accuracy
- Architected serverless backend and created REST API endpoints (AWS Lambda, SQL, Flask, Pandas, Jenkins)

SIDE PROJECTS

Twitter Analytics Web Service

Sept. 2023 - Dec. 2023

- Built high-performant and reliable web services on AWS, which included serving complex CRUD queries and analyzing a large Twitter dataset (Java, Kubernetes, Docker, ECS, EKS)
- Architected and executed an ETL pipeline on 1TB raw Twitter dataset from S3 to structured MySQL (Scala, Spark, and Azure Databricks)
- Optimized service throughput up to 112,000+ RPS by comparing web frameworks, load balancers, and scaling up worker nodes

NFT Sports Pass

Jan. 2023 - April 2023

- Collaborated with 5 developers to design and build an ERC-4907 NFT implementation of Texas A&M's sports pass
- Spearheaded the creation of an NFT marketplace smart contract for sports pass trading and renting between students (Solidity, Hardhat)
- Presented the proof-of-concept at Texas A&M Blockchain day to **50+** students and staffs with positive feedback