
Education

New York University

Bachelors of Science in Computer Science

Sep 2020 — May 2023

Brooklyn, NY

Experience

AWS Bedrock

 Software Development Engineer

Seattle, WA 12/2023 — *Present*

Bedrock: Creating Generative AI infrastructure for AWS Bedrock. Part of the core team and launched/maintained key features like batch inference, model distillation, and provisioned throughput with AWS-Wide and ReInvent visibility.

Amazon Last Mile

 Software Development Engineering Intern

Seattle, WA 05/2022 — 08/2022

Data Aggregation Service: Created a full stack service to visualize last mile delivery data. Created a Typescript React frontend with Polaris styling that calls an AWS backend implemented with Java Lambda Functions, API Gateway, S3, and Internal Amazon Services. Used S3 Select and Spark to filter through about 1TB per query.

Hewlett Packard Enterprise (Aruba Networks)

 Cloud Intern

Santa Clara, CA 06/2019 — 08/2019

Estimating Bandwidth: Estimated bandwidth using Auto ARIMA/Prophet and other time series algorithms.

NYU High Speed Research Network (HSRN)

 Academic Researcher

Brooklyn, NY 02/2021 — 05/2023

Parallel File System: Deployed an NSF funded 6PB storage PFS (SeaweedFS) for usage internally and externally to the HSRN. Automated Deployment with Ansible Playbooks and Rust CLI. Benchmarked with Bonie++ and IOR.

Audio Conferencing: Created an audio service (Portaudio) in C++ that interfaces with internal broker service.

CI/CD: Developed documentation, linting, testing, deployment (DinD with Kaniko) pipelines for the project in Gitlab

Mentorship: Leader of the student research arm. Managed and onboarded over 110 students over 4 semesters

Sparkup

 Software Development Engineering Intern

Brooklyn, NY 09/2022 — 12/2022

UX Development: Implemented a new feature in React Native App to link names and phone numbers in transactions

Dark Forest

 Graphics Intern

San Jose, CA 12/2021 — 02/2022

Shader Development: Created a typescript plugin that allows for custom WebGL shaders in the Dark Forest game.

Projects

Tweet Toxicity: Used DistilBERT, Pytorch, HuggingFace Transformers, Streamlit and AdamW to classify toxicity type

Wikipedia Editor: Used Spark, LDA, Cohere, NYU HPC/ SLURM for variance in editor topics with 6TB of dumps

Sembox: A drive with semantic searching over documents with blip, xsum, whisper, bert, mui/nextjs, by taking the cosine similarity of summaries/search terms. Supports images, text, video, audio through intelligent document type recognition

Synesthesia Visualizer: Auditory Visual Synthesis Visualizer with librosa, yin, eks, flask, docker, blender, WebVR

Book Recommendation Engine: Wrote a recommendation engine to group books based on wikipedia page similarity.

K3S Cluster: Created a portable resilient fault-tolerant k3s cluster that networks through a wireguard mesh (headscale)

College Rank: Extensible meta-ranking from conference proceedings/best papers, placement rank, paper age, interests

Programming Skills

Langs: Typescript, Javascript, Node, C++, C, Rust, Java, Python, (e)Lisp, Bash/Zsh, Cuda, Kotlin, Perl, Lua, L^AT_EX

Tech: AWS, Linux, Emacs, QT, Docker, k8s/k3s Rancher, Nginx, Traefik, ReactJS, Tailscale, MongoDB, Postgres, ...

Certifications

AWS Solutions Architect

September 2021

AWS Cloud Practitioner

August 2021

Stanford Machine Learning by Andrew Ng

July 2020

AWS Fundamentals Specialization

June 2020