
Education

New York University*Bachelors of Science in Computer Science*

Brooklyn, NY

Exp. May. 2023

Experience

Amazon*Software Development Engineering Intern*

Seattle, WA

May 2022 – August 2022

Data Aggregation Service: Created a full stack service to visualize last mile delivery data. Created a Typescript React frontend that calls an AWS API Gateway based backend implemented with Java Lambda Functions, API Gateway, S3, and Internal Amazon Services. Service sifts/caches through up to a TB of data per query with S3 Select.

Deployment/Observability Pipeline: The service is built with the AWS Typescript CDK. It is validated with unit and integration testing before being deployed through CodeDeploy and monitored with CloudWatch alarms and SNS.

NYU Holodeck (Corelink)*Academic Researcher*

Brooklyn, NY

February 2021 – Present

Framework Design: Designed a framework for developers to integrate their service with the Corelink network

Client Development: Developed and unified Corelink clients (Python, C++, Bash, Browser, and others)

CI/CD: Developed documentation, testing, and linting pipelines for the project in Gitlab

Mentorship: Onboarded and managed 20+ members at Corelink. Created informational documentation and tutorials

Audio Video Conferencing: Created an audio/video service in C++ that interfaces with the Corelink network

Sparkup*Software Development Intern*

Brooklyn, NY

September 2022 – December 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

December 2021 – February 2022

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

Hewlett Packard Enterprise (Aruba Networks)*Cloud Intern*

Santa Clara, CA

June 2019 – August 2019

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

Projects

Synesthesia Visualizer: Create a visualizer that mimics the experience of Auditory Visual Synthesis with librosa and yin. Utilizes AWS infrastructure (autoscaling ec2 cluster) for compute and WebGL for VR.

Delivery Service: Created a web crawling service to notify available delivery slots for Whole Foods, Costco, or Safeway. Used AWS SNS, ECS, and Lambda functions. Created headless Chrome docker containers running Selenium.

Git OpenResty: Created a container that utilized Lua JIT with NGINX to sync git repos as an alternative to git-sync

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

Personal Website: Created a website that does real time client-side 3d rendering, as well as self-deployed services. Deployed on k3s with full CI/CD using git-sync.

IP Monitor: Used the QT Framework and built a KDE widget to monitor public and private IP Addresses.

Electronic Trombone: Engineer a trombone midi controller using Arduino with capacitive sensing and pid controllers.

Programming Skills

Langs: Typescript, Javascript, Node, C++, C, Rust, Java, Python, (e)Lisp, Bash/Zsh, MDown, JSON, YAML, L^AT_EX

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

Certifications

AWS Solutions Architect

September 2021

AWS Cloud Practitioner

August 2021

Stanford Machine Learning by Andrew Ng

July 2020

AWS Fundamentals Specialization

June 2020