

EDUCATION

New York University

Bachelors of Science in Computer Science

Brooklyn, NY

Exp. May. 2023

Basis Independent Silicon Valley

High School Diploma

San Jose, CA

Jul. 2020

EXPERIENCE

Amazon

Seattle, WA

Software Development Engineering Intern

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 through up to a Terabyte of data per query.

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)

Brooklyn, NY

Academic Researcher

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

Dark Forest

San Jose, CA

Graphics Intern

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)

Santa Clara, CA

Cloud Intern

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 pure serverless aws infrastructure (autoscaling ec2 cluster) and WebGL for Virtual Reality.

Delivery Service: Created a web crawling service to send a notification when there is a delivery slot available for Whole Foods, Costco, or Safeway. Used AWS SNS, serverless infrastructure with ECS and Lambda Functions, and selenium with headless chrome instances in docker containers.

Personal Website: Created a website that does real time 3D rendering in pure client side javascript with reactive interactive elements. Deployed with AWS CodeDeploy, API Gateway, CloudFront, IoT, S3, DynamoDB, and SNS.

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

Electronic Trombone: Engineer a midi controller in the form of a trombone using Arduino to apply standard instrument knowledge to electronic applications with capacitive sensing and pid controllers.

PROGRAMMING SKILLS

Languages: Python, Javascript/Node, C++, C, Rust, Java, (e)Lisp, HTML/CSS, Solidity, Shell Scripting, L^AT_EX

Technologies: AWS, Linux, Emacs, Docker/Kubernetes, ReactJS, Jupyter Notebooks, NGINX, ...

CERTIFICATIONS

AWS Solutions Architect

September 2021

AWS Cloud Practitioner

August 2021

Stanford Machine Learning by Andrew Ng

July 2020

AWS Fundamentals Specialization

June 2020