

## EDUCATION

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### 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

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### 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. The CloudFormation service is validated with unit and integration testing before being deployed through CodeDeploy.

### NYU Holodeck (Corelink)

Brooklyn, NY

*Academic Researcher*

*February 2021 – Present*

**Framework Design:** Designed a framework for application 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

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**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

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**Languages:** Python, Javascript/Node, C++, C, Rust, Java, (e)Lisp, HTML/CSS, Solidity, Shell Scripting, L<sup>A</sup>T<sub>E</sub>X

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

## CERTIFICATIONS

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AWS Solutions Architect

*September 2021*

AWS Cloud Practitioner

*August 2021*

Stanford Machine Learning by Andrew Ng

*July 2020*

AWS Fundamentals Specialization

*June 2020*