

# Sachin Iyer

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<https://sachiniyer.com>  
<https://github.com/sachiniyer>

## 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/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)

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

### Sparkup

Brooklyn, NY

*Software Development Intern*

*September 2022 – December 2022*

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

### 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 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.

**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 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<sup>A</sup>T<sub>E</sub>X

**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*