# Sachin Iyer

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https://sachiniyer.com https://github.com/sachiniyer

#### EDUCATION

New York University

Brooklyn, NY

Bachelors of Science in Computer Science - Final Year

Aug. 2021 – Present

Basis Independent Silicon Valley

San Jose, CA

High School Diploma

Aug. 2016 - Jul. 2020

## EXPERIENCE

### NYU Holodeck (Corelink)

Brooklyn, NY

Academic Researcher

February 2021 - Present

Framework Design: Helped design a major portion of the project - plugin interaction within the 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+ people to the service. Created informational documentation and tutorials.

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

**Amazon**Software Development Engineering Intern

Seattle, WA

May 2022 - August 2022

**Data Aggregation Service**: Created a project to visualize data within team's service. Created an API with AWS CDK, lambda functions, API Gateway, and internal Amazon Services, and React frontend.

Dark Forest San Jose, CA

Graphics Intern

December 2021 - February 2022

Shader Development: Implemented a plugin that allows for custom shaders throughout 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.

Unit Testing: Acted as QA tester for team, increasing test coverage throughout the service

#### Projects

Synesthesia Visualizer: Create a visualizer that mimics the experience of Auditory Visual Synthesis, with audio analysis libraries (e.g. librosa) and through the use of pitch recognition algorithms (e.g. Yin) and frequency spectral analysis. Utilizes pure serverless awas 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 interactable elements in a fun and playful environment. Also purely serverless and scalable with API Gateway and other interactions with fun lambda functions and other AWS elements.

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, IATEX

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

#### CERTIFICATIONS

AWS Solutions Architect
AWS Cloud Practitioner
Stanford Machine Learning by Andrew Ng

**AWS** Fundamentals Specialization

 $September\ 2021$ 

August 2021

July 2020

June 2020