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 — *Exp. May. 2023*

Basis Independent Silicon Valley — San Jose, CA

High School Diploma — *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, LaTeX

Tech: AWS, Linux, Emacs, 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*