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 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. 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

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 interactable elements in a fun and playful environment. 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, LATEX

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

CERTIFICATIONS

AWS Solutions Architect

AWS Cloud Practitioner

September 2021

August 2021

Stanford Machine Learning by Andrew Ng

AWS Fundamentals Specialization

June 2020