Sachin Iyer

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https://github.com/sachiniyer

Education

New York University Sep 2020 — May 2023

Bachelors of Science in Computer Science *Brooklyn, NY*

Experience

AWS Bedrock Software Development Engineer *Seattle, WA 12/2023 — Present*

Bedrock: Creating Generative AI infrastructure for AWS Bedrock. Part of the core team and launched/maintained key features like batch inference, model distillation, and provisioned throughput with AWS-Wide and ReInvent visibility.

Amazon Last Mile Software Development Engineering Intern *Seattle, WA 05/2022 — 08/2022*

Data Aggregation Service: Created a full stack service to visualize last mile delivery data. Created a Typescript React frontend with Polaris styling that calls an AWS backend implemented with Java Lambda Functions, API Gateway, S3, and Internal Amazon Services. Used S3 Select and Spark to filter through about 1TB per query.

Sparkup Software Development Engineering Intern *Brooklyn, NY 09/2022 — 12/2022*

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

Dark Forest Graphics Intern *San Jose, CA 12/2021 — 02/2022*

Shader Development: Created a typescript plugin that allows for custom WebGL shaders in the Dark Forest game.

NYU High Speed Research Network (HSRN) Academic Researcher *Brooklyn, NY 02/2021 — 05/2023*

Parallel File System: Deployed an NSF funded 6PB storage PFS (SeaweedFS) for usage internally and externally to the HSRN. Automated Deployment with Ansible Playbooks and Rust CLI. Benchmarked with Bonie++ and IOR.

Audio Conferencing: Created an audio service (Portaudio) in C++ that interfaces with internal broker service.

CI/CD: Developed documentation, linting, testing, deployment (DinD with Kaniko) pipelines for the project in Gitlab

Mentorship: Leader of the student research arm. Managed and onboarded over 110 students over 4 semesters

Hewlett Packard Enterprise (Aruba Networks) Cloud Intern *Santa Clara, CA 06/2019 — 08/2019*

Estimating Bandwidth: Estimated bandwidth using Auto ARIMA/Prophet and other time series algorithms.

Projects

Personal Website: Self-deployed a BabylonJS website with kubernetes k3s and full CI/CD using Custom Git Sync

CTF: Built CTF with Docker Compose, Dnsmasq, Postgres, Node MQTT server, Rust/Tide HTTP server and XtermJS

Apps Status: Built an API with Rust, Tokio Async, Axum, and Reqwest that proxies status for my self-hosted apps through a Rust Lambda function with a custom Megalodon-rs that pushes outage statuses to Mastodon every 5 min

Control Display: Created a mass controllable (over 50 simultaneous people) LED matrix. Host built with arduino metro and platformio, USB Serial Buses for communication, and React, Docker, and Material UI for site

Delivery Service: Created a web crawling service to notify available grocery delivery slots for Whole Foods, Costco, or Safeway. Used AWS SNS, ECS, and Lambda functions. Created headless Chrome docker containers running Selenium.

Synesthesia Visualizer: Auditory Visual Synthesis Visualizer with librosa, yin, eks, flask, docker, blender, WebVR

Programming Skills

Langs: Typescript, Javascript, Node, C++, C, Rust, Java, Python, (e)Lisp, Bash/Zsh, Cuda, Kotlin, Perl, Lua, LaTeX

Tech: AWS, Linux, Emacs, QT, Docker, k8s/k3s Rancher, Nginx, Traefik, ReactJS, Tailscale, MongoDB, Postgres, ...

Certifications

AWS Solutions Architect *September 2021*

AWS Cloud Practitioner *August 2021*

Stanford Machine Learning by Andrew Ng *July 2020*

AWS Fundamentals Specialization *June 2020*