Saim Ahmad

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EDUCATION

University of California, Los Angeles

Los Angeles, California

B.S In Computer Science

Sep. 2020 – Present

• Relevant Coursework: Data Structures, Algorithms and Complexity, Software Construction, Operating Systems, Computer System Architecture, Computer Networking

Experience

DIRECTV

June 2022 – September 2022

Backend Engineering Intern

Remote

- Redesigning an antiquated location microservice that serves locational data mappings used by the stream authentication pipeline
- Ensuring that the service correctly handles all use cases in its millions of daily transactions through extensive unit tests and functional tests
- Reduced the code footprint and provided documentation, offering better code maintainability in the future
- Optimized processing speed by identifying and parallelizing multiple portions of the service

enabling scientists to efficiently verify, generate, and model multiple satellites' attitude data.

• Working with Golang, Kafka, Couchbase, Kubernetes, Jenkins

ELFIN CubeSat

October 2021 – Present

Software Developer Los Angeles, California

- Architected an end-to-end React web application that shifts the ADCS pipeline away from a CLI into a GUI,
- Designed and implemented a dashboard to visualize telemetry data to assist with mission operations and verify generated maneuver data for the NASA funded mission
- Wrote REST endpoints in FastAPI to communicate with the team's MySQL and PostgreSQL databases.
- Helped operate two in orbit CubeSats to efficiently collect scientific data and ensure satellite health

Bruinwalk August 2021 – Present

Software Developer

Los Angeles, CA

- Deployed code to UCLA's premier class review website utilized by 50,000+ students annually
- Contributed to redesigning the entire website written with Django, HTML, CSS, and JavaScript
- Incorporated React into the codebase, increasing customizability of components and allowing developers to integrate unique components

Projects

Sorting Algorithm Visualizer

Website | Github

- Customized an application to visualize common sorting algorithms such as merge sort, quick sort, radix sort, and
- Adjustable sorting speed and array size which dynamically changes height to fit within a user's screen
- Built with React and styled-components

ZasBot Github

- Synthesized a discord bot that scrapes player statistics for the games Valorant and Fortnite
- Stored user information to allow for easy access to data
- Designed with Node.js, Express, and Firestore

Awards

Participant

2021 SharkHacks3, 1st Place

Irvine, California

• Won a Hackathon with more than 250 participants and awarded best use of Google Cloud

August 2021

• Engineered with Node.js, React, Typescript, Apollo Client, PostgreSQL, GraphQL, JWT, Google Cloud

TECHNICAL SKILLS

Languages: C/C++, Java, JavaScript, iQuery, Typescript, Python, Golang, Node.js, Express, React, Verilog

Tools/Technologies: Django, SQL, PostgreSQL, Kafka, MongoDB, CouchBase, Firebase

Developer Tools: Git, Docker, Kubernetes, Google Cloud, Jenkins