Alan Chang

⊙ Irvine, CA   ☎ 510-299-6417
🌐 alanchang.xyz   in /in/acxyz/   ✉ alan@alanchang.xyz

🎓 Education

University of California, Irvine	**September 2020 - June 2024**
Bachelor of Science (B.S.) in Computer Science	Regents' Scholar & Dean's Honors List (Fall 2020 – Present) - GPA: 3.95

Relevant Coursework   Data Structures & Algorithms, Low-Level Computer Organization & Systems Design, Databases & Data Management, Software Testing, Machine Learning & Data Mining, Probabilistic & Deterministic Graphical Models, Human-Computer Interaction, Advanced Concepts in Programming Languages

{} Technical Skills

Languages   Python, JavaScript, Java, TypeScript, SQL, C, C++, Go, MIPS Assembly, Lisp, Prolog, HTML/CSS

Frameworks & Libraries   React, Express.js, Node.js, Redux, Flask, SK-learn, Numpy, Framer Motion, MySQL, PostgreSQL, MongoDB, Couchbase, Apache Spark, Neo4j, Cassandra

Other   Git, AWS (S3, RDS, EC2, Lambda, APIGateway, AppConfig, CloudFormation), Nginx, Bash, Linux

📂 Experience

Amazon	**June 2022 - September 2022**
Software Development Engineer Intern - Seattle, WA	Returning Summer 2023

Constructed a dynamic data schema with automatic multi-point validation and corresponding full-stack configuration system for customized data visualization as part of the AWS Cost Explorer team.
Technologies used: TypeScript, React, Python/Pytest, AWS (Lambda, API Gateway, AppConfig, CloudFormation, CloudWatch)

Commit the Change @ UCI	**June 2022 - June 2023**
Technical Director - Irvine, CA	

Planned and executed the construction of 5 pro bono, large-scale, and customized software projects for nonprofit organizations by UCI student developers during the 2022-23 school year, with expected outcomes of 1,000s in nonprofit labor hours and $10,000s+ in funds saved.

- Redesigned club website to integrate new design language and Framer Motion animations for a smoother desktop and mobile experience, generating 15,000+ page visits on Google Analytics since redesign as of August 2022 (+89% year-over-year increase).
- Facilitated implementation of new and existing tech stacks (React, Express, Nodejs, SQL, noSQL, & more) by technical leads and held projects accountable to 1-year delivery timelines through extensive trajectory & mitigation planning.
- Directed the migration of internal project deployments to public-facing cloud platforms (AWS, DigitalOcean, and others) as part of project handoff process to nonprofit partners.

📄 Projects

Hourglass	**March 2023**

React Native, Flask, CockroachDB, scikit-learn, Google Calendar/OAuth2

- Created a mobile application for scheduling user tasks within their desired time ranges, using a k-nearest neighbors algorithm to recognize scheduling preferences and recommend better schedules for users.
- Implemented the OAuth2 login flow and interfaced with the Google Calendar API for users to import events from their personal Google calendars and export scheduled tasks from the app back to Google Calendar.

Moodacado	**March 2021**

React, Express.js, scikit-learn, Flask, PostgreSQL

- Designed a Spotify mood tracking app at LA Hacks 2021, using recent listening activity fetched via Spotify authentication flow.
- Trained a machine learning model deployed in Flask to recognize mood descriptors of 2,000+ songs, in order to classify the emotions of users' recently played songs.
- Planned, led, and implemented frontend and backend for a friend system functionality allowing users to friend each other using Spotify IDs and see recently played songs and moods.