Skills

- Languages: Go, TypeScript/NodeJS/JavaScript, HTML, CSS, SQL, C++, C
- Frameworks/Tools: React, NextJS, gRPC, Protocol Buffers, Git, sqlite3, PostgreSQL, GitHub, Spanner
- Platforms/OS: Linux, Firebase, Digital Ocean, Render, PlanetScale, Vercel

Experience

Google, Software Engineer L4, San Francisco CA

Mar 2021 - Mar 2023

- Collaborated within a remote-first team to develop ludicium, a security monitoring and automation platform, contributing to enhanced oversight and detection of security threats.
- Designed and implemented an authorization model with Go and the Ganpati2 identity management system, ensuring fine grained authorization checks are applied to all requests to the Iudicium application.
- Architected and built a scalable data storage layer using SpannerDB, centralizing security assessment for Google's systems and providing security teams with the ability to query historical security data.
- Designed and implemented a data export pipeline using Spanner Push Queues and Go, allowing export of 100+ gigabyte data sets into text proto files for easy and cheap post analysis.
- Engineered a data analysis layer with <u>CEL</u>, streamlining the data shaping process during security assessment generation. This minimized the need for one-off post processing scripts.
- Acted as mentor and main point of contact to team interns and fostered a sense of inclusion by planning events for interns.

Lockheed Martin, Software Engineer, Orlando FL

Jan 2018 - Mar 2021

- Earned promotion from "Software Engineer Associate" to "Software Engineer", contributing to the development of IRST (<u>Infrared Search and Track</u>) systems.
- Developed and maintained a C library for audit logging, capturing hardware failures for diagnostics.
- Implemented an application boot framework in C/C++ to coordinate the secure and ordered launch of all software system components.
- Adapted existing <u>1553</u> messaging interfaces in C++ for integration with new aircraft models, facilitating the acquisition of a new IRST contract.
- Implemented command and response messages using a pub-sub framework in C++ to support pilot communication in F-18 and F-15 fighter jets.
- Collaborated with customers on-site, conducting integration tests and resolving issues to meet key contract deadlines.
- Lead the migration of all messaging systems from version 3 to 5 of a core internal SDK and performed verification testing on all software components.

Abacus Technology, Software Developer I, Kennedy Space Center

June 2017 - Jan 2018

- Transitioned to a full-time position after a successful internship.
- Developed 250+ mobile-friendly pages using Bootstrap, HTML, and CSS.
- Facilitated content updates by transferring data into Sitecore CMS for non-technical users.

Education

University of Central Florida

Orlando, FL