

EXPERIENCE

• Amazon

San Diego, CA

Software Development Engineer I

Jan. 2022 - Present

- Developed multiple web-apps from the ground up using the Spring Web MVC framework and React.js, including full integration and unit testing, CI/CD pipelines, and alarms/ticketing for site failures
- Owned and wrote several design documents for high-level and low-level technical implementations, which were implemented and promoted to production by others
- Led efforts to deprecate features, increasing team productivity and decreasing operational burden, as well as supporting external teams' migrations away from the deprecated features
- Mentored junior engineers and interns and helped them deliver projects to production on Amazon's site

• Hewlett-Packard Enterprise (Aruba Networks)

Roseville, CA

Systems/Software Engineer

Jun. 2021 - Jan. 2022

- Led a newly-created Proto Support team to automate and simplify the engineering process when working with in-office hardware remotely, supporting around 100 engineers
- Wrote tests and refactored code for a new daemon being produced the L1 embedded team
- Learned to debug issues by working closely with other teams and determining root causes using GDB and other debugging tools

Embedded Software Engineering Intern

Jun. 2020 - Dec. 2020

- Assisted in creation of new switch mode to allow for hub-like functionality by disabling all L2 and L3 protocols and working with other teams
- Wrote feature tests to automate testing of this new mode and ensure no regression occurs

Software Engineering Intern

Jun. 2019 - Aug. 2019

- Created an API for multiple daemons to access new column data produced by a migration effort which determined whether or not a port has routing enabled
- Refactored all references in source code to certain column data to use the newly written API

PROJECTS

• MPGameBoy

Written in C, closed-source on GitHub

Oct. 2022 - Present

- Implemented the Nintendo GameBoy's architecture in portable C code to load and read ROMs for the console
- Wrote CPU implementation, instruction handling, a debugger, and a tile-set viewer

• Minls and Minget

Written in C

Jun. 2021

- Created a filesystem reader for Minix, for use outside of the Minix operating system, in portable C code
- Supported functions to list out the contents of a directory and print the contents of a file

• Portable Weather Station

Written in C for the MSP432

May 2020

- Created libraries for four different weather sensors to easily interact with the MSP432 microprocessor
- Implemented these libraries to display all the data on an LCD screen

• The Otter XADC

Written in C and SystemVerilog

Mar. 2020

- Designed a microprocessor from scratch in SystemVerilog to run assembly and C code on
- Created a library to allow use of the given hardware's XADC chip with our microprocessor in C

EDUCATION

• California Polytechnic State University

Bachelor of Science in Computer Engineering; GPA: 3.53

San Luis Obispo, CA

Aug. 2017 - Jun. 2021

PROGRAMMING SKILLS

- **Languages:** C/C++, Java, JavaScript, TypeScript, Python • **Technologies:** Git, Unix, Vim, React.js, Spring