

## EXPERIENCE

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### • 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 by 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 switching and routing protocols
- 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

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### • 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

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### • California Polytechnic State University

*Bachelor of Science in Computer Engineering; GPA: 3.53*

San Luis Obispo, CA

*Aug. 2017 - Jun. 2021*

## PROGRAMMING SKILLS

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