Eric Spidle

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Skills

- C, C++, Java, Python, C#, Bash, Rust, Javascript, Git, ASP.NET MVC, Docker, React, APIs,
- Linux, Virtualization, Operating Systems

Professional Experience

Dornerworks Ltd. | Embedded Systems Engineer I

Nov 2023 - Present

- Ported a USB driver (XHCI) from U-Boot to the seL4 microkernel that increased capabilities and devices available in a virtualized environment
- Developed VirtIO ethernet drivers for seL4 platforms abstracting away underlying hardware for applications resulting in portable pieces of software across 15+ different hardware configurations
- Designed a 'lite' version of a virtual machine web app that used Rust for the backend and React for the frontend to support customer demos
- Wrote virtual UART driver in seL4 to make debugging interface consistent between devices for early virtualization debugging (awaiting approval to merge into open source seL4 project)

Dornerworks Ltd. | Embedded Engineer Co-op

May 2021 - Dec 2022

- Employed Gitlab API and python to create a hardware manager tool that allowed for team members to share hardware and test images from a server increasing productivity for remote workers
- Spearheaded effort to boot first ever seL4 virtualized guest on RISC-V hardware
- Awarded outstanding technical contribution bonus for the seL4 virtualized guest on RISC-V hardware
- Answered customer wants by developing an seL4 SD Card driver allowing for 32GBs+ of persistent storage in multiple virtual machines at the same time

Rocket Mortgage | Software Engineering Intern

May 2020 – Sep 2020

- Coordinated with business analysts to update models, views and controllers for changing business needs resulting in smooth communication between Rocket Mortgage and 30+ Appraisal Management Companies
- Created unit tests for updated web application code that led to 95% code coverage and enhanced the resilience of the application

Education

Grand Valley State University • B.S.E Computer Engineering

Sep 2018 - Aug 2023

GPA: 3.86 | Magna Cum Laude

Projects

RC Car App: Designed Android application with Bluetooth (BLE) connectivity that controlled our original embedded remote control car in an accelerated 6-week course (ESP32)

GV Napster: Created a peer to peer file transfer application using python and the Qt GUI library