MARY STRODL

Computer Scientist Seeking a Summer 2024 Co-op

@ mary@mstrodl.com
📞 (516) 654-5123
🔗 mstrodl.com
in in/mstrodl
○ mstrodl

PROJECTS

ColecoVision Emulator

○ **mstrodl/pen**

- Wrote a Z80 (ColecoVision CPU) emulator in TypeScript, from the documentation without external libraries
- Reverse-engineered video and sound processors
- Developed a deep understanding of the internal operations of a computer

Tools: *WebAssembly, TypeScript, JavaScript, Parcel Bundler*

Gatekeeper Access Control System

○ **mstrodl/gatekeeper-door**

- Gatekeeper is a door lock system to control access to Computer Science House special rooms
- Gatekeeper uses NFC (DESFire) tags to authenticate users
- Wrote both server and door code which pulled data from LDAP and communicated with doors over MQTT

Tools: *NodeJS, Rust, Embedded Systems, MQTT, Express, MongoDB, Kubernetes*

Elcord

○ **mstrodl/elcord**

- Emacs minor mode to display the current file in a Discord status
- Reverse engineered Discord's RPC protocol
- Over 7,500 downloads on MELPA

Tools: *Emacs Lisp*

EXPERIENCE

Bryx

Software Engineer (Part-time)

📅 August 2022 – Present   📍 Rochester, NY

- Maintaining a large React codebase with a Kotlin and Python backend
- Assisting with embedded software development

Tools: *React, Typescript, Python, Rust, Kotlin, C*

D3 Engineering

Engineering Intern

📅 May 2022 – August 2022   📍 Rochester, NY

- Developed camera drivers for Texas Instruments' RTOS Jacinto platform
- Maintained the Linux kernel and device tree for the Texas Instruments TDA4
- Improved custom build tooling, leading to a 10 minute reduction in build times

Tools: *Linux Kernel, C, RTOS, I2C*

Geisel Software

Software Engineer Intern

📅 November 2021 – May 2022   📍 Worcester, MA

- Worked on a large CodeIgniter and Nuxt Vue project
- Migrated internal projects from Vagrant to Docker
- Moved codebase to CodeIgniter Forge migrations

Tools: *Nuxt, Vue, PHP, CodeIgniter 4*

EDUCATION

Rochester Institute of Technology

Computer Science B.S.

📅 Expected Graduation May 2026

SKILLS

Languages

JavaScript · TypeScript · C · C++ · Rust · HTML/CSS · SCSS/SASS · Java · Python · Svelte

Tools

Express · Webpack · Parcel · React · NGINX · Linux · Git · GitHub · Bash · SQL · Kubernetes · Docker · MongoDB

ACTIVITIES

Computer Science House

Member

📅 May 2021 - Present

CSH is a student-run organisation at RIT providing a productive, inclusive, and educational community for everyone interested in Computer Science.

System Administrator

📅 September 2021 - Present

Managed and maintained house-provided computing resources for members, including a Kubernetes cluster, a student-run server room, and other member projects.

Drink Admin

📅 November 2021 - Present

Maintained and stocked CSH's internet-connected vending machines. Wrote embedded software for the machines, a touch screen interface, a CLI drink client, and an Android client.

Society of Software Engineers

Member

📅 August 2021 - Present

The Society of Software Engineers (SSE) is a student organisation at RIT composed of software engineers, computer scientists, and other students. The SSE provides mentoring and a community for students.

Amateur Radio Service

General Class

📅 September 2022 - Present

Licensed to operate in the Amateur Radio Service under the call sign KE2ABY.