

MARY STRODL

Computer Scientist Seeking a Summer 2023 Co-op

PROJECTS

ColecoVision Emulator

<https://github.com/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

<https://github.com/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

<https://github.com/mstrodl/elcord>

- Emacs minor mode to display the current file in a Discord status
- Reverse engineered Discord's RPC protocol
- Requires no native dependencies
- Nearly 6000 downloads on MELPA

Tools: Emacs Lisp

EXPERIENCE

Bryx

Software Engineer (Part-time)

 August 2022 – Present  Rochester, NY

- Maintained a large React codebase
- Assisted with embedded software development

D3 Engineering

Engineering Intern

 May 2022 – August 2022  Rochester, NY

- Developed camera drivers for Texas Instruments' RTOS Jacinto platform
- Maintained the Linux kernel for TDA4
- Improved custom build tooling

Geisel Software

Software Engineer Intern

 November 2021 – May 2022  Worcester, MA

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

Tools: Nuxt, Vue, PHP, Codelgniter 4

 github.com/mstrodl

 mary@mstrodl.com

 (516) 654-5123

 mstrodl.com

 in/mstrodl

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

Vending Machines 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.

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.

Women in Computing

Member

 August 2021 - Present

Women in Computing is an all inclusive organisation that provides an interdisciplinary networking forum for students, faculty, staff and alumni involved in the field of computing at RIT through professional, leadership, mentorship, and technical development opportunities.