

# KLAIRE CURDE

Software and DevOps Engineer.

@ kcurde@gmail.com    (724) 718-7281    github.com/klairecodes    linkedin.com/in/klaire-curde    klaire.codes

## EXPERIENCE

Software Engineer Co-op

Bryx Inc. | Summer 2023

- Enhanced an EMS/firefighter job submission page with a modern stack.
- Migrated from class-based to efficient functional React + TypeScript.
- Focused on reliability, and integrated extensive first responder feedback.

TypeScript   React   Semantic UI   SQL

DevOps Engineer Co-op

Council Rock | May 2022 - August 2022

- Maintained an RKE Kubernetes deployment of the Thingsboard IoT application with custom modifications.
- Developed a new Docker Compose deployment for external services.
- Managed a Proxmox cluster, and created optimized multi-stage Docker BuildKit builds.

Kubernetes   Docker   Docker Compose   AWS   Proxmox

Software Engineer Co-op

Council Rock | Aug 2021 - Dec 2021

- Implemented the CoAP protocol in C++ using the libcoap C library.
- Integrated with ThingsBoard IoT Software's REST API via CoAP.

C++   C   Linux   CoAP   IoT

Software Engineer Co-op

LightRiver Software | Jun 2021 - Aug 2021

- Designed and implemented an ingress controller in C using a reverse proxy with Apache for REST API requests.
- Enhanced the netFLEX application with new features using C, JavaScript, and JSON on Linux.

C   Linux   Apache   PostgreSQL   HTML/CSS   JS

## PROJECTS

Sparsr

github.com/klairecodes/sparsr

- Utilized the OpenCV Python API and Whisper AI to capture timestamps and screenshots of videos where a searched phrase was said.

Python   OpenCV   Whisper AI   Podman

Guestbook

github.com/klairecodes/guestbook

- Created a content delivery application for cabin guestbooks using protocol buffers, sqlx, and the highly scalable Rust Tokio runtime.

Rust   gRPC   Protobuf   Podman   SQLx   S3

RITlinks

https://ritlinks.csh.rit.edu   github.com/klairecodes/ritlinks

- Developed a site to dynamically generate a list of all websites RIT makes available to students and their uses.
- Deployed on an OKD 4 Kubernetes cluster.

Python   Django   Docker   OKD   Bootstrap 4

## EDUCATION

Rochester Institute of Technology

B.S. in Computer Science   Earned May 2024

Psychology Immersion

AI/ML/LLM & Intelligent Security Concentration

## SKILLS

### Languages

Python   C   C++   Rust   JavaScript   TypeScript   Java   Go   Bash   HTML/CSS   SQL   LaTeX

### Tools

Linux   Docker   Nginx   Kubernetes   Openshift/OKD   Proxmox   Ceph   PostgreSQL   Django   AWS   Protobuf   gRPC   DataDog   Puppet

## ACTIVITIES

Computer Science House

SysAdmin Director   May 2021 - Oct 2022

- Led a \$1.2 million+ server hardware donation from Wayfair's decommissioned datacenter, featured in a Google Cloud article.
- Rebuilt an enterprise-grade datacenter with modern hardware, setting up over three dozen machines from scratch running 1150 k8s pods for 400 projects, 170 VMs, and 500 terabytes of Ceph storage.
- Led a team of eight admins for two years, and spent five total years maintaining the datacenter for over 100 active users.

Reporter Magazine

Sysadmin   May 2021 - May 2023

- Maintained the frontend and infrastructure for a student-run magazine.
- Supported 30+ contributors and the entire student body audience.

RIT Residence Life

Resident Advisor   Aug 2020 - May 2021

- Supported and guided 50 dorm residents.

WSET Level 2 Wine Certification

Completed with Merit   May 2024

- Guest judged for the Great American International Wine Competition.