

# KLAIRE CURDE

## Software and DevOps Engineer

@ kcurde@gmail.com

📞 (724) 718-7281

🐙 github.com/klairecodes

🌐 linkedin.com/in/klaire-curde

🌐 klaire.codes

## EXPERIENCE

### 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 set up build vms with 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.
- Communicated with the 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 and used a reverse proxy with Apache to act as middleware for REST API requests.
- Wrote new features and enhancements for the netFLEX application using C, JavaScript, and JSON on Linux.

C Linux Apache PostgreSQL HTML/CSS JS

### Software Engineer Co-op | Bryx Inc. | 📅 Summer 2023

- Wrote a job submission page for fire chiefs to submit details into autonomous reporting systems.

TypeScript React Semantic UI

## PROJECTS

### Guestbook [github.com/klairecodes/guestbook](https://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

### Spars [github.com/klairecodes/spars](https://github.com/klairecodes/spars)

- Used 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

### RITlinks <https://ritlinks.csh.rit.edu> [github.com/klairecodes/ritlinks](https://github.com/klairecodes/ritlinks)

- A site to dynamically generate a list of all the websites RIT makes available to students as well as their uses.
- Runs in a Docker container and is deployed on an OKD 4 cluster.

Python Django Docker OKD Bootstrap 4

## EDUCATION

### Rochester Institute of Technology

#### Computer Science B.S.

📅 Expected Graduation: May 2024

## SKILLS

### Languages

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

### Tools

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

## ACTIVITIES

### Computer Science House

#### System Administrator Director

📅 May 2021 - Oct 2022

- Organized a \$1.2 million+ server hardware donation from Wayfair's decommissioned datacenter.

- Featured in a Google Cloud article.
- Currently maintaining the hardware and software for a student-run datacenter. Services include an OKD 4 Kubernetes cluster, Proxmox cluster, FreeIPA user management, Ceph distributed storage, multiple databases, mail server, MediaWiki instance, and various web services.

📅 System Administrator

Oct 2020 - Present

📅 Member

Aug 2019 - Present

### Reporter Magazine

#### Web Developer & Sysadmin

📅 May 2021 - May 2023

Responsible for maintaining the frontend and infrastructure for reporter.rit.edu