

KLAIRE CURDE

Software and DevOps Engineer

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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

- 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

Sparsr | 🐙 github.com/klairecodes/sparsr

- 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

- 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