KLAIRE CURDE

## Software and DevOps Engineer.

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# EXPERIENCE

Software Engineer Co-op | Bryx Inc. | ii Summer 2023

* Developed a secure job submission page with form validation for ﬁre chiefs to submit details into autonomous reporting systems.

TypeScript React Semantic UI SQL

DevOps Engineer Co-op | Council Rock | ii May 2022 - August 2022

* Maintained an RKE Kubernetes deployment of the Thingsboard IoT ap- plication 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

AWS Proxmox

Docker Compose

# EDUCATION

### 1 Rochester Institute of Technology

B.S. in Computer Science ii 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

Software Engineer Co-op | Council Rock | ii 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 | ii 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 0 [github.com/klairecodes/sparsr](https://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 0 [github.com/klairecodes/guestbook](https://github.com/klairecodes/guestbook)

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

Rust gRPC Protobuf Podman SQLx S3

RITlinks '9 [https://ritlinks.csh.rit.edu](https://ritlinks.csh.rit.edu/) 0 [github.com/klairecodes/ritlinks](https://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 Boostrap 4

# ACTIVITIES

Linux Docker

Openshift/OKD

Nginx Kubernetes

Proxmox Ceph

PostgreSQL Django AWS Protobuf

gRPC DataDog Puppet

### § Computer Science House

SysAdmin Director | ii May 2021 - Oct 2022 System Administrator | ii Oct 2020 - May 2024 Member | ii Aug 2019 - For life

* Spearheaded a [$1.2 million+ server hard-](https://www.rit.edu/news/wayfair-gifts-850000-servers-rits-computer-science-house) [ware donation](https://www.rit.edu/news/wayfair-gifts-850000-servers-rits-computer-science-house) from Wayfair’s decommis- sioned datacenter.
* Featured in a [Google Cloud article](https://cloud.google.com/blog/transform/wayfair-server-donation-mass-open-cloud-rit-student-innovation-johonnot).
* Rebuilt an enterprise-grade datacenter

with modern hardware.

* Led a team of system administrators for two years, and spent ﬁve total years maintaining a datacenter running OKD k8s, Proxmox, Ceph, FreeIPA, DataDog, assorted databases, and web services.

### m Reporter Magazine

Sysadmin | ii May 2021 - May 2023

* Maintained the frontend and infrastruc- ture for [reporter.rit.edu,](https://reporter.rit.edu/) a student-run magazine publication.

### 1 RIT Residence Life

Resident Advisor | ii Aug 2020 - May 2021

* Acted as a leader for a dorm ﬂoor.

### , WSET Level 2 Certiﬁcation

* Demonstrated knowledge of various wine regions, grape varieties, and wine tasting techniques.