KLAUS CURDE

Seeking a Summer or Fall 2022 Software Engineer or DevOps Co-op.

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EXPERIENCE

Software Engineer Co-op 📅 **Aug 2021 - Present**

Council Rock - Vista Agent

- Implemented the CoAP protocol in C++ using libcoap C library.
- Communicated with the ThingsBoard IOT Software's REST API via CoAP middleware.
- Interfaced with a Linux system manager application over 0mq sockets.
- Built Ubuntu Core Snap packages.

C++ | C | Linux | CoAP | IoT

Software Engineer Co-op 📅 **Jun 2021 - Aug 2021**

LightRiver Software - netFLEX

- 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, Linux/Unix, JavaScript, and JSON.
- Implemented access logging and user access control permissions with PostgreSQL.

C | Linux | Apache | PostgreSQL | HTML/CSS | JS

PROJECTS

RITlinks

 github.com/klauscurde/ritlinks   🔗 https://ritlinks.cs.house

- Developed a website using Django and self-created Bootstrap 4 templates 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.
- Implemented administrator accounts to manage adding and removing content with drag-and-drop controls and forms.
- Helps new students understand which services do what, and was well received by incoming freshmen and current students.

Python | Django | Docker | OKD | Boostrap 4

HuntedRC Car

 github.com/Hunted_RC_Car

- Designed the electronic internals of a remote control car that can be controlled from up to 1 kilometer away.
- Uses an NRF24L01 wireless module with a self-designed wireless protocol, an L298N H-bridge motor controller, and Arduino Mega and Nano microcontroller boards.
- Coded in C++ and uses a custom designed controller. Internals are a prototype for modifying a Barbie Jeep to be wirelessly controlled as a safe, moving hunting target.

Arduino C++ | Electronics | Robotics

EDUCATION

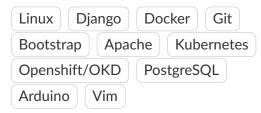**Rochester Institute of Technology**

Computer Science B.S. 3.48 GPA

📅 Expected Graduation: May 2024

SKILLS

Languages

Python | C | C++ | Java | Bash | HTML/CSS | SQL | LaTeX

Tools

Linux | Django | Docker | Git | Bootstrap | Apache | Kubernetes | Openshift/OKD | PostgreSQL | Arduino | Vim

ACTIVITIES

Computer Science House

System Administrator Director

📅 May 2021 - Present

System Administrator

📅 Oct 2020 - Present

Member

📅 Aug 2019 - Present

Maintain services for a student-run server room including an Openshift/OKD 4 cluster, Proxmox cluster, FreeIPA user management, databases, mail, MediaWiki, and various web services. Provide leadership for the other System Administrators, represent them as a position on the executive board, and manage server room donations and hardware upgrades.

RIT Residence Life

Resident Advisor

📅 Aug 2020 - May 2021

Responsible for enforcing university policy in the dorms. Was a leadership figure for new residents, and helped them adjust to college life by interacting with them and organizing events.