KLAUS CURDE

Seeking a Software Engineer Co-op/Internship. Available May 2022.

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EXPERIENCE

Software Engineer Co-op | **Aug 2021 - Present**
Council Rock

- Implemented the CoAP protocol in C++ using libcoap.
- Communicated with the Thingsboard IOT Software REST API.
- Interfaced with a Linux system manager over 0mq sockets.
- Build Ubuntu Core Snap packages.

Software Engineer Co-op | **Jun 2021 - Aug 2021**
LightRiver Software

- 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

PROJECTS

ritlinks

github.com/klauscurde/ritlinks | https://ritlinks.com

- Developed a website using Django and self-designed 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.

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.

EDUCATION

Rochester Institute of Technology
Computer Science B.S. 3.48 GPA
📅 Graduation: May 2024 (5yr pgrm.)

SKILLS

Languages

Python   C   C++   Java   Bash
HTML   CSS   VHDL

Tools

Linux   Django   Docker
Bootstrap   Apache   Kubernetes
Openshift/OKD   PostgreSQL
Arduino/MCU

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, and various web services. Provide leadership for the other System Administrators, represent them as a position on the executive board, and manage donations and server room 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.