

KLAUS CURDE

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

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🔗 github.com/klauscurde

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 Omq 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

- Used the Python web framework Django to create a dynamically generated website that lists a collection of all the websites RIT makes available to students as well as their descriptions.
- Helps new students understand which services do what, and has administrator accounts to manage adding and removing content as relevant.
- Runs in a Docker container.

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.)

COURSES

Digital System Design 1 | CMPE-160

- Learned how to design, optimize, and implement circuits, including decoders, multiplexers, adders, flip flops, etc.
- Digital system simulation with VHDL.

Intro to SE | SWEN-261

- A course that dove into software engineering practices.
- Worked as a group using the SCRUM Agile process.
- Learned the Spark framework and automated unit testing.

SKILLS

Python

C

C++

Java

Bash

HTML

CSS

JavaScript

VHDL

Linux

Django

Docker

Bootstrap

Apache

Kubernetes

Openshift/OKD

Arduino/MCU

ACTIVITIES

Computer Science House

System Administrator | Oct 2020 - Present

Member | Aug 2019 - Present

RIT Residence Life

Resident Advisor | Aug 2020 - Present