WILL NILGES

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SKILLS

LANGUAGES

- C
- C++
- BASH
- Rust
- Pvthon
- QML
- ARM
- VHDL
- Cortex M0+ Assembly

OPERATING SYSTEMS

- RHFL
- Fedora
- Debian
- Ubuntu
- Arch
- **PFSense**
- Cisco IOS

HARDWARE

- Oscilloscopes
- Multimeters
- Wave Function Generators
- Soldering Equipment
- Trace32 Dongles

SOFTWARE

- Proxmox
- Kubernetes
- OpenShift
- Podman
- Docker
- CMake
- **GNUMake**
- Vim
- JetBrains IDE
- Qt Creator

ACTIVITIES

COMPUTER SCIENCE HOUSE

SysAdmin, Executive Board Living-learning community focused on technical projects, knowledge, and skills. Managed computing resources and web services for members to facilitate project development.

RIT LINUX USERS GROUP

Worked alongside enthusiasts and experts to spread knowledge among the greater RIT community through presentations and meetings.

SCOUTS OF AMERICA

Eagle Scout, Order of the Arrow Completed Eagle Project for Christian youth organization.

EDUCATION

ROCHESTER INSTITUTE OF TECHNOLOGY

B.S. Computer Engineering

May 2023 | GPA: 3.45

EXPERIENCE

OUALCOMM

Firmware Engineering Co-Op

May 2021 — August 2021

- Designed new debugging frameworks to accelerate development
- Implemented polished and functional system and UI in Python and C
- Laid groundwork for future expansion of framework and additional interfaces

COUNCIL ROCK

Computer Engineering Co-Op

May 2020 — December 2020 & August 2021 — December 2021

- Built new, more maintainable firmwares for custom embedded devices
- Developed new features, addressed customer issues, and managed roadmap
- Designed Kubernetes infrastructure for product to improve flexibility

THE REPORTER

System Administrator

November 2019 — Present

- Architecting and building practical solutions for article, podcast, and services hosting to boost employee productivity
- Managing instances of **Pritunl**, **Mediawiki**, and **Samba** on **Proxmox**
- Maintaining Drupal CMS and Flask frontend served with Nginx on Docker

MASTODON DESIGN

Software Engineering Co-Op

May 2019 — August 2019

- Designed test suites for custom communication equipment in Python and C++ to streamline QA
- Created thermal testing software for mil-spec stress tests to boost product reliability

PROJECTS

INKPATH (C)

GITHUB.COM/WILLNILGES/INKPATH

- Xournal++ plugin for transcribing whiteboard notes
- Allows for faster note taking and flexible adaptation of lecture materials
- Contributed API code to popular open source project

CSH OPENSHIFT 4 CLUSTER

- Boostrapped large-scale cluster for Computer Science House on Proxmox
- Provided Kubernetes-related support and resources for members' projects
- Monitored for and corrected issues as they arose to prevent downtime

IMAGINERIT 2022: CSHACKS (C / Python / Rust)

GITHUB.COM/COMPUTERSCIENCEHOUSE/IMAGINE2022-EMBEDDED

- Campus-wide BLE-based asset tracking demo with a fun twist
- Leading and managing multi-disciplinary project by maintaining schedule, taking notes, facilitating communication, and running meetings