# WILL NILGES

(he/him)

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# **SKILLS**

## **LANGUAGES**

C • C++ • BASH • Rust • Python • QML • B.S. Computer Engineering Java • Kotlin • C#

• ARM Cortex M0+ • VHDL

#### **OPERATING SYSTEMS**

RHEL • Fedora • Debian • Ubuntu • Arch

PFSense • Cisco IOS

## **HARDWARE**

Oscillosocopes • Multimeters

- Wave Function Generators
- Soldering Equipment
- Lauterbach Debug Interfaces

#### **SOFTWARE**

Proxmox • Kubernetes • OpenShift

- Podman Docker CMake GNUMake
- Vim JetBrains IDE Qt Creator
- Ansible

# **ACTIVITIES**

## **COMPUTER SCIENCE HOUSE**

SysAdmin, Exec 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 with other enthusiasts 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

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 framework 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

- Architect and build practical solutions for article and services hosting to boost employee productivity
- Manage instances of Pritunl, Mediawiki, Keycloak, Nginx, and Samba on Proxmox

#### 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

#### **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

#### **BETTERVENT** (Kotlin)

GITHUB.COM/COMPUTERSCIENCEHOUSE/BETTERVENT

- Lightweight and easy to use room schedule viewer for Android
- Uses Google Calendar API to manage events
- Built with extensibility in mind to fit wide array of use cases