WILL NILGES

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OBJECTIVE
Seeking a Computer Engineering Co-Op for Summer/Fall 2020

EDUCATION
Rochester Institute of Technology
B.S. in Computer Engineering — GPA: 3.52
Expected Graduation: Spring 2023

EXPERIENCE
Mastodon Design | Software Engineering Co-Op
May 2019 — August 2019
- Designed and built test suites for custom communication equipment
- Reverse engineered and simulated binary messages and signals
- Designed and built thermal testing software for mil-spec stress tests

Rochester Institute of Technology | Linux System Administrator
August 2018 — May 2019
- Supported and maintained various Red Hat systems using Ansible for configuration management
- Patched and protected research computing resources for the Kate Gleason College of Engineering

Online Computer Library Center | Information Technology Intern
July 2015 – August 2015 | June 2017 – August 2017
- Cataloged, repaired, upgraded, imaged, and deployed computer hardware
- Resolved various hardware and software issues across multiple hardware platforms

Upper Arlington Schools | Instructional Technology Intern
January 2016 – July 2017
- Maintained fleet of 2,000+ MacBook Air laptops
- Assisted students and teachers with hardware and software problems

PROJECTS
Directional AC | *github.com/WillNilges/DirectionalAC*
- Computer vision-enabled gyroscopic fan control system written in C++
- Uses OpenCV to track users and automatically adjust its airstream
- Custom designed 3D-printed chassis

BetterVent | *github.com/WillNilges/BetterVent*
- Room schedule viewer for Android written in Java
- Easy to configure, use, and customize
- Lightweight and easy on resources

ShelfLife | *github.com/WillNilges/ShelfLife*
- OpenShift project management, backup, and monitoring system written in Rust
- Automatically notifies admins and backs up project configurations
- Manages and limits resources to stale projects

The Death Panel | *github.com/WillNilges/DeathPanel*
- Completely custom-built control panel written in C++
- Custom protocol that interfaces with game
- Uses a Teensy 3.6 to control switches and an Arduino Nano to control an LCD

sampleZone | *github.com/WillNilges/sampleZone*
- Terminal-based audio sequencer written in C
- ncurses GUI
- Built for speed and efficiency

SKILLS
Languages
- C
- C++
- Python
- C#
- Java

Operating Systems
- Red Hat Enterprise Linux
- Fedora
- Debian
- Ubuntu
- Arch
- Manjaro
- macOS

Tools
- Oscillosocopes
- Wave Function Generators
- Multi Meters
- Soldering Equipment

Software
- Altera Quartus II
- Modelsim
- JetBrains IDE
- VisualStudio
- Qt Creator
- MessagePack
- Ansible
- Puppet
- OpenShift

ACTIVITIES
Computer Science House
- Living-learning community focused on technical projects, knowledge, and skills
- Root Type Person Status

RIT Linux Users Group
- Enthusiast group dedicated to developing and spreading Linux knowledge and skills

FIRST Robotics
- Head Electrician
- Drive Team Technician

Scouts of America
- Eagle Scout
- Order of the Arrow