Miles A. Martin

contact.milesmartin@gmail.com || 207-385-5279 || 56 Maple St, Burlington, VT 05401 Bachelor of Science, Computer Engineering, University of Maine, May 2023

Relevant Work Experience:

Networkmaine Network Engineer I: Design, provision, install, and maintain enterprise networking equipment deployments; expected to spearhead or join projects, maintain/create records on field deployments, & work well independently, maintain high service availability across statewide networks spanning 7 distinct primary campuses, and perform service-affecting maintenance independently after-hours (emergency and non-emergency). Selected Achievements:

- Performed data center networking overhaul, end-of-life hardware upgrades, and off-site installs.
- Diagnostic specialties include Cisco switches, routers, network intrusion detection, virtualization, with secondary experience troubleshooting wireless, authentication, network performance monitoring

MITRE Corporation

May 2021 - Aug 2021

Summer Enterprise IT Intern: The Enterprise IT team tailored consistently reliable solutions to other IT-focused departments' issues; worked fully remote with minimal supervision, as part of a small team at times. Selected Achievements:

- Automated DISA STIG compliance measures in Ruby for sysadmins' virtual Linux and Windows hosts.
- Self-taught Powershell scripting in order to accomplish goals and meet deadlines.

SPICE (Scalable and Portable Infrastructure for Cybersecurity Education, U. of M) Jul 2020 - Feb 2022 Student Research Assistant, Student Volunteer: Assisted in founding a research initiative with a team of other student researchers working to improve cybersecurity education, and wrote a paper describing the process. Selected Achievements:

- Developed and maintained two twin hypervisors with easily portable network equipment and infrastructure for the purpose of hosting virtual machines used in cybersecurity lab instruction.
- Investigated how portable & remotely accessible lab infrastructure augments a cybersecurity education.

Woodland Pulp, LLC

May 2019 - Aug 2020

Summer/Winter Electrical Engineering Intern: Woodland Pulp, LLC manufactures kraft wood pulp for sale. Drafted formal documentation of previously undocumented industrial electronics deployed within the plant.

- Studied deployed industrial control electronics and instrumentation, automation, and industrial logistics.
- Worked independently in AutoCAD LT to document field implementations of electrical instrumentation

Demonstrations of Project Management:

UMaine ECE Senior Project: vintage basketball scoreboard revitalized as analog & digital clock. 2021-2022. Designed and executed plans to meet the needs of stakeholders' community, as part of a team with a classmate. Implemented digital and analog clock functionality by creating stepper-motor driven clock hands and a custom multiplexed LED-based segment display. Documented entire process in journals. Covered in campus magazine. CNC Hardware Exploration: closed-source CPU reprogrammed to run CNC hardware. 2024-present.

Solo project. As I make a new, more capable 3D printer from other less capable hardware, this is an opportunity to familiarize myself with more low-level programming tools, to further my computer engineering education with regard to microprocessors. Like the Senior Project, all work is fully documented in a personal journal.

Additional Skills: Strong technical communicator; enjoys technical writing; good project management skills; innovative; proficient in C, Bash, Java, Python, MATLAB, familiar with VHDL, Powershell, Ruby, R; Unix/*nix sysadmin skills; proficient in AutoCAD and Fusion 360; owns and maintains CNC machinery; forklift safety training; studying for CCNA cert.; thrives in and gives back to supportive communities.

May 2023 - Sep 2024

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Additional Work Experience:

Graduate Research Assistant: The Maine In-situ Sound and Color (MISC) Lab conducts research on Marine Science topics, such as the development, testing, and calibration of optical sensors to study the Earth's waters and catalog aquatic phenomena.

- Prototyped a submersible sensor payload, balancing practical constraints and functionality
 - Programmed sensor firmware in C and designed electronics to capture nephelometric data
- Collaborated with others remotely and in-person, and also worked independently
- Recorded documentation of my design and results, for future reference and iteration

Networkmaine **Network Technician IV:** Provided year-round support to Networkmaine's end-sites. Performed network diagnostics, and fulfilled NOC trouble tickets. Consistent operational procedure was critical to network upkeep. Selected Achievements:

- Independently set up customer premises equipment for clients.
- Documented work diligently to resolve tickets in a timely manner.

Dept. of Electrical and Computer Engineering (U. of Maine) Jan-May, 2018 + 2020

Teaching Assistant (Intro to C, Sequential Logic Systems): Students in the ECE department at UMaine must demonstrate proficiency in C (ECE177) and Verilog Hardware Design Language (ECE275) to recognize how modern software is built on digital logic operations, and to perceive basic forms of hardware driving software.

- Assessed students' understanding of logic concepts during weekly three-hour lab sessions
 - Extensive troubleshooting procedures to determine point of failure in student code
- Respectfully addressed all people in need of assistance and patiently resolve the issue
- Ability to view the issue from multiple perspectives in order to guide beginners

Maine LearnToMod Project (U. of Maine)

Student Special Project Assistant

MISC Lab (U. of Maine)

The Maine LearnToMod Project incentivizes computer science education through gameplay.

- Explored applicability of computers and microcontrollers in an educational setting
- Facilitated 8-week sessions with clients on a weekly basis
- Hybridized more educationally potent curricula from separate sources
- Trained educators and others to implement the Maine LearnToMod Project

Relevant Community Involvement:

UMCST (University of Maine Cybersecurity Team):

President, Competitor, Alumnus: Trained a team in simulated enterprise environments to develop and hone sysadmin skills in cyberdefense. UMCST annually qualifies and competes in collegiate-level events for practice. Team officers maintained UMCST's infrastructure, shared knowledge freely, and led by example. Selected Achievements:

- Rose to Team Captain and President, fostering a supportive, technical, and casual community.
- Captained team to 3rd Place in the 2021 Northeast Collegiate Cyber Defense Competition
- Continues to provide support as an alumnus of the team to enable the success of others

Mar 2020 - May 2020

Sep 2017 - May 2019

Sep 2018 - Present