

Ryan Moulton

Firmware Engineer

Hello, I'm a computer engineer with electronics, network, and coding skills. I'm looking for firmware opportunities in a positive team environment to apply and expand my skills. I love to learn new things, so if something is unfamiliar I'll find the resources to figure it out.

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WORK EXPERIENCE

Firmware Engineer

Schneider Electric via HireGenics Inc.

01/2025 - 06/2025

Firmware maintenance, writing C/C++ for network communication PLCs

Responsibilities and Achievements

- Trained new hire, while documenting and enhancing internal processes
- Became team cybersecurity expert for IEC-62443, and addressed cybersecurity vulnerabilities
- Investigated network driver issues using Wireshark
- Developed, tested, and presented solutions for customer issues
- Optimized custom scripts for VxWorks build procedures

Firmware Engineer

Schneider Electric via Cognizant

09/2023 - 12/2024

Firmware maintenance, writing C/C++ for network communication PLCs

Responsibilities and Achievements

- Preserved multi-million dollar client account
- Took over for mentor as designated maintenance engineer for three product lines
- Received product from another unit, documented functionality and developer tools, and fixed outstanding customer issues
- Participated in hackathon and developmental certification courses
- Maintained products by investigating user reports and developing solutions

Reliability Engineering Co-op

MKS Instruments

08/2022 - 12/2022

Responsibilities and Achievements

- Created a Spark server cluster for integration with machine learning to preempt failures
- Completed failure analysis of various components and lead meetings to discuss findings
- Created Windchill predictions based on hardware data

SKILLS



PROJECTS

Personal Website (12/2025 - Present)

- Manually coding a place to showcase my skills, hobbies and talents, while learning new skills like HTML, CSS and web-accessibility.

Digital Picture Frame (04/2025 - 06/2025)

- Created a network-accessible digital picture frame for my roommate's birthday using IoT devices.

Dual-Channel Signal Generator and Oscilloscope (03/2023 - 04/2023)

- Used embedded programming, FreeRTOS, DMA and UART to create a real-time signal generator and oscilloscope using a microcontroller.

Hands-free Adaptive Keyboard (08/2022 - 05/2023)

- Worked with client to produce a unique, adaptive keyboard.

Autonomous Model Car Competition (01/2022 - 05/2022)

- Used embedded programming to navigate a race track autonomously using a microcontroller, camera, motors, etc.

Retrofitted Guitar Hero Controller (05/2022 - 09/2022)

- Replaced electrical components of a broken guitar hero controller with a Raspberry Pi.

PROGRAMMING LANGUAGES

C	C++
<i>Full Professional Proficiency</i>	<i>Full Professional Proficiency</i>
Python	SQL
<i>Professional Working Proficiency</i>	<i>Professional Working Proficiency</i>
Java	Bash
<i>Professional Working Proficiency</i>	<i>Professional Working Proficiency</i>
Matlab	Assembly
<i>Professional Working Proficiency</i>	<i>Full Professional Proficiency</i>
HTML	CSS
<i>Limited Working Proficiency</i>	<i>Limited Working Proficiency</i>

EDUCATION

Computer Engineering BS

Rochester Institute of Technology

08/2018 - 05/2023