

MATTHEW CLOUTIER

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Education

Worcester Polytechnic Institute | BS in Electrical & Computer Engineering | Minor: CS May 2026

- Relevant Coursework: Digital Circuit Design, Advanced Digital Circuit Design, Embedded Computing, Real-Time Embedded Systems, Intro to ECE, Engineering with Sensors, Circuits, and Systems, Microelectronics One, Systems Programming
- Current GPA: 3.64 – Dean’s List for Four Semesters
- Activities and Involvement
 - WPI Cycling Club - President and Gear Manager
 - Alpha Chi Rho Fraternity – Treasurer’s Assistant
 - Running Club
 - Ballroom Dance

Experience

SignalFire Wireless Telemetry – Engineering Intern

May 2023 – August 2023

- Created and integrated a web server using Mongoose WS to interact with a radio communications device to eliminate the necessity of locally interacting with the device.
- Assisted in the creation of a new variant of a cellular communications device.
- Utilized Microsoft Visual Studio to add new settings to an existing tool to locally interact with devices. These changes have been released to customers in the *SignalFire Ranger Toolkit*.
- Updated C code to be more efficient and to remedy bugs within radio and cellular devices.
- Instructed on how to use git revision control and used it daily.

Landry’s Bicycles – Sales Associate

March 2021 – August 2023

- Trained in hospitality through a program developed by Dan Mann of the Mann Group.
- Responsible for guiding customers to the product that best suited their needs. Each customer and situation were different and required a unique solution.
- Developed communication and people skills that brought me to be a top salesperson in 2023.
- Sold \$130,000 of products from May 2023 to August 2023.

Projects

- Assisted developing a new product, the SignalFire Ranger AirQ, to track the amount of methane present in an area.
- Implemented a web server to monitor and interface with an embedded radio device using Mongoose WS. I also created the backend functions to support it as well.
- Created tools in Microsoft Visual Studio to interface with radio and cellular communication devices. These are present in the SignalFire Toolkit and the SignalFire Ranger Toolkit.
- Developed a self-playing four-pipe organ on a team of four students. Designed and implemented the software to process MIDI data, control the stepper motors, and sync the solenoid for accurate timing.
- Developed a calculator using an FPGA board. The user would input a number and an operation, and the result would be displayed on four seven-segment displays.

Skills

Verilog
MATLAB

Microsoft Visual Studio
C / C#

Embedded Devices
Revision Control