MATTHEW CLOUTIER

(978)760 – 6444 mrcloutier@wpi.edu
linkedin.com/in/matthew-robert-cloutier

Education

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

- Undergraduate Coursework: Embedded Systems, Microelectronics, Systems Programming, Computer Networks, Mobile & Ubiquitous Computing
- Graduate Coursework: Computer Architecture, Digital Systems Design, Digital Signal Processing
- GPA: 3.68 – Dean's List, Five Semesters
- Activities and Involvement
    - Cycling Club – President, Secretary, and Gear Manager
    - Alpha Chi Rho Fraternity – Social Officer and Treasurer's Assistant
    - Alpha Phi Omega Service Fraternity

Experience

SignalFire Wireless Telemetry – Engineering Intern May 2023 – August 2025

- Created a web server using Mongoose WS to interact with a radio communications device.
- Utilized Microsoft Visual Studio to add new settings to an existing tool.
- 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.
- 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

Museum of Horrors of Communism in Romania

- Traveled to Romania to work on a seven-week-long project.
- Worked with a team of three other students to conduct 35 interviews with survivors of the regime.
- Developed an interactive digital museum exhibition to educate children on the history of the regime.

Developing an Intrusion Detection System for Cybersecurity (Ongoing)

- Collaborate with a team of three students, a PhD student advisor, and a faculty advisor to develop an intrusion detection system based on pyIDS.
- Manage and preprocess large cybersecurity datasets, including BETH and UNR-IDD.
- Evaluate model performance to further improve accuracy and robustness.

Self-Playing Four-Pipe Organ

- Developed a pipe organ along with three other students consisting of four pipes of variable length. The length was controlled by stepper motors, and the airflow was controlled by solenoids.
- The machine was controlled via Ableton and a serial connection from the computer to each pipe's microcontroller.

Multi-Cycle Processor

- Designed and implemented a multi-cycle processor, which could execute basic assembly instructions.

Skills

Verilog	Microsoft Visual Studio	Embedded Devices	Kotlin
MATLAB	C / C#	Revision Control	Hardware Design