

Matthew Marsicano

Email: Marsicano.ma@Northeastern.edu | Mobile: 781-783-5800 | [LinkedIn](#) | [Personal Website](#)

Location: Boston, MA (Willing to Relocate) | May – August 2025 Internship Availability

EDUCATION

Northeastern University, Boston, MA May 2027

Bachelor of Science in Electrical and Computer Engineering, GPA: 4.0

Organizations: Generate, Forge, NURobotics, DeLTA Lab, IEEE, NASA BIG Idea, Sigma Xi, HKN

Coursework: Circuits and Signals, Embedded Design, Fund. of Networks, Networked XR Systems, Optics

WORK EXPERIENCE

Backscatter Radio Co-op Jan 2025 - Current

Nokia Bell Labs

Murray Hill, NJ

- Leads design of batch verification fixture for a novel backscatter RF FPGA PCB.
- Develop and debug MATLAB scripts for writing, and synthesizing Verilog HDL.

Makerspace Electronics Lead Sep 2023 - Dec 2024

Northeastern University

Boston, MA

- Leads safety orientation events and trainings for soldering and electronics test instrumentation.
- Manages stock documentation, ordering, and improvement projects to support product development.

Embedded Software Engineer Intern May 2024 - Aug 2024

DEKA Research and Development

Manchester, NH

- Developed channel bonding and networking software for improved latency and fail-over of custom LTE modem onboard the Sentry security robot.
- Optimized modem boot time by 60% through modifications to U-boot, Yocto, and kernel modules.
- Designed 5 API commands for real-time processor control and connection status displays, using multi-threading and object oriented design principles in C++.
- Automated network configuration and security protocols with Bash scripts.

Information Technology Intern Jun 2023 - Aug 2023

Baystate Milling Co.

Quincy, MA

- Deployed 90+ desktop computers through end-user communication and MS Intune.
- Applied targeted remediations to vulnerable devices, reducing risk scores by 10%.
- Reconfigured network and protocols of autonomous flour quality analyzers.

SKILLS

Software: C, C++, Verilog, iCECube2, Quartus, Python, Bash, Linux, RTOS, Yocto Project, Git, Jira

Hardware: Altium Designer, FPGAs, LTSpice, RF Sig Gen, VSA, Oscilloscopes, ADS, Microwave Office

TECHNICAL PROJECTS

Tubender | Generate Product Development Studio Sep 2024 - Dec 2024

- Designed KiCAD schematics and PCB layouts for the display and UI of a tube bending CNC.
- Programmed display UI state machine and automated sensor interrupts to ensure reliable functionality.

ECE Workshop Leader | Forge Aug 2024 - Dec 2024

- Leads hour-long workshops on circuits, soldering, and software for 3 Product Development teams.
- Provides tailored feedback on designs, circuits, Arduino Software, and electromechanical integration.

Space Building Drone | NU-Robotics Sep 2023 - Dec 2024

- Leads project team in design, fabrication, and verification of low power pneumatic actuators.
- Integrates SPI and I2C pressure sensors for automated control on a custom ESP32 PCB.

Hackathon Finalist | iQuHack, MIT Feb 2024

- Won 2nd place after presenting findings on IoT applications of Bayesian optimization algorithm.