Sebastian Baldini

Worcester, MA 01609 sebastian.baldini@outlook.com (603) 321-1577

github.com/somguynamedseb **sebastianbaldini.com** linkedin.com/in/sebastian-baldini

Objective: I am a Robotics Engineering Major and Computer Science minor student looking for a summer engineering internship position.

Education:

Worcester Polytechnic Institute (WPI), Worcester, MA

Bachelor of Science in Robotics Engineering, GPA 3.5 Graduating May 2025

Activities/Leadership:

WPI Robotics Materials Group: August 2023 -> Present:

- Designing custom encoding solution with conductive filaments to replace magnets in soft body multi-material 3d printed quadrupedal robots
- Assessing the strength and quality of new mutli-material FDM printers for soft robotic applications

Omega Head of House, MBU Exec Chair: APO Omicron lota Chapter: January 2023 -> Present

 Lead the organization of WPI's Merit Badge University with over 100 Boy Scouts coming to campus to earn merit badges.

Lead Test Stand and Control Systems Designer: AIAA Jet Engine Project: March 2023 -> Present

- Leading development of new control system for Wren 75 Jet Engine
- Developing remote server data display and collection system for new test stand

Personal/Class Projects:

Soft Robotic Encoding Journal Paper:

 Currently finishing my development and starting the writing of a journal paper on custom embedded encoding solutions in soft robotics

OpenCV Personal Project:

- Developing a face recognition model to identify over 30 individuals accurately with the YOLOv8 neural network
- Designing a system to track faces with a camera and program motors to keep them in the center of the frame using feature detection

NHRL Battlebot

Currently designing a 3 pound battle bot to compete in NHRL early next year

Experience:

Millennium/Evergreen Slate: Intern Production Manager, Granville NY: May 2022 -> August 2022

- Managed the loading and unloading of production lines involving CNC lasers and FANUC robotic systems
- Diagnosed and repaired bugs in code and sensor issues to improve the efficiency and uptime of production

Skills:

- Technical Skills: Circuits and Sensor Integration and Programming, C++, Java, Rust, Python, MATLAB
- Software: Solidworks (CSWA certified), Fusion 360, Onshape, Simulink, MultiSim, Linux, ABB RobotStudio

Additional Experience: FIRST Robotics FTC Team 11536, CS 4341: Introduction to Artificial Intelligence, RBE 4815 Industrial Robotics