Brandon A. Sawyer

Brandon.Sawyer2@snhu.edu | 603-213-0066 | Merrimack, NH 03054

EDUCATION

Southern New Hampshire University (SNHU) — Manchester, NH
Bachelor of Science, Mechanical Engineering, Minor in Robotics — Expected May 2025
GPA: 3.34

Technical Skills

Design:	Autodesk Inventor, Fusion 360, SolidWorks (EPDM, Circuit-Works)
Languages:	Arduino, Python, G-Code
Software:	COMSOL, NI Multisim, NI LabView, FluidSIM, PTC Mathcad, MATLAB, Microsoft Excel
Certifications:	NC3 Festo Advanced Manufacturing – Intro to Mechatronics$_{2022}$, Fundamentals of Electricity DC_{2022}

Related Experience

Mechanical Engineering Intern, Elbit Systems of America – Defense, Merrimack, NH — May 2024 – Present

- Designed testing fixtures, developed PCB layouts, and created presentations for a Vision System project.
- Contributed to 3D modeling, updated Bills of Materials, light sensor validation, and produced part drawings in accordance with ASME Y14.5 standards for a Laser Module.
- Developed rapid designs for experimental testing.
- Created detailed documentation for pre-existing systems.

Engineering Internship, Beswick Engineering, Greenland NH — Jan. 2024 – May 2024

- Used NI LabVIEW created software for reading a DAQ and relaying calculated information to the network.
- Redesigned and built housing for an assembly testing station using SolidWorks.

Lab Assistant, SNHU IDEA Lab, Manchester, NH — Sept. 2023 – Present

- Using milling and lathe machinery to craft and enhance precision-engineered components.
- Helping to teach other students on how to machine components on a Mill and Lathe.
- Studying and writing G-Code for a Roland MDX-540 CNC.

Project Experience

Chief Analyst for Senior Capstone — Sept. 2024 – Present

- Developing a laser reflecting mirror to create an image while showing off **Light Steering Technologies Inc.'s** proprietary magnetic joints.
- Leading Research efforts across programming, electrical, and mechanical systems.
- Developing and implementing analytical tools, including F.E.A. for drop tests and Multisim for electrical design.
- Generating in-depth analysis for reports and presentations.

Junior Engineering Design — Jan. 2024 – Apr. 2024

- Developed and programmed a Heated Compression Shirt for athletes, optimized for winter conditions.
- Utilized Fusion 360 (Eagle CAD) to design a space-efficient PCB with minimal wiring.
- Led project phases, including serving as Project Manager, from concept through presentation.

Leadership Experience

SNHU Robotics Club, President (Founding Member)
ASME (American Society of Mechanical Engineers Club), Secretary
AIAA (American Institute of Aeronautics and Astronautics), Secretary

Interests

- Robotics – Creating a micro mouse to navigate through a maze and an LED Cube.
- 3D Printing & Machining – Creating parts for college classes and personal projects.