Connor Furlong

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EDUCATION

B.S. Mechanical Engineering | Milwaukee School of Engineering | Graduation: May 2026 | GPA: 3.93

TECHNICAL SKILLS

- SOLIDWORKS
- Autodesk CAD
- Creo with Windchill
- Ladder Logic (Studio 5000)
- Metal and wood shop
- 3D Print Prototypes
- MATLAB, Excel
- Microsoft Office
- Pneumatic Systems

WORK EXPERIENCE

Rockwell Automation **Milwaukee, WI**

Product Development Intern *May 2025-Present*

- Designed, modeled, and built transfer sections for high current lab testing allowing up to 100kA
- Iterated solutions to improve hole punching accuracy, saving 5 minutes per punch while decreasing defects
- Modeled in CREO with windchill to create custom bus bar for high current electrical systems
- Conducted thermal tests using heat transfer principles to determine thermocouple locations
- Monitored real time data to adjust current levels preventing overheating

Rockwell Automation **Milwaukee, WI**

Automation Engineering Intern *May 2024-May 2025*

- Collaborated with automation team to rapidly repair broken robots and mechanical stations
- Updated ladder logic for PLC code utilizing Studio 500 to improve power data collection accuracy
- Implemented cloud based software, Factory Talk Energy Manager, to track air compressor power usage
- Analyzed data to identify ideal shutoff conditions saving $4000 per year
- Presented technical tours of 100-C contactor line showcasing Rockwell equipment and software

STV Inc. **Chicago, IL**

Rail Structure Intern *May 2023-May 2024*

- Utilized CAD programs to model culverts while adding wingwalls as needed based on surrounding terrain
- Created and annotated detailed production sheet sets for Palmetto Railways
- Determined pier placement for rail bridge following CSX bridge standards

PROJECT EXPERIENCE

Rocketry Club Leader (2023-Present)

- Worked with a team to design and build a high powered rocket capable of various design targets including maximizing apogee, payload, or more specific requirements
- Worked within specific competition boundaries to create a 2-stage rocket capable of hitting max height of 10,000ft while carrying 150 golf balls, calculate thrust, acceleration, position, orientation

Mechatronics Project Based Class (2023)

- Designed, built, and programed a robotic car using sensors and 3D prints to identify and travel to objects

Teaching Assistant (2021-2022)

- Led a 3 person team in developing a new robotics class, creating presentations, drawings and models
- Taught students mechanical systems, software, automation and graded designs

ORGANIZATIONAL INVOLVEMENT

Treasurer | MSOE High Powered Rocketry Club | *August 2023-Present* | 4 hrs/wk
Tutor | MSOE Raider for Academic Success | *August 2023 - January 2024* | 3 hrs/wk
Member | Tau Beta Pi Engineering Honor Society | *August 2024-Present* | 1 hrs/mth
President | MSOE Club Soccer | *Nov 2022-Present* | 12+ hrs/wk
Mentor | First Robotics Competition | *Jan 2023-Present* | 1 hrs/wk