

William Dowell

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EDUCATION

The Ohio State University, Columbus, OH

Expected Graduation: May 2026

B.S. Mechanical Engineering

GPA: 3.64/4.00

Relevant Coursework:

- Engineering: Physics – Mechanics, Physics – E&M, General Chem, Statics, Dynamics, Mechanics, Thermodynamics, Systems, Machine Elements, Heat Transfer
- Mathematics: Calculus I, Calculus II, Calculus III, Statistics, Linear Algebra, Differential Equations

EXPERIENCE

Manufacturing Engineer Intern

Sloan Valve Company

(May 2025 – August 2025)

- Improved workplace safety by designing and implementing effective guarding solutions and ergonomic improvements.
- Enhanced manufacturing efficiency by analyzing and optimizing the workflow of a CNC machining cell for better productivity.
- Conducted a detailed workplace analysis to assess material flow, inputs/outputs, and cycle timing to ensure seamless integration with the lathe cell.

Instrumentation Technician Intern

Field Environmental Instruments

(June 2024 – August 2024)

- Calibrated and maintained air, water, and soil environmental monitoring equipment to ensure accurate field data.
- Calibrated, repaired, and troubleshooted issues with Testo 350 and JUM 3-500 gas analyzers used in environmental compliance testing.
- Worked full-time supporting field teams and ensuring equipment readiness.

PROJECTS

DV1 Mill Guarding

- Worked cross-functionally with operators and maintenance to design improved guarding using 80/20 aluminum extrusions.
- Improved factory safety by adequately protecting the user from pinch points and flying chips.
- Designed and built a mirrored attachment for light curtains on a rotating die press.

Spur Gear Test Box

- Designed and modeled a test box for spur gear lifespan for industrial agitators.
- Spearheaded mechanical component selection using MATLAB for cost-life analysis

Air Motor

- Machined a precision piston and cylinder for an air motor from raw stock.
- Developed precision machining skills on the lathe, mill, and drill press.
- Strengthened understanding of machining processes, tolerances, and terminology.

Garage Door Sensor/Remote

- Researched, programmed, and built a dynamic garage door sensor that adapts to different vehicle sizes.
- Assembled a functional prototype using Arduino components and sensors.
- Expanded programming and prototyping skills, integrating mechanical and electrical systems.

TECHNICAL SKILLS

- **Programming:** MATLAB
- **Tools:** Excel, Visio, Inventor, Onshape, SolidWorks, Creo

HONORS AND PERSONAL ACHIEVEMENTS

- AAPL Commended Student (Spanish)
- 2023 Columbus Marathon Finisher
- 2025 Chicago Marathon Finisher