

# Logan J. Waldron

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## OBJECTIVE

Mechanical engineer with proven design, and manufacturing experience seeking an entry-level mechanical design role

## EDUCATION

### The Ohio State University

May 2026

B.S. Mechanical Engineering – GPA: 3.78

- Dean's List (6 consecutive semesters) & OSU Engineering Scholar
- Certified SolidWorks Associate (CSWA) – Mechanical Design

## PROFESSIONAL EXPERIENCE

### General Motors

May – August 2025

*Quality Engineer Intern – Propulsion*

Toledo, OH

- Resolved CAD, GD&T, and tolerance issues with design teams to reduce rework and improve assembly precision
- Performed SPC and dimensional analysis on CMM data to validate design specs, enabling \$70.4K cost savings
- Reduced defect rates by 56% and 45% on two operations through root cause analysis and corrective redesigns
- Designed and deployed internal inspection workflows to streamline defect tracking and save 300+ hours annually

### Worthington Steel

May – August 2024

*Mechanical Design Engineer Intern – Structures*

Delta, OH

- Designed 40+ parts and 3 assemblies in SolidWorks/AutoCAD with GD&T to improve uptime and reliability
- Increased coil yard capacity from 270 to 1.1K and cut retrieval time by 2.5 minutes via optimized layout design
- Created BOMs and detailed drawings; validated manufacturability with vendors to ensure smooth implementation
- Partnered with engineering and maintenance to refine part designs and reduce mechanical failures by 6.3%

### Sauder Manufacturing Co.

May – August 2023

*Manufacturing Engineer Intern*

Stryker, OH

- Operated CNC equipment, monitored 10+ parameters, and recommended fixture changes that cut cycle time 15%
- Diagnosed tooling inefficiencies using Excel, boosting throughput 25% and supporting lean manufacturing
- Updated 10+ work instructions and collaborated with teams to boost manufacturability and process repeatability

## PROJECTS

### Solar Car Suspension Redesign, Buckeye Solar Racing

August 2023 – Present

- Designed vehicle suspension using SolidWorks and FEA to enhance handling and weight, and improve durability
- Led collaboration with chassis and drivetrain teams to ensure full integration and optimize vehicle performance

### Transmission Tear-Down & Failure Analysis, General Motors

May – July 2025

- Disassembled and inspected 8-speed transmission components using calipers and gauges to identify failure modes
- Documented findings with photos, analysis, and CAD annotations to support root cause investigations

### Stitcher Carry Over Table Redesign & Implementation, Worthington Steel

July – August 2024

- Designed entry/exit tables for coil handling in SolidWorks with GD&T, improving structural reliability and safety
- Collaborated with plant engineers and vendors to optimize manufacturability, structural integrity, and reduce costs
- Secured purchase order and coordinated implementation for on-schedule installation during a plant outage

## SKILLS

**Engineering and Design:** SolidWorks (modeling & simulation), AutoCAD, NX, ANSYS, GD&T, Product Development  
**Analysis and Tools:** MATLAB, Simulink, CFD, LabVIEW, Excel, Root Cause Analysis, Lean Six Sigma, DAQ Systems  
**Manufacturing:** Sheet Metal, CNC, Mill, Lathe, Waterjet, 3D Printing, Injection Molding, General Prototype Machining