Austin Lippert, EIT

Pittsburgh, PA • austin@lippertsonline.com • 724-525-8044 • AustinLippert.com

Education

Gannon University, Erie, PA Mechanical Engineering

Professional Experience

Industrial Sales and Manufacturing, Inc, Erie, PA

Engineering Intern

- Designed custom work holding and fixturing methods for 5-axis manufacturing. _
- Created process and methods using Fusion 360 to increase manufacturing efficiency on 5-axis CNC milling.
- Oversaw the process of manufacturing precision parts while complying with ISM's ISO 9001standard.
- Developed a plant wide spreadsheet of equipment based technical data to define capability across the company.

Gannon University Center for Manufacturing and Technology, Erie, PA

Senior Makerspace Lab Technician Project Manager

- August 2021 May 2025 Supported students, faculty, and local Erie businesses in their research and rapid prototyping by designing and
- manufacturing parts and processes. Trained team members on the proper operation and assembly of new equipment resulting in improved safety and knowledge in the workplace.
- Worked and implemented Six Sigma and Lean ideas in task management and standard operating procedures (SOPs) to create a flexible work environment and a constant flow of information.
- Created safety and operation guides for students and employees to reference to be properly educated on equipment and procedures in the lab.
- Acted as president of Gannon University Robotics and Development (GuBotDev) focusing in organize STEM outreach events.

Project Experience

Senior Design Capstone Project

- Designed and manufactured custom vacuum end of arm tooling (EOAT) and fixture plates.
- _ Integrated a Fanuc CRX-10iA/L and UR-5e with a press break to manage a variety of part marking applications.
- Incorporated an OCR verification camera to verify parts were stamped properly to decrease rework and rejection.

Gear Box

- Designed a 3-stage gear speed reducer for Machine Design Class. _
- A spreadsheet was created to aid in the design to determining loads, distances, and number of teeth based on torque inputs and outputs.
- This gear box was created using involute spline geometry. -
- A full Finite Element Analysis was done to properly validate design data.
- A 3d-printed model was made to present my solution and validate assembly. _

Battle Bot Competition Robot

- Designed and built a 3lb vertical spinner combat robot.
- The weapon drive train was designed by combining stock parts and 3d-printed custom designs. -
- _ Electrical components were models and specked for their torque and current draw.
- A general shape was modeled and analyzed for strength and stability.

Certifications and Licenses

Fundamental of Engineering (FE), SOLIDWORKS CAD Design Professional (CSWP), Lean Six Sigma Green Belt Certified (LSSGB), OSHA 30 Hour General Industry, CNC Machine Fundamentals: Saunder's Machine Works

May, 2025

GPA: 3.6

August 2024 – May 2025