

Austin Lippert

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Education

Gannon University, Erie, PA
Mechanical Engineering

May, 2025
GPA: 3.53

Relevant Experience

Industrial Sales and Manufacturing, Inc, Erie, PA

Engineering Intern

August 2024 – Present

- Organizing current and past 5-axis tooling, work holding, and manufacturing processes ensuring a smooth workflow.
- Programming parts using a UMC-750 to produce precision parts.
- Creating a concise overview of all equipment and processes in-plant, with technical information to serve as a definition of capability.

Gannon University Center for Manufacturing and Engineering, Erie, PA

Senior Makerspace Lab Technician Project Manager

August 2021 – Present

- 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 to create a flexible work environment and a constant flow of information.
- Delegated and managed projects to Junior Lab Technicians.
- Created safety and operation guides for students and employees to reference in order to be properly educated on equipment and procedures in the lab.

Senior Makerspace Lab Technician

- Worked with Architectural Firm to develop 13,000 sq.ft. of lab space.
- Acquired technical expertise on new equipment, enabling effective troubleshooting and maintenance to ensure proper functionality.
- Successfully researched and managed grants that aligned with organizational objectives.
- Successfully negotiated quotes for the acquisition of goods and services.

Makerspace Lab Technician

- Supported students and faculty in their research by designing and manufacturing parts and processes for projects.
- Assisted local Erie businesses by reverse engineering and designing specialty parts.
- Organize STEM outreach events in local Erie.

Montrose Environmental Group, Pittsburgh, PA

Traveling Field Technician Intern

July 2024 – August 2024

- Monitored natural gas processing plants to ensure compliance to federal and US Environmental Protection Agency guidelines.

Research Experience and Publications

“Conjuring NIMBUS From Thin Air”

Researcher and Designer

October 2022

- This sampling drone is a custom build and programmed Small Unmanned Aircraft System (sUAS) designed to collect air samples at a variety of altitudes for the purpose of aerial microbial surveillance for research and education.
- Won 1st place in the Institute of Electrical and Electronics Engineers Student Research Competition.

Various Faculty and Senior Research Projects, Erie, PA
Researcher and Designer

October 2022

Community Service and Local Outreach

Gannon University Robotics and Development (GUBotDev), Erie, PA

President

August 2021 – Present

- Organized STEM outreach and internal events to demonstrate and teach these educational skills.

Go Baby Go, Erie, PA

Designer

January 2022 – Present

- Collaborated with mechanical and electrical engineers as well as the doctor of physical therapy students focusing on providing modified ride-on cars to young children with movement challenges to increase their functional mobility.

Feeding Minds and Families, Erie, PA

Designer/Volunteer

January 2022 – Present

- Designed and Manufactured “STEM Kits” to help enhance young students knowledge and capabilities through the use of hands on activities.

IG-Knight 90, Erie, PA

Student

December 2020

- Spent time working on career readiness as well as spending 30+ hours working with a local manufacturer on fixturing, CNC Milling on a HAAS UMC 750, design, and engineering operations.

Boy Scouts of America, Lower Burrell, PA

Eagle Scout

December 2018

- Spearheaded a successful Eagle Scout project with the Veteran’s Leadership Program of Western PA, coordinating a 35-member volunteer team to collect personal items for veterans and fill over 100 custom drawstring bags. Constructed a wooden flag retirement box for the facility as an additional contribution.

Tae Kwon Do, Lower Burrell, PA

Second Degree Black Belt

Grants Funded

NHRL

\$10,000

February 2023

Skills

Computer Aided Design/Manufacturing (CAD/CAM)

- Fusion 360
- SolidWorks
- Creo 6/Pro-E

Manufacturing

- Additive Manufacturing: FDM/SLA/SLS/DLP/DMLS 3D Printing
- Co2 Laser Cutting/Engraving
- Subtractive Manufacturing: CNC/Manual Milling/Turning/Plasma Cutting

Computer Programming

- Matlab

- Python
- Java

Honors and Activities

Pi Tau Sigma, International Honor Society for Mechanical Engineers, Erie, PA November 2022

- Selected based on academic excellence, engineering ability, and demonstrated leadership, service, and integrity.

Saunder's Machine Works CNC Machine Fundamentals, Erie, PA March 2022

- Completed the intensive course in programming, running, and manufacturing parts on CNC machines such as Tormach 1100MX/1100M.

Gannon University Artificial Intelligence Committee, Erie, PA
Student Member March 2022

- Advised and supported faculty and staff on the limitations and capabilities of AI in academia. I focused in the student code of conduct and academic honesty policy revisions, as well as spreading knowledge across campus of these resources.

Deans List, Erie, PA
Student Member December 2021

Small Business Development Center Commercial, Erie, PA
Pilot/Videographer February 2023

- Drone pilot tasked with capturing footage over downtown Erie and the bayfront.

Certifications and Licenses

<i>SOLIDWORKS CAD Design Professional (CSWP)</i>	<i>Jan 2025</i>
<i>Lean Six Sigma Green Belt Certified (LSSGB)</i>	<i>July 2023</i>
<i>High Performance Teams Certified (HPTC)</i>	<i>July 2023</i>
<i>OSHA 30 Hour General Industry</i>	<i>October 2022</i>
<i>Small Unmanned Aircraft Pilot (Part 107)</i>	<i>July 2022</i>
<i>Amateur Radio General Class Operator (KC3ULC)</i>	<i>June 2022</i>
<i>Forklift Operator</i>	<i>December 2021</i>
<i>Boom Operator</i>	<i>December 2021</i>
<i>Scissor Lift Operator</i>	<i>December 2021</i>