

# Austin Lippert

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## Education

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**Gannon University**, Erie, PA  
Mechanical Engineering

May, 2025  
GPA: 3.45

## Relevant Experience

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**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.
- 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

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**“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 1<sup>st</sup> 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

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### 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

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### Grants Funded

NHRL

\$10,000

February 2023

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### Skills

#### Computer Aided Design/Manufacturing (CAD/CAM)

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

#### Manufacturing

- FDM/SLA/SLS/DLP/DMLS 3D Printing
- Co2 Laser Cutting/Engraving
- 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

*Lean Six Sigma Green Belt Certified (LSSGB)* July 2023

*High Performance Teams Certified (HPTC)* July 2023

*OSHA 30 Hour General Industry* October 2022

*Small Unmanned Aircraft Pilot (Part 107)* July 2022

*Amateur Radio General Class Operator (KC3ULC)* June 2022

*Forklift Operator* December 2021

*Boom Operator* December 2021

*Scissor Lift Operator* December 2021