

NICHOLAS MILLER

nictmil4@gmail.com | (218)-216-5563 | 304 Terrace Street, Duluth, MN 55811

EDUCATION

- Michigan Technological University (MTU)** | Houghton, MI 2023 – 2025
Bachelor of Science, Major: Mechanical Engineering, Minor: Aerospace Engineering | GPA: 4.0
Organizations: American Institute of Aeronautics and Astronautics (AIAA)
- Itasca Community College (ICC)** | Grand Rapids, MN 2020 – 2022
Associate of Science, Engineering | GPA: 3.92
Organizations: Phi Theta Kappa (PTK)
- Denfeld High School (DHS)** | Duluth, MN 2016 – 2020
High School Diploma | GPA: 4.0

WORK EXPERIENCE

- Mechanical Engineering Intern** | GPM Inc. May 2023 – Present
- Efficiently set-up and performed pump performance tests to generate new published curves.
 - Measured and modeled test pit fixtures to calculate head losses and integrate them into an Excel workbook to provide more accurate pump performance data. Changes to the workbook were verified through pump performance tests.
 - Built a system from the ground up to compare test data from multiple pumps to their published curve to verify that pumps were performing as stated. Excel VBA was utilized extensively to perform this task effectively.
- Product Development/Test Engineering Co-Op** | TEAM Industries May 2022 – December 2022
- Designed, conducted, and interpreted data from studies that allowed TEAM and their customer, Polaris, to make informed process changes to the assembly and machining of various parts.
 - Utilized Creo Parametric modeling software to create fixtures that allowed repeatability within studies and tools that are used during the construction, testing, and tear-down of TEAM products.
 - Acquired knowledge of how involute gears and splines are utilized in transmissions, transaxles, and right-angle drives.
- Engineering Work-study** | Itasca Community College August 2021 – May 2022
- Supervised, cleaned, and organized the fabrication labs ensuring that equipment was ready and safe to be used.
 - Taught and assisted students in the use of the fabrication lab equipment.
 - Tutored students across various subjects within and outside the engineering curriculum.
- Assistant Mechanic** | Jonathan Aero June 2020 – August 2020
- Prepared planes for annual inspection by removing inspection panels and interior components, cleaning spark plugs, and performing other maintenance items as necessary.
 - Showed attention to detail by organizing and cleaning the hanger resulting in a safer and more effective workspace.

LEADERSHIP AND INVOLVEMENT

- Lunabotics Astro-Huskies, Mechanical Lead** | MTU August 2023 – Present
- Will lead a small team of mechanical engineers in order to fundraise, design, build, and compete with a new robot in NASA's Lunabotics competition in the spring of 2024.
- FRC Robotics Team, Build Captain** | Denfeld High School 2017 – 2020
- Led the team to raise over \$45,000 dollars in funding and sponsorships during 2020.
 - Mentored students on mechanical aspects of robot construction, emergency repairs, and gracious professionalism.
 - Won second at state in 2019 and the Engineering Inspiration Award in 2020 securing our team a spot at the world championships, and various other awards during time on the team.
 - Volunteered at numerous events in Duluth to spread STEM within various schools and communities.

SKILLS AND CERTIFICATIONS

- Certified Solidworks Professional (CSWP)
- Intermediate GD&T Training
- Statistical Analysis
- Hands on Engineering Experience
- Excel VBA, C++, MATLAB, & Mathematica
- Pilot Ground School