



JOSEPH MILLER

ROBOTICS ENGINEER | 679 PINE CONE TRAIL, EAGAN MN 55123

OBJECTIVE

Seeking a role in robotics, mechanical engineering, or manufacturing to apply my skills and drive, aiming to contribute to innovation in a dynamic production environment

SKILLS

- SolidWorks
- OnShape
- GD&T
- Part Detail Drawings
- Pneumatics Schematics
- Safety Risk Assessments
- Additive Manufacturing/3D printing
- Prusa 3D Printers
- Linux
- ROS
- Java
- C programming language
- Teamwork
- Communication
- Self-starter

EXPERIENCE

MECHANICAL ENGINEER INTERN • ASPECT AUTOMATION • MAY 2023 – AUG. 2023:

Worked independently to accelerate project release timelines by creating innovative, detailed drawing for custom parts • Created CAD assemblies to be manufactured and installed on automation machines • Updated and verified pneumatic schematics to reflect the actual machine specs • Verified and signed off on safety risk assessments

RESEARCH ASSISTANT • MTU ECE DEPARTMENT • FEB. 2023 – APR. 2023:

3D printed parts and built assemblies for bipedal robots used in control algorithm research • Tuned and recommended changes to printing materials to increase part strength

SALES ASSOCIATE • DOWN WIND SPORTS • OCT. 2022 – APR. 2023:

Waxed and sharpened skis • Assisted customers with product selection • Display Design • Sized & recommended skis and boots to customers

RETAIL SALES ASSOCIATE • SIERRA • SEPT. 2019 – DEC. 2022:

Honed interpersonal skills as a cashier • Assisted customers with product selection

EDUCATION

ROBOTICS ENGINEERING • APR. 2025 • MICHIGAN TECHNOLOGICAL UNIVERSITY

GPA: 3.75

EAGAN HIGH SCHOOL • JUNE 2021

GPA: 3.71 • AP Scholar with honors



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VOLUNTEERING & CO-CURRICULARS

CO-CURRICULARS

- Mechanical lead for the MTU DIVER enterprise project: Design and build an underwater robot to explore, map, and obtain samples in the Quincy Mine
- SAE Aero design competition representing MTU
- FIRST Tech Challenge captain 2018-2021

VOLUNTEERING

- Mentor for two FIRST Robotics teams (FLL, FTC)

AWARDS & ACHIEVEMENTS

- Granted Stratasys scholarship for 3D printing
- 10 Years of FIRST robotics experience (FLL, FTC)
- Qualified for FTC world championship by placing second at the Minnesota State tournament
- Received 1st place Inspire award for overall team excellence, Think award for engineering notebook, and Connect award for community outreach from FIRST Robotics
- 6 years of CAD and 3D printing experience
- Built and modified Prusa I3 Mk3s 3D printer
- Certificate from MIT in Additive Manufacturing for innovative design and production • Dec. 2020

REFERENCES AVAILABLE UPON REQUEST



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