

# RYAN MALVEY

mahtomedirm@gmail.com

651-894-3350

<https://ryanmalvey.github.io/portfolio/>

---

Dedicated and hardworking student majoring in software engineering at Milwaukee School of Engineering with an expected graduation date in 2026. Completed engineering projects including building a working FPV drone, designing and constructing a mini fridge, and creating an aquatic vehicle. Inventor on granted patent for “Automatic fire resistant exterior shutter.” (US Patent No. US 9,297,198 B2).

## **Education**

Mahtomedi High School, Mahtomedi, MN

- GPA: 3.82
- High Honor Roll (2018-2022)

Milwaukee School of Engineering, Milwaukee, WI

- Software Engineering Major
- Expected Graduation May 2026

## **Work**

Event Staff, Mahtomedi School District (2019-2022)

- Set up equipment for gymnastics meets, kept track of the score and ran clock for basketball games.

Mahtomedi Adventure Club (MAC), Mahtomedi School District (2021, 2022)

- Supervise elementary and middle school kids, including chaperoning field trips.

## **Skills**

- |              |                   |               |
|--------------|-------------------|---------------|
| ● Java       | ● Fusion 360      | ● Soldering   |
| ● HTML       | ● 3D Printing     | ● CNC Routing |
| ● Python     | ● Prusa Slicer    |               |
| ● Solidworks | ● Laser Engraving |               |

## **Project Experience**

Construction of a First Person View Drone (3 months)

- Built an FPV drone using parts found online. Project involved soldering circuit boards.

Design and Construction of a Mini Fridge (1 month)

- Designed an insulated chamber and implemented a cooling device. Finished by bolting laser cut acrylic paneling to the wooden frame of the fridge.

Design and Creation of an Aquatic Vehicle (10 months)

- Designed a surfboard using Fusion 360 and cut using a CNC router. Used marine epoxy and fiberglass to make the board. Built a propulsion system using a motor, ESC, and lithium ion batteries. Attached propulsion system to board using 3D printed mount.

## **Achievements**

- Inventor on granted patent (US Patent No. US 9,297,198 B2)
- Real World Design Challenge State Winner (2018-2019, 2020-2021)
- Real World Design Challenge National Merit Award for Creativity (2020-2021)
- Cross Country All Conference (2020)

**Involvement**

- Team Captain, Real World Design Challenge (2020-2021)
- Team Captain, Robotics (2021-2022)
- Lead Engineer, Drone Club (2020, 2022)

**Athletics**

- Cross Country Team Captain (2020, 2021)
- Cross Country Varsity Letter (2018, 2019, 2020, 2021)
- Track and Field Varsity Letter: (2019, 2021, 2022)