RYAN MALVEY

mahtomedirm@gmail.com
651-894-3350
www.linkedin.com/in/ryanmalvey
https://ryanmalvey.github.io/portfolio/

Software engineering student from Milwaukee School of Engineering, on track for a 2026 graduation. My journey has seen me grapple with challenges from the skies to beneath water, and even confronting the raging threat of wildfires. An internship threw me into the deep end with intricate Salesforce user stories that demanded more than just conventional thinking. Each challenge I've faced has a story behind it — a solution, a result, an innovation. Dive into the details below, and uncover the ways I've navigated these hurdles.

Work

NMDP Salesforce Development Intern (2023)

- Worked on 1-4 point stories as a developer.
- Participated in a mature agile scrum environment.
- Used gearset to deploy stories from dev to QA.
- Worked in an environment that used DevOps to streamline the development process.
- Wrote and incorporated apex into a flow when it encountered a field-level security issue.

MSOE Cove Student Scholar (2023, 2024)

- Assisted other students with their projects in the Nelson prototype lab.
- Work included using 3D printers, Cricut machines, and a button maker.

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

- Supervised elementary and middle school-aged kids.
- Solved disputes between kids.
- Chaperone for field trips in chaotic environments.

Skills

- Salesforce
- Java
- Javascript
- HTML
- Python
- C++
- C
- Apex
- Scrum
- Software Verification
- UX Design
- Design Patterns
- Solidworks
- Fusion 360
- 3D Printing
- Prusa Slicer
- Laser Engraving
- CNC Routing

Project Experience

Created a Portfolio Website

- Used html, css, and javascript to create a portfolio website.
- Created functional tabs to condense information.
- Added photos with pop up text on mouseover for each project.

Design and Construction of a Mini Fridge (1 month)

- Designed an insulated foam chamber and implemented a cooling device.
- Mounted the chamber on a wooden frame for strength and portability.

- Finished the design by bolting laser cut acrylic paneling to the frame of the fridge.

Construction of a First Person View (FPV) Drone (3 months)

- Researched and sourced parts for my design including some custom soldering to get the circuit boards to communicate.
- Encountered an issue where the drone would start, but not move, and had to use different troubleshooting techniques to eventually locate the broken part.
- Took a leap of faith that my analysis was correct, and purchased a replacement part which succeeded in fixing the issue with the drone.

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 shape the board.
- Built a propulsion system using a motor, ESC, and lithium ion batteries.
- Attached propulsion system to board using 3D printed mount.
- Ran into many issues throughout this project including water leakage, motor stuttering, and controller disconnects, but solved each of them with thorough research.

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

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)

Involvement

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

Athletics

- College Cross Country Runner (2022, 2023)
- College Track Runner (2024)
- High School Cross Country Team Captain (2020, 2021)
- High School Cross Country Varsity Letter (2018, 2019, 2020, 2021)
- High School Cross Country All Conference (2020, 2021)
- High School Track and Field Varsity Letter: (2019, 2021, 2022)