Tayber J. McMullen

tjm253@uw.edu • tjm253.github.io • linkedin.com/in/tayber-mcmullen-1043281a3/

SUMMARY OF QUALIFICATIONS

- Experienced in a range of fields and environments with a great attention to detail. Proficient in structural analysis for life and safety in varying stress states and structural failure and fluent in the fundamentals of mechanical engineering.
- A positive addition to any social environment and completed numerous group projects with experience in *MATLAB*, *Solidworks*, *AutoCAD 2D*, *Python* and finite analysis.

EDUCATION

University of Washington – Tacoma, WA — Graduating June 2023
Bachelor of Science in Mechanical Engineering
Cumulative GPA: *3.79/4.00* • Major GPA: *3.79/4.00*

Pierce College – Puyallup, WA — July 2021
Associate in Science majoring in Mechanical Engineering
Cumulative GPA: *3.91/4.00*

PROFESSIONAL EXPERIENCE

Tres West Engineers, Inc. — June 2022 – September 2022
Mechanical Engineering Intern – Tacoma, WA
- Using engineering fundamentals in heat transfer, thermodynamics, and air dynamics, I performed calculations to determine heating, cooling and ventilation loads for buildings of differing types using ASHRAE standards and the WA State building code.

Abacus Electric — June 2021 – September 2021
Electrical Trainee – Fife, WA
- Performed commercial and lighting renovations under the supervision of experienced electricians.

Safe Consulting Services — July 2020 – June 2021
AutoCAD Technician – Snohomish, WA
- Designed fire alarm systems starting from floor plan drawings to complete design plans up to apartment-sized buildings.

PROJECTS

All past and present projects can be found here: tjm253.github.io/blog/

TECHNICAL PROFICIENCIES

- *SolidWorks* (certified), *AutoCAD 2D* (fluent), *MATLAB* (intermediate), Python (beginner)
- Fluid dynamics, thermodynamics, physics, mathematics, heat transfer, mechatronics
- Analysis of structures and systems under external and internal forces in varying stress states
- Technological abilities: *Linux*, *MS Suite*, printers/plotters, and 3D printers

RESEARCH EXPERIENCE

Undergraduate Research, Organ Cryopreservation – Seattle, WA — January 2021 – Present
- Researched methods to cryopreserve human tissue for practical medical usage under Dr. Zhiquan Shu of University of Washington Seattle. Tasked with researching in heart valve cryopreservation and authoring an article of findings for university publication.

INVOLVEMENT AND VOLUNTEERING

Elected Officer, IEEE club – Tacoma, WA — June 2022– Present
- Elected officer of the IEEE club which combines the efforts of engineering students from multiple disciplines to design an autonomous machine that will be entered into a competition in spring of 2023.

Volunteered at Door of Faith Orphanage – Baja California, Mexico — April 2019
- Volunteered with a team where we built fences, painted houses, and landscaped for the for the Door of Faith Orphanage.

Ram Pride Award – Puyallup, WA — Fall 2018
- Given at end of tennis career at Rogers Highschool in Puyallup, WA. The Ram Pride Award is awarded to select players who show outstanding character and leadership as a Rogers Ram.