Tayber J. McMullen

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SUMMARY OF QUALIFICATIONS

- Experienced in the trades under professionals where teamwork and organization are essential. Proficient in structural analysis for life and safety in varying stress states and structural failure and educated in the fundamentals of mechanical engineering.
- Effective in CAD software in designing and complex safety system with the ethical and industry standards in mind with a variety of modeling and drafting software including *AutoCAD* 2D and *SolidWorks*.

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: 3.92/4.00

PROFESSIONAL EXPERIENCE

Tres West Engineers, Inc. — June 2022 – September 2022
Mechanical Engineering Inter – 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 in various environments, with customers and people with varying backgrounds.

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 to minimize complexity and applied industry and company standards to satisfy the customer's needs.

TECHNICAL PROFICIENCIES

- *SolidWorks* certification in associate-mechanical design 2022 from *SolidWorks*
- *AutoCAD 2D* (fluent)
- *MATLAB* (intermediate)
- Python (beginner)
- Fluid dynamics, thermodynamics, physics, mathematics
- Analytical analysis of structures and systems under external and internal forces in varying stress states
- Technological abilities: work remotely, *Linux*, *MS Suite*, printers/plotters, 3D printers, and manual machining

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 and the present market value of cryopreservation technology.

INVOLVEMENT AND VOLUNTEERING

Elected Officer, IEEE University Mars Rover Competition – Tacoma, WA — June 2022 – Present

- Newly elected officer to meet with a team to hopefully complete a fully functioning autonomous mars rover model that might assist astronauts working on the surface of Mars. The competition is hosted and held annually by the Mars Society.

Volunteered at Door of Faith Orphanage – Baja California, Mexico April 2019

- Volunteered with a team and we built fences, paint houses and did landscaping for the Door of Faith Orphanage in Baja California, Mexico.

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.