David J. Tobin

Contact

• Laramie, WY

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Objective

To begin my professional engineering career by applying my diverse engineering experiences, graduate-level education, and ambitious personality to a full-time engineering position starting September 2020.

Education

University of Wyoming - Laramie, WY

Fall 2014 - Present

- Master of Science, Mechanical Engineering August 2020 Graduation
- Bachelor of Science, Mechanical Engineering Graduated December 2018
- Mathematics and University Honors Program minors
- 4.0 Graduate GPA (4.0 scale), 3.96 Undergraduate GPA (4.0 scale)
- EI Certification No. 6462 Wyoming Board of Professional Engineers and Professional Land Surveyors
- Undergraduate Research Fellowship funded by the Wyoming NASA Space Grant Consortium
- Instructor for the U.W. McNair Program's GRE Quantitative Reasoning preparation course
- Tutor for the Tau Beta Pi Engineering Honor Society and U.W. Student Success Services
- ASUW Student Government Senator for the College of Engineering and Applied Science
- Western Thunder Marching Band and Basketball Pep Band member

Engineering Experience

U.W. Mechanical Engineering Department - Laramie, WY

January 2019 - Present

<u>Graduate Research Assistant</u>: Completing graduate level coursework while conducting thesis research sponsored by the U.S. Department of Energy. Research is focused on numerically simulating radiative heat transfer in complex multiphase flows by utilizing Photon Monte Carlo methods. Resulting high fidelity models will allow for verification and implementation of the P1 radiation model into the MFIX CFD suite.

Deep Space Systems - Littleton, CO

Summer 2017, January 2018

Intern - Test Engineer: Worked full time on a NASA subcontract to develop and test a complex camera system for the Orion Multi-Purpose Crew Vehicle in accordance with detailed customer requirements. Administered thermal cycle, random vibration, proton radiation, modulation transfer function, and shock test procedures to flight hardware, executed inspection, functional, and performance tests to continuously determine hardware status, and communicated with NASA and Lockheed Martin representatives through written test reports in order to meet aggressive delivery deadlines for Exploration Mission 1 (Artemis 1).

HollyFrontier - Cheyenne, WY

Summer 2016

Intern - Mechanical Engineer: Worked full time in the Capital Projects & Design Engineering department of the region's premier oil refinery while learning how to utilize my engineering education in the professional environment of a Fortune 500 company. Learned fundamental refinery processes and operations, assisted with three main capital projects totaling more than \$5 million, worked closely with numerous engineering contractors, developed detailed cost estimates, effectively communicated project status to management, and strived for safe, successful, and profitable production of petroleum products.

Technical Skills

<u>Programming Languages:</u> MATLAB, Python, FORTRAN, C++, HTML/CSS

Engineering Software Skills: SolidWorks, AutoCAD, ANSYS Fluent, LabVIEW, LATEX, EES, Linux

Microsoft Office: Excel, Word, PowerPoint, Outlook, SharePoint

Honors

- President's Honor Roll
- Magna cum laude graduation status
- Mechanical Engineering Department Honor Book recipient
- Outstanding Junior in Engineering Award (Finalist) Tau Beta Pi Engineering Honor Society
- Outstanding Sophomore in Engineering Award Tau Beta Pi Engineering Honor Society
- Outstanding Freshman in Engineering Award Tau Beta Pi Engineering Honor Society
- American Council of Engineering Companies of Wyoming Scholarship
- Eagle Scout Rank in the Boy Scouts of America