Radley Rel

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EDUCATION

Northern Arizona University, *B.S. Mechanical Engineering*, Flagstaff, AZ | **Graduation: Fall 2022**
- Relevant Courses**:** Aerodynamics, Fluid Mechanics, Dynamics, Thermodynamics, Machine Design, Structural Analysis, and Material Science
- Awards: Dean's List 2017-2019

WORK EXPERIENCE

Northern Arizona University, *Teaching Assistant* Flagstaff, AZ | Aug 2018 – Dec 2021
- Engineering Teaching Assistant for Engineering Design, *Two Sections per semester; 80 Students*
- o Graded all homework and was in class once a week to assist students, separate tutoring sessions and managed bookkeeping
- Engineering Teaching Assistant for Engineering Design II, *Single Section; 40 students*
- o Graded all homework and was in class once a week to assist students, separate tutoring sessions and managed bookkeeping

PROJECT EXPERIENCE

Solar Powered Unmanned Aerial Vehicle, *Senior Capstone Project* Flagstaff, AZ | Jan 2022 – Dec 2022
- Budget Liaison and Lead Manufacturing Engineer of six engineering students; four mechanical and two electrical
- Design and construction of multiple unique aircrafts while in cohorts with NACA standards
- Tested designs using software such as XFoil and SolidWorks, along with physical wind tunnel lab testing
- Worked with Vertical Mill and 2-Axis Lathe to fabricate necessary parts

Renewable Energy Solar Design and Build Project, *Solar Design/Build Project* Flagstaff, AZ | Aug2022 – Dec 2022
- Lead Systems and Design Engineer of eight mechanical engineering students
- Designed a Solar system within SMA Sunny Design, Sunny Island software to handle the family's expected daily loads
- Off-grid solar design and simulation, wind power analysis and design, battery system design, and on site installation conducted
- Built a customer-client relationship with the Wilson family

Lumberjack Motorsports SAE Baja Collegiate Competition, *Junior Year Project* Flagstaff, AZ | Jan 2021 – May 2021
- Frame and Rear End Lead of four engineering students; developed a chassis and strong rear suspension system
- Worked in the machine shop to develop and manufacture the Chassis of the vehicle along with body panels, safety equipment, and driver ergonomics using machines such as a vertical mill, lathe, and bandsaw
- Used CAD software such as Fusion 360 and Solid works to develop the vehicles subsystems
- Designed the Vehicles subsystems based on a strict set of rules and regulations put in place by the society of automotive engineers (SAE)

SKILLS

Software: SolidWorks, MATHCAD, MATLAB, AutoDesk Fusion 360, Excel, SMA Sunny Design, and Adobe Dreamweaver
Hardware: Vertical Mill, Lathe, Bandsaw, and Soldering

References Provided Upon Request