

Someone

555-555-5555 | jn30@gmail.com

EDUCATION

Land Grant University

Bachelor of Science in Physics

Midwest

May 2020

EXPERIENCE

Structural Design Engineer

Aerospace Company

January 2023 – Present

Midwest

- Interacted with workers on shop floor to gauge tooling needs, created a plan of action, and designed a cost effective and structurally sound solution
- Performed project management by overseeing the process from design to production, mitigating holdups in the process
- Translated actual problems to Finite Element Analysis (FEA) model, interpreted analysis results while performing hand-checked calculations to ensure full understanding, and employed best solution

Research Engineer

Propulsion Research Company

May 2020 – September 2020

Southwest

- Performed computational fluid and thermodynamic calculations, resulting in an increased efficiency in a nuclear thermal propulsion system by 13%
- Utilized MCNP to determine the survivability of an antimatter sphere through an interstellar distance, binned the energy deposition, and prevented a chain reaction thereby keeping the sphere in tact
- Presented research findings to team members and wrote SBIR grant proposals for my advanced propulsion ideas

Unlicensed Reactor Operator

University Nuclear Reactor Facility

August 2018 – May 2020

Midwest

- Performed surveillance tests, gathered data, and input information into an internal database for further review and record keeping
- Managed accurate and efficient control adjustments to position rods and to regulate flux level, coolant temperature, and reactor period
- Identified reactor equipment problems and applied appropriate resolution strategies to resolve issues
- Worked with other departments to determine their irradiation needs, developed an experiment, and operated the reactor to get the proper power level to conduct research
- Trained new staff in reactor operation, radiation detection methods, and NRC (10CFR) specifications

TECHNICAL SKILLS

Laboratory: Electronics, Circuitry, Experimental Design

Software: CATIA V5, MCNP, COMSOL, AutoCAD, ANSYS, Nastran, Python, MATLAB

Libraries: SciPy, NumPy, Matplotlib