Xavier Stephenson

• xavierstephenson123@gmail.com • https://www.xavierstephenson.net/ •

EDUCATION

B.S., Mechanical Engineering *May 2024*
University Of Delaware, Newark, DE 3.57 GPA
College Engineering, The Honors College
Relevant coursework: Finite Element Method, Rocket Propulsion, Aerodynamics, Heat Transfer

TECHNICAL SKILLS

Design and Modeling Tools: SOLIDWORKS, Onshape, Simscale, Creo Parametric
Programming: Python, JavaScript, C++, MATLAB, Google/Office Scripts, Batch
Data-basing: MongoDb, PowerBi, Excel
Molecular Dynamics Program: LAMMPS

EXPERIENCE

Holtec International, Camden NJ: Assistant Project Manager *January 2025 - Present*

- Develop several datasheets, to track hundreds of individual tasks, schedule activities, and budget of multi million dollar nuclear waste management projects
- Facilitate design reviews design for compliance with engineering principles, contract requirements, and applicable standards and act as the final approver
- Compile data to report with internal and external stakeholder on the status of dry cask storage projects

Eagle Group, Clayton DE: Mechanic Design Engineer *June 2024 - December 2024*

- Design systems and manage project scopes, timelines, costs, and implementation for new development and existing product modifications
- Oversee all phases of the custom manufacturing process, including engineering, design, production drawings, assembly support, quality, and testing
- Develop multiple datasheets and programs to automate several phases of the engineering process

University of Delaware, Newark, DE: Research Intern *May 2023 – September 2023*

- Employed high performance computing cluster to model the various properties of Ultra High Temperature Ceramics (UTHC) to increase the understanding of hyper-sonic materials
- Created custom program to arrange thousands of atoms to mimic ceramics on a molecular level to run on LAMMPS and simulate real conditions of UHTCs

ACADEMIC PROJECTS

NASA Flexible Tire Footprint Contact Measurement *February 2024 – May 2024*
Designed a device to read the pressure distribution, contact footprint, and 3d deformation of an airless flexible tire

- Developed an app that takes in data from two depth sensors and computes the contact footprint and 3D deformation.
- Characterize the relation of stress distribution of the contact medium and location and intensity of input pressure

NASA Synthetic Sensor-Embedded Moon Rock Design and Manufacturing *September 2023 - January 2024*
Designed a simple manufacturing process to create a wide array of synthetic sensor inexpensive moon rocks

- Researched the various material properties of moon rocks for replication from the NASA Astromaterials Database
- Tested the validity of the manufacturing process at NASA Glenn Research Center

ACTIVITIES

University of Delaware, Newark, DE: Resident Assistant *August 2022 – May 2024*

- Served as a resource and leader for a community of 20 plus students living on the dorm floor
- Acted as a first responder for any emergency happening in the vicinity of 4 dorm building

University of Delaware, Newark, DE: Teaching Assistant *August 2022 – May 2024*

- Assisted learning for four courses Thermodynamics, Mechanics of Solids, Fluid Mechanics, and Heat Transfer
- Taught weekly discussion classes for a class of 30 students and engaged with students individually during 10 hours of weekly office hours