

EDUCATION

University at Buffalo

BS, Aerospace and Mechanical Engineering (*Double Major*) | GPA: 3.55 | *Dean's List*

Buffalo, NY

August 2022

Relevant Coursework: Space Dynamics & Control, Propulsion, Aircraft Design, Flight & Gas Dynamics, Aerodynamics, Aerospace Structures, Design Process & Methods, Manufacturing Processes, Engineering Materials, Dynamic Systems, Intermediate Dynamics, Thermodynamics, Fluid Mechanics

SKILLS

Languages : MATLAB, Python

3D Design & Simulation : Solidworks, FEA, STK AGI, OpenRocket

Other : Microsoft Office, Windows OS

PROJECTS

Solar-Irrigation Garden | BRRAlliance

Sept 2019 - May 2020

Project Lead

- Led team of 4 in concept design and selection of most feasible solution for solar irrigation project
- Implemented customer requirements and engineering characteristics to address problem statement
- Adapted solar and electrical wiring concepts from scratch within a 1 month time frame
- Performed quantitative model analysis on solar requirements
- Conducted material research and cost analysis within a \$750 budget
- Attained approval from program director to implement final design in local WNY garden

Micro-G NExT | NASA

Sept 2019 - May 2020

Structures Team Member

- Collaborated with team on 2020 SAVER design challenge
- Analyzed and explored different design shapes for autonomous maritime vehicle
- Iterated through different exhaust methods in hull
- Invited by NASA to Johnson Space Center for Phase 2 of competition

Students for the Exploration and Development of Space | UB SEDS

Sept 2019 - May 2020

Structures Team Member

- Formed fiberglass layup for rocket tube bulkheads
- Tested different mold formations using different release film techniques
- Reviewed CAD design to increase aerodynamic efficiency

Stirling Engine | Project

Sept 2019 - Dec 2019

- Constructed 3 different Stirling engine designs using household items and tools
- Applied thermodynamic concepts and principles in the design of the engines
- Incorporated component analysis to ensure all necessary parts were representative of desired engine

Wind Turbine | Project

Sept 2018 - Dec 2018

- Tested a total of twelve different design factors
- Compared quantitative data and practicality factors before moving forward with design elements
- Studied design specifications and testing results using decision matrices and comparison metrics
- Increased the maximum power generated by over 3000 times from .01009 mW to 33.57 mW
- Achieved efficiency rating from $\approx 0\%$ to 2.35% using readily available items

OTHER WORK EXPERIENCE

Prime Now Associate | Whole Foods Market

May 2019 - Aug 2019

- Assisted in delivering quality groceries to thousands of customers per day
- Ensured the picking and packing quality of fruits, meats, and overall groceries
- Assisted team members whenever available
- Trained incoming associates
- Awarded on many occasions by manager for high performance