

Education

Rensselaer Polytechnic Institute, Troy, NY 2014 - Present
Bachelor of Science in Aeronautical Engineering Expected May 2018
GPA (Cumulative): 3.73 GPA (Major): 3.90 Dean's List 6/6 Semesters

Relevant Coursework:

Advanced Design Optimization, Space Vehicle Design, Propulsion Systems, Boundary Layers and Heat Transfer, Aeroelasticity and Structural Vibrations, Aerospace Structures and Control Laboratory, Spaceflight Mechanics, Combustion Systems, Numerical Linear Algebra with Applications, Aerodynamics, Aerospace Structures and Materials, Numerical Computing, Thermal and Fluids Engineering

Engineering Experience

Optimal Design Lab, Undergraduate Research Assistant, Troy, NY Summer 2016 - Present

- Development of programming interface to model fluid flow in virtual reality learning environment
- Development of mapping and discretization algorithm with applications related to robust accurate simulation of turbulent flows

Rensselaer Rocket Society, Payload Lead, Troy, NY Fall 2014 - Present

- 2017-2018 NASA Student Launch
 - Payload Team Lead – Manage a team of 6 people, setting and achieving milestones, writing reports, leading mind mapping sessions, culminating to the development and creation of an electro-mechanical payload to detect ground objects in real time
- 2016-2017 NASA Student Launch
 - President – Administrative and external point of contact, coordinate club events, oversee all club activities
 - Oversee design, development, and integration of all rocket systems to see a successfully completed project
 - Technical design and development of mechanical payload
- 2015-2016 NASA Student Launch
 - Recovery Team Lead – Responsible for design of recovery hardware/software as well as execution of safe parachute deployment and recovery
 - Tasked with integrating all major systems together (structural, recovery, scientific payload)

Center for Composite Materials, Engineering Intern, Newark, DE Summer 2015

- Mechanical design of test fixture for testing composite subcomponents, including adaptability to different composite shapes and attachment methods, and having the capability to attach multiple force and acceleration sensors
- DVIRC Advanced Manufacturing Technology Immersion Course, fabrication of prototype composite parts using out of autoclave processes

North Station Millwork, Shop Assistant, Ferrisburgh, VT 2012 - 2014

- Production of finished custom mouldings and flooring from rough cut lumber
- Technical operator of shop equipment

Skills

Software

- CAD — Dassault Systemes Catia V5, Siemens NX (Unigraphics), Solidworks, and AutoCAD
- Programming/Productivity — Microsoft Office, C, Python, MATLAB, Julia, and Git

Fabrication

- Machining — Manual and CNC Metalworking Lathe, and Vertical Mill

Interests Skiing, Hiking, Backpacking, Fishing, Kayaking, High Power Rocketry