Jordan Handy

Jhandy03@vt.edu | 661-621-5632 | Blacksburg VA, 24060 | LinkedIn | MachWorks | Personal Website

Education

Virginia Tech - College of Engineering - Blacksburg, VA | GPA: 3.05

August 2021 - Present

• Bachelor of Science: Aerospace Engineering - Propulsion

Expected Graduation: Spring 2026

Experience

Undergraduate Research Design Team - Optical Standoff, GrayUR

May 2025 - Present

• Assisting in a team working with the US Army Countermine Division

Undergraduate Research Assistant - Pratt and Whitney Engine Test Stand, VT APPL

May 2025 - Present

 Assisting in the development, implementation, and maintenance of a new jet engine test stand in a partnership between Virginia Tech and Pratt and Whitney Canada

The Home Depot- Deliveries associate

May 2023 – August 2023

 Managed incoming and outgoing deliveries for customers while also assisting, using machinery, the transportation of customer orders

Relevant Projects

Propulsion Lead - MachWorks

March 2024 - Present

- Leading the design and implementation of propulsion systems for a UAS aimed at a 220-mph top speed
- Facilitated sponsorship discussions leading to donations worth over \$15,000
- Manage a team of 15 undergraduate students
- Designed and manufactured an intake for the current team aircraft
- Designed an afterburner to be retrofit to a hobby sized turbojet engine increasing thrust by 20%
- Developing a Python app that designs and optimizes afterburners utilizing CFD, combustion analysis and a custom designer optimization solver
- Working to develop a variable area nozzle for use in conjunction with afterburner system

Propulsion Director - StageZero

May 2025 - Present

- Leading the design of a liquid bipropellant rocket engine
- Helping establish the team as officially recognized by Virginia Tech
- Wrote code to derive the design parameters for the engine
- Developed a custom user interface in python for use on an engine test stand
- Validated CAD models in the CFD program Ansys Fluent

Skills

- CAD & Modeling: SolidWorks, Autodesk Fusion 360, OpenVSP
- Simulation & Analysis: SolidWorks, Ansys Fluent, StarCCM+, NPSS, Simulink, NASA CEA, Cantera, OpenFOAM,
- Programming: MATLAB, Python
- Project Management: Microsoft Office Suite