ZACHARY DUTTON

Aerospace Engineering Student
41 Ayers Lane, Dover, NH 03820
(603) 828-2738 zdutton04@gmail.com

Education

University of Central Florida, Orlando, FL (2023-Present)
Bachelor of Science, Aerospace Engineering

Embry-Riddle Aeronautical University, Daytona, FL (2022-2023)
Bachelor of Science, Aerospace Engineering

- Relevant Coursework: Intro to Computing for Engineers, Graphical Communications

Dover High School, Dover, NH (2018-2022)

- Relevant Coursework: Honors Pre-Engineering (PLTW - 3 Year Dual Enrollment)

Internships

Pratt & Whitney, Aftermarket Sustainment Engineer Co-Op: (January 2025– May 2025)

- Collaborated with repair technicians to assess damage on aftermarket parts and develop repair solutions in accordance with approved aircraft documentation; additionally analyzed field data trends to identify new methods to mitigate recurring damage.
- Assessed aftermarket part damage using repair technician inputs and regulatory documentation, creating compliant repair procedures while analyzing recurring damage trends to propose optimized solutions.
- Evaluated technician-reported damage on aftermarket parts, created repair solutions in line with official aircraft documentation, and conducted trend analysis to recommend improvements that reduce future field failures.

Sig Sauer, Additive Intern: (May 2024 – August 2024) (May 2025 – August 2025)

- Operated and maintained EOS M290 & M400 DMLS printers, Volkmann Powder Extraction Systems, and Grenzebach Exchange Modules to ensure consistent additive manufacturing production.
- Collaborated with injection molding vendors and managed the operations of all metal printers.
- Diagnosed and resolved error codes, optimizing machine performance and implementing new processes.
- Played a key role in a newly established department, working closely with the director to streamline tasks and adjust control plans.

Pirouette Medical, Engineering Intern: (May 2023 - August 2023)

- Contributed to the testing, building, and development of a new auto-injector device.
- Assembled a clean room environment, operated heavy machinery, and conducted device testing, reporting findings.
- Assisted in the optimization of engineering processes and protocols, ensuring compliance with industry standards.
- Collaborated with the engineering team to troubleshoot and resolve technical issues, enhancing overall product quality.

Project Experience

MATLAB Project: **(**December 2022)

- Developed an image comparison code that identified a user's target image among multiple images in an input folder.

Switch Lab Electric Vehicle, High School Project: **(**September 2021 – June 2022)

- Collaborated with classmates to construct a one-seater, street-legal electric vehicle capable of reaching 45 mph.
- Enhanced understanding of electric vehicles and developed teamwork skills in a large group setting.

Work Experience

Dover Honda, Lube Mechanic: (June 2022 - August 2022)

- Addressed customer-oriented basic mechanical needs in a fast-paced, team-based setting.

Target, Closing Expert: (May 2021 - June 2022)

- Assisted in various departments, accurately following processes and prioritizing tasks.

Activities

Baja Club (September 2023 – Present)

- Played an integral role in a national-level Baja SAE team, collaborating across multiple sub-teams.
- Utilized SolidWorks to create the wireframe for the vehicle body, contributing to overall CAD design efforts.
- Assisted in constructing a PVC prototype of the chassis, providing hands-on support and technical insights.

Additional Skills

Engineering Software: MATLAB, SolidWorks, Fusion 360, OnShape, Autodesk Inventor, Catia, Multisim, Aery32

Technical Skills: DMLS Printing, Additive Manufacturing, Injection Molding, Ultrasonic Welding, Pressure Decay and Occlusion Testing, 3D Printing, CNC Milling, Soldering, Tensile Testing, 2D Optical Micrometer Testing, Pad Printing, Pneumatic Liquid Dispensing

Certifications: OSHA 10-Hour Course, SolidWorks CSWA