AIDAN SCOTT FITZPATRICK
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EDUCATION

SUNY University at Buffalo — Buffalo, NY
Bachelor of Science (B.S) in Aerospace Engineering, GPA: 3.7 — May 2022

- Dual Major ~ Degree in Mechanical Engineering
- *Relevant Coursework: Thermodynamics, Statics, Engineering Computations, Dynamics, Mechanics of Solids, Analysis of Structures, Fluid Mechanics, Dynamic Systems, Product Design in a CAE Environment, Engineering Materials, Aerospace Structures, Heat Transfer, Intermediate Dynamics, Aerodynamics, Gas Dynamics, Flight Dynamics, Design Processes and Methods, Machines and Mechanisms, Manufacturing Processes, Space Dynamics and Control, Aircraft Design*

NYU Tandon School of Engineering (Current) — Brooklyn, NY
Master of Science (M.S) in Mechatronics and Robotics, Current GPA: 3.6 — August 2024 - Present

- Second-Year Graduate Student
- *Relevant Coursework: Advanced Mechatronics, Foundations (&) Mathematics for Robotics, Robotic Gait and Manipulation, Reinforcement Learning and Optimal Control, Autonomous Mobile Vehicles*

HONORS

American Society of Mechanical Engineers — 2020
Dean's List — 2018 - 2022
Summa Cum Laude (University at Buffalo) — 2022
Eagle Scout of America — 2018 - Present
Formula SAE (FSAE) — 2025-2026

EXPERIENCE

Lockheed Martin — Owego, NY
Design Engineer Associate — September 2022 - November 2023

- My role consisted of mechanical design work for the lab design-and-build group in the installation engineering department. In addition, assistance with electrical cable and harness and systems schematic designs was provided. I quickly took over as mechanical lead of multiple software development lab designs within a year of service. Following this, I was appointed as the installation and project lead of a large software development project. I worked hands-on with external vendors for engineered item procurements and orders, as well as had hands-on experience with the installation and build on software development labs. Mechanical and electrical drawings and release processes were utilized by myself during my employment. My hands-on experience of installation and building consisted of multimeter guided continuity via system schematics and cable build along with use of shop and power tools.

SUNY University at Buffalo — Buffalo, NY
Teaching Assistant — February 2022 - May 2023

- My role consisted of running lab sections for students enrolled in Mechanical and Aerospace Lab I during the Spring 2022 semester. The main task consisted of performing workshops and labs and answering questions about the course. The workshops and labs consisted of utilizing Arduino microcontrollers and IDE for digital data acquisition. Among some of the tasks I performed during the course were: experimental analysis of dynamic systems, transducers for mechanical and electrical measurements, digital data acquisition, experimental uncertainty analysis, microcontrollers, etc.

IMA Life — Tonawanda, NY
Engineering Intern — June 2021 – August 2021

- My summer role consisted of assisting to create and develop a framework for data analytics and health monitoring of pharmaceutical equipment under guidance from the Technology group. The main task consisted of figuring out a means of utilizing vibration analysis to determine the health of vacuum and compressor pumps. Software usage consisted of MATLAB, VES004, Python, Microsoft Offices/Excel. My work over the summer, if elaborated upon since my departure, could save the company anywhere between $20,000 and $60,000, as a replacement for purchasing a full-spectrum vibration analysis service.

SKILLS

Coding: MATLAB, Python, PBasic, Arduino IDE, C/C++
CAD: SolidWorks, AutoCAD, Creo PTC, ANSYS SpaceClaim
Other: ANSYS, SimuLink, Zuken E3 (Electrical Design), XFLR5 (Airfoils/Simulation), Microsoft Offices, Raspberry Pi, Parallax Propeller/BS2 Microcontrollers, 3D Printing (Bambu/Ultimaker/Cura), Misc. Manufacturing Processes