EVAN SIE

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EDUCATION

University of Texas at Dallas – Richardson, Texas

Degree: Bachelor of Science in Mechanical Engineering **2027**

- Minor: Nanoscience and Technology

Relevant Coursework:

- Kinematics and Dynamics, Thermodynamics, CAD, Design of Mechanical Systems, Probability Theory and Statistics, C Programming, Fluid Mechanics, Design of Mechanical Systems, Organic Chemistry

Technical Skills:

- SolidWorks, Creo Parametric, Fusion360, GD&T, CFD, OpenRocket, Arduino IDE, MATLAB, Python, C/C++, C#, 3D Printing, Prototyping, Soldering, Oscilloscope, Multimeter, Drone/RC Aircraft Assembly

ACADEMIC EXPERIENCE

Reliability and Design Automation Research – Richardson, TX **May 2025 - September 2025**

- Developed MATLAB code to simultaneously train 3 machine learning models on real manufacturing datasets
- Presented findings to additive manufacturing team
- Implemented Bayesian learning techniques to iteratively improve models

Undergraduate Research Assistant – Richardson, TX **May 2025 - September 2025**

- Helped develop a Mixed Reality environment for testing Connected/Autonomous Vehicles
- Created a digital twin of the real world into traffic software

High Altitude Balloon – Richardson, TX **August 2024 - June 2025**

- Built & launched UTD's first high altitude weather balloon reaching 92,404ft (28,164m) in altitude
- Spearheaded the primary design proposals, creating the final payload architecture selected for the flight
- Study the effects of heat transfer on the electronics & use ANSYS simulations to validate hypotheses
- Performed research on thermal insulation strategies for high-altitude balloon payloads, resulting in a publication, "Thermal Performance Evaluation of Insulation Materials for High-Altitude Balloon Payloads," and an oral presentation at the AIAA Regional Student Conference.

L1 Rocket – Richardson, TX **January 2024 - May 2024**

- Researched, designed, and built a high-powered rocket from scratch
- Constructed using 3D Printing, fiberglass/epoxy while adhering to simulation data

Hydroponics Research (SWG) – Richardson, TX **January 2024 - May 2024**

- Designed and built a hydroponics setup for a former professor
- Completed 2 working setups under the 1000$ budget

LEADERSHIP

AIAA UTD – Richardson, Texas **August 2025 - Current**

HAB Project Lead

- Manage a team of 5 mechanical/electrical engineers to conduct research using a high altitude weather balloon to measure cosmic ray and ozone concentrations in the atmosphere
- Directed the integration of atmospheric sensors, active heating systems, and live video telemetry using an Arduino Nano. Mentored team members on electronics fabrication, including soldering and circuit assembly.
- Present technical research paper regarding data obtained during the flight at Rice University
- Collaborate with NASA by participating on the High Altitude Balloon Student Platform

WORK EXPERIENCE

UNIQLO – Dallas, Texas / Orlando, Florida / New York City, New York **October 2024 - Current**

Sales Associate

- Upheld high standards of customer service and attention to detail while driving revenue through targeted product marketing and providing operational support during peak seasons in Orlando and New York.