

# BRANDON TASHI

[brandontibet@gmail.com](mailto:brandontibet@gmail.com) • [linkedin.com/in/brandon-tashi](https://www.linkedin.com/in/brandon-tashi) • [brandontashi.netlify.app](https://brandontashi.netlify.app)

Enthusiastic **Aerospace Engineering** student. Expert in Fusion 360, SolidWorks, PTC Creo, and AutoCAD. Intermediate in ANSYS, CATIA, Unity, and Blender. Highly experienced in assembly/component drafting, concept designing, soldering, 3-D printing, workshop tools, and material documentation with verification. Familiar with general GD&T principles. Skilled in Arduino C, Raspberry Pi, MATLAB, Python, and C#. Proven teamwork and communication capability from NASA, Department of Transportation, and cube-sat structure lead experience.

## EDUCATION

Embry-Riddle Aeronautical University

**Bachelor of Science in Aerospace Engineering**

Expected graduation: Dec 2024

GPA: 4.0/4.0

Related Coursework:

Thermodynamics	Differential Equations & Matrix Methods	Graphical Communications
Solid Mechanics	Aerospace Flight Vehicles	Dynamics

## WORK EXPERIENCE

NASA Goddard Space Flight Center (IV&V)

**Yearlong Engineering Intern – Binary Analysis**

23 hours/week, Sep 2021 – Aug 2022

- Responsible for programming a Python data pipeline for an Artemis I SLS simulation by using Atom.
- Designed/analyzed SLS and launchpad 39B simulation parts using Blender, Fusion 360, and Maya.
- Helped research, document, and improve project systems through Microsoft SharePoint and Confluence.
- Refactored C# code in Artemis I simulations via Microsoft Visual Studio, Unity, and Oracle VirtualBox.
- Built a modern, Bootstrap website using HTML, CSS, JavaScript, jQuery, Python, JSON, and TensorFlow.

Texas Department of Transportation

**Summer Engineering Tech**

40 hours/week, Jun 2021 – Aug 2021

- Performed verification and validation of contractor-based scope templates using Microsoft Excel.
- Assisted in analysis and gathering of various Level of Effort sources through extensive research.
- Supported troubleshooting efforts in detecting missing information and grammar issues via Microsoft Word.
- Aided in organizing file systems for different contractor projects ranging into millions of dollars in funding.

## PROJECTS

Robotic Vacuum Cleaner

Oct 2020 – Present

- Fabricated and assembled a 3-D printed robotic vacuum that was designed in Fusion 360 and PTC Creo.
- Constructed a modular chassis by using mechanical design principles like joints, clearance, and tolerance.
- Drafted robot assembly components onto drawing sheets with detailed and appropriate labeling.
- Programmed using an Arduino Nano and utilizes soldered ultrasonic sensors to navigate terrain.
- Simulated stress on assembly components using ANSYS and iterative design testing.

Two-Stage Model Rocket

Jan 2020 – Present

- Designed rocket engine housing, payload, nose cone, and fins using Fusion 360 and AutoCAD.
- Manufactured components using workshop tools and 3-D printers; simulated using OpenRocket software.
- Employs design principles in CAD relating to threading, counterbores, clearance, and tolerance.
- Drafted rocket assembly parts with orthographic/isometric projections, detailed views, labels, and notes.

## EXTRACURRICULAR ACTIVITIES

Embry-Riddle Orbital Research Association

Aug 2020 – Sep 2021

**Structures Sub-Team Lead for Project Hermes**

- Researched potential structure designs and helped generate prototype satellite models using SolidWorks.
- Presented material in team meetings that elaborated on current and future project concepts.