

Drake Gossett

US Citizen | drake.gossett@outlook.com | [linkedin.com/in/drake-gossett](https://www.linkedin.com/in/drake-gossett) | Orlando FL

EDUCATION

University of Central Florida

Honors Bachelor of Mechanical Engineering

Aug 2024 – May 2028

Orlando, FL

EXPERIENCE

Thermal Analysis and Radio Communications Tech

SEDS Rocket Club @UCF

Sept 2024 – Present

Orlando, FL

- Conducted failure assessment of rocket tip and body using RasAero, SolidWorks, and Ansys.
- Identified and addressed potential challenges in design and functionality through a FMEA chart.
- Enhanced data transmission reliability, allowing for real-time tracking during launches.
- Tested electronic components for resilience, incorporating redundancy measures to enhance system reliability.
- Streamlined rocket by cutting live telemetry from the second stage, saving weight and increasing altitude.
- Constructed critical infrastructure and tested electronics for the final design during build sessions.

Private Tutoring for Honors and Dual Enrollment

Self Employed

Aug 2023 – Present

Orlando, FL

- Tutored students boosting grades and building confidence.
- Instructed students in college level concepts including advanced Mathematics, Physics, and English Composition.

Cart Barn Attendant

RedTail Golf Club

May 2022 – Present

Sorrento, FL

- Self driven and consistently strives for excellence in serving 100+ members and guests.
- Train new employees on personable hospitality and the opening and closing procedures.
- Adapt to changing events and challenges that arise, assisting in tournaments to provide a seamless experience.

PROJECTS

Level 1 NAR High Power Rocket Certification | *OpenRocket, Ansys Fluent*

Sep 2024 – Dec 2024

- Designed, built, and launched an H-class high-powered rocket for NAR certification.
- Used OpenRocket to validate CG/CP and ensure flight stability.
- Verified pressure distribution and drag forces using Ansys Fluent.
- Conducted pre-flight safety checks and ensured recovery with black powder ejection and parachute deployment.

SeaPerch Robotics Tournament | *Soldering, Robotics, Leadership*

Jan 2022 – Apr 2022

- Lead coordinator for assembly and testing of a SeaPerch underwater robot.
- Oversaw the cutting of pvc, the attachment of motors, soldering, and waterproofing necessary to build the robot.
- Competed in a high school tournament and emerged victorious beating the 6+ other teams.

Whipper Trebuchet | *CAD, Fusion 360, Stress Testing, Video Production,*

Mar 2023 – May 2023

- Designed, built, and tested a “Whipper Trebuchet” for a highschool physics project.
- Modeled the trebuchet by sketching on paper and moving to fusion 360 to complete a 3d model to present in class.
- Streamlined the project after initial testing by increasing structural strength and researching better projectiles to increase the throw distance by 70%

ACHIEVEMENTS

Congressional Award Gold Certificate and Bronze Medal

Aug 2022

- I set long term goals of personal growth and community involvement.
- I completed an Expedition/Exploration to immerse myself and leave my daily routine and discover the unfamiliar.

Level 5 Piano Practical and Theory First Class Honors With Distinction

Dec 2021

- Completed a music theory section with a final exam
- Practiced to complete a practical examination of 5 challenging piano pieces.
- Identified intervals from sound, and a performance of 5 pieces.

TECHNICAL/NONTECHNICAL SKILLS

Solidworks CAD, Fusion 360, Onshape, Fabrication tools, 3D printing, Ultimaker Cura, Microsoft Office, Excel, Powerpoint, Word, Critical Thinking, Problem Solving, Attention to detail.