

# Drake Gossett

US Citizen | drake.gossett@outlook.com | linkedin.com/in/drake-gossett | Orlando FL

#### **EDUCATION**

## University of Central Florida

Aug 2024 – May 2028

Honors Bachelor of Mechanical Engineering

Orlando, FL

#### EXPERIENCE

## Thermal Analysis and Radio Communications Tech

Sept 2024 – Present

SEDS Rocket Club @UCF

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.
- Constructed critical infrastructure and tested electronics for the final design during build sessions.

## Private Tutoring for Honors and Dual Enrollment

Aug 2023 – Present

Self Employed

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

May 2022 - Present

RedTail Golf Club

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

#### Custom Monocular Digital Night Vision | 3D Printing, Soldering, Multimeter

Feb 2025 – May 2025

- Built a modular digital night vision monocular, 3D-printing a rugged ABS housing.
- Repurposed off the shelf components. Soldered camera and display modules to accept 5V and lower latency.
- Tested and resolved misdocumented wiring using a multimeter, resulting in a fully operational prototype.

### Supersonic Level 1 Rocket | OpenRocket, 3D Printing, Fiberglass Layup

Dec 2024 – Feb 2025

- $\bullet$  Designed and constructed a supersonic rocket, achieving Mach 1.5 and over 6,000 feet with an H550 ST motor.
- Performed a **fiberglass layup** to reinforce structural integrity, ensuring durability under high-speed conditions.
- Optimized aerodynamics with a custom 3D-printed nose cone, enhancing performance and stability.
- Conducted pre-flight safety checks to ensure reliable launch and recovery operations.

#### 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.

### ACHIEVEMENTS

#### Congressional Award Gold Certificate and Bronze Medal

Aug 2022

- Set long term goals of personal growth and community involvement.
- Engaged in an Expedition/Exploration to step outside my routine and embrace new experiences.

## Level 5 Piano Practical and Theory First Class Honors With Distinction

Dec 2021

- Studied music theory to take a final exam. Trained to identify intervals by ear.
- Practiced to complete a practical examination of 5 challenging piano pieces.

## TECHNICAL/NONTECHNICAL SKILLS

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