

Ori Algave

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EDUCATION

University of Florida, Herbert Wertheim College of Engineering
B.S. Aerospace Engineering and B.S. Mechanical Engineering | GPA: 3.72/4.00

Gainesville, FL
Aug 2024 – Dec 2028

EXPERIENCE

Theissen Training Systems (TTS)

Gainesville, FL

Production & Assembly Intern

Aug 2026 – Present

- Assemble **100+** SIT target systems per week in a production-line workflow, also supporting SAT, MIT, and MAT builds.
- Diagnose and document manufacturing non-conformities against engineering specifications, perform in-process quality checks before release, and support packaging, palletization, quantity verification, and shipment preparation to U.S. Army training ranges.

Evren Technologies

Gainesville, FL

Engineering Intern

Apr 2026 – Aug 2026

- Built and tested complete ear-worn bioelectronic devices, applying DFM, in-process quality checks, and systematic troubleshooting.
- Reduced electrode pad cutting time by **85%** by implementing stamp-press tooling and standardized fabrication, improving repeatability.
- Designed injection-molded components in Onshape and validated fit and manufacturability with 3D-printed prototypes, supporting rapid iteration and production.

Fluids and Adaptive Structures (FASt) Lab

Gainesville, FL

Research Assistant

Feb 2026 – Present

- Designed and 3D-printed a high-aspect-ratio **NACA 0012** hydrofoil and custom load-cell adapter in SolidWorks to validate a numerical fluid-structure interaction model for a robotic fish platform.
- Operate water-tunnel and load-cell test equipment across multiple flow velocities, collecting drag, lift, and pitching-moment data through a repeatable dSPACE MicroLabBox and Simulink workflow.
- Process and report force/moment data in MATLAB, comparing experiments with computational predictions to assess model accuracy.

Department of Astronomy

Gainesville, FL

Teaching Assistant, The Art & Science of Astrophotography

Jan 2026 – Aug 2026

- Operate and safeguard 6 observatory telescopes valued at **\$50,000+**, managing setup, safety, and student use during imaging sessions.
- Troubleshoot, calibrate, and align cameras, tracking mounts, and telescope hardware while training students in data reduction and post-processing to ensure reliable, interpretable results.

PROJECTS

Swamp Launch Rocket Team | *Aerosciences / Staging Engineer*

Aug 2025 – Present

- Develop Cd-versus-Mach lookup tables and mesh-independent ANSYS Fluent CFD models on UF's HiPerGator Supercomputer from Mach 0 to 1, optimizing nosecone, fin, and boattail geometry while producing drag estimates within **15%** of RASAero predictions.
- Designed a dual-load-cell wind-tunnel test assembly with precision-machined couplings and Arduino-based real-time data acquisition to support drag measurement and hardware validation.
- Serve as Responsible Engineer for flight-dynamics simulation and aft-plane pressure sensing, validating models against flight data and refining boattail instrumentation to calculate pressure drag and support the **10,000-ft** IREC apogee target.

Gators Design Build Fly | *Aerodynamics / Manufacturing Engineer*

Aug 2025 – Present

- Modeled lifting surfaces in ANSYS Fluent/XFLR5 and manufactured carbon-fiber airframe components for flight-ready hardware.
- Reduced airframe drag by **18%** and body weight by **34%** through iterative geometry optimization and carbon-fiber composite fabrication.

Air-Engine Mixer | *Mechanical Design / Manufacturing Project*

Summer 2026

- Machined 4 engine components from raw stock on a manual mill/lathe, holding fits and alignment through inspection, achieving 1200 RPM.
- Created SolidWorks assembly/GD&T drawings, BOM, inspection reports, and process plans for a variable-speed belt-driven mixer.

SKILLS

Technical: SolidWorks, Onshape, 3D CAD, ANSYS Fluent, MATLAB, Simulink, XFLR5, RASAero, DFM, Engineering Drawings, Mechanical Assembly, Quality Control, Test & Evaluation, Technical Documentation, Composite Fabrication, Mill Machining, Lathe Machining, TIG Welding, 3D Printing, NI LabVIEW, dSPACE MicroLabBox, Load Cells, Water-Tunnel Testing, Injection-Mold Design

Languages: Hebrew (Native), English (Native)

LEADERSHIP

Lubavitch Chabad Student Group | *Vice President*

April 2025 – Present

- Lead **8** committees serving **1,500+** students coordinating campus-wide programs and events from planning through execution.

UF RecSports | *Student Referee Official*

Aug 2025 – July 2026

- Officiated intramural games across **5** sports, enforcing rules, managing game flow, and resolving conflicts