CRISTINA **CUESTA BRET**

+1 (352) 278-7527 | cristinacuestabret@gmail.com | linkedin.com/in/cristinacuestabret/ | https://cuestabretc.github.io/portfolio/

EDUCATION

University of Florida, Gainesville **Aug. 2021 – May 2026**
Bachelor of Science in Mechanical Engineering *Major GPA: 3.61*
Certificate in Artificial Intelligence Fundamentals and Applications

SKILLS

Software Skills: SolidWorks, MATLAB, Python, Microsoft Office, Granta, PDM
Technical Skills: CAD, manufacturing operations, mill, lathe, mechanical design, programming, technical writing
Certifications: SolidWorks, CNC Machining Training Program, Cambridge Proficiency in English (CPE)
Essential Skills: Analytical thinking, creativity in design, efficiency under pressure, collaborative mindset
Languages: Spanish (Native), English (Fluent)

WORK EXPERIENCE

Dynamics and Controls Design Laboratory Teacher Assistant **Gainesville, FL, USA**
University of Florida *Aug. 2025 – Sept. 2025*
- Taught 5 weekly lab sessions where students conducted dynamics and controls experiments using a Furuta Pendulum.
- Provided constructive feedback on transfer functions, bang-bang , PID and full state feedback controls based on the pendulum.

Mechanical Engineering Summer Intern **Madrid, Spain**
GMV Aerospace and Defence SAU *Jul. 2025 – Aug. 2025*
- Collaborated with 2 engineers on the CAD and assembly of electronic systems for defense and aerospace applications.
- Independently carried forward manufacturing production during the team's vacation period, ensuring uninterrupted output and preventing project delays.
- Operated 3D resin printers to validate and refine prototypes through iterative assessments.
- Executed material selection analyses based on mechanical performance and application constraints on 2 projects.
- Supported structural, vibration, and shock analyses on 2 mechanical components to ensure reliability under operational loads.

Mechanics of Materials Laboratory Teacher Assistant **Gainesville, FL, USA**
University of Florida *Jan. 2025 – May. 2025*
- Assessed 60+ student lab reports and provided detailed and constructive feedback to strengthen experimental analysis, technical writing, and understanding of mechanics of materials concepts.
- Led 4 weekly lab sessions, mentoring students through hands-on experiments involving pressure, strain gauges, tensile testing machinery, and LabVIEW, while advancing their technical writing skills for engineering reports.

Elements of Electrical Engineering Teacher Assistant **Gainesville, FL, USA**
University of Florida *Aug. 2023 – Dec. 2024*
- Evaluated 45+ student assignments and guided students during weekly office hours to reinforce core electrical engineering concepts and circuit building.

Undergraduate Research Intern **Lleida, Spain**
Universidad de Lleida *May 2023 – Jul. 2023*
- Developed a sophisticated 700-line solar management Python algorithm aimed at optimizing the allocation of Direct Normal Irradiance (DNI) resources and providing accurate power output forecast based on dynamic demands and boundary conditions.
- Performed fluid and thermal dissipation analyses for components with and without fins with a team of 4 engineers.
- Streamlined Python code to support various receiver sizes and electrical configurations of photovoltaic (PV) cells, improving the tool's versatility and performance by 20%.

PROJECTS

Solar Gators – Design Team **Gainesville, FL, USA**
Chassis and Cockpit Engineer *Jan. 2023 – Sept. 2025*
- Executed multiple hands-on manufacturing tasks, including carbon fiber and resin wet layups, to support vehicle production.
- Designed and manufactured an actuator release body latch system and canopy hinge using SolidWorks contributing to the structural and functional integrity of the car while following FSGP regulations.

Clubs: SHPE (Society of Hispanic Professional Engineers) member | UF Club Tennis secretary and social media chair.