**Olivia Ricca** 561-891-4035 [ol811929@ucf.edu](mailto:ol811929@ucf.edu)[www.linkedin.com/in/olivia-ricca](http://www.linkedin.com/in/olivia-ricca)

**DoD Interim Secret Security Clearance**

**EDUCATION**

UNIVERSITY OF CENTRAL FLORIDA - **Intended Bachelor of Science Degree in Aerospace Engineering**

08/2022-05/2026

* **Programs:** Leadership Enrichment and Academic Development (LEAD) Scholars Academy, EXCEL
* **Activities:** Robotics Club of Central Florida – Lunabotics, American Institute of Aeronautics and Astronautics at UCF
* **Awards:** UCF MUREP Space Technology Artemis Research (MSTAR) Fellowship 2023
* **GPA:** 3.8

**EXPERIENCE**

**UNDERGRADUATE RESEARCH ASSISTANT for Stephen W. Hawking Center for Microgravity Research & Education at UCF**

03/2023-present

* Utilize 3D printer to design parts for Strata-2P experiment hardware and experiment mounting.
* Operate SOLIDWORKS 2022 in design process.
* Contributed to assembly process for experiment equipment.

**OSTEM INTERN for NASA Kennedy Space Center at SwampWorks**

06/2023-08/2023

* Utilized Creo Parametric 7 to design ground test equipment for lunar regolith microgravity experiment to further

research in the In-Situ Resource Utilization Pilot Excavator (IPEx) project.

* Familiarized myself with operating vacuum pump equipment to lower experiments down to vacuum-like conditions.
* Assisted IPEx rover wheel testing to determine optimal wheel design for various loads.
* Assembled Voron 3D printers to increase 3D printing productivity in facility.

**ENGINEERING INTERN for Inovaxe Corporation**

06/2022-08/2022

* Operated Autodesk Inventor Professional 2023 to design upcoming product models, various sheet metal parts, and various renderings to fit needs for customers.
* Tested and experimented with OMTech 40W CO2 laser engraver and cutter to further improve manufacturing of product component.
* Became familiar with using PrusaSlicer 3D printer.

**DRUM MAJOR for Olympic Heights High School Mighty Lion Band**

  06/2021 – 05/2022

* Led Marching and Concert Band students throughout the school year and competitive seasons.
* Orchestrated rehearsals and conducted the band during performance at Marching Band competitions and football games.
* Earned Straight Superior ratings (highest rating) at Marching Band evaluation.
* Awarded Best in Class in the Bronze Division at Vero Beach Marching Band Competition.

**STUDENT TEAM LEADER for FIRST FRC The Dirty Mechanics Robotics Team 3932**

01/2019 – 05/2022

* Train and teach younger/less experienced students on machine shop equipment, tools, and other applications in robot design and assembly.
* Headed Competition Pit Crew (maintenance to robot after matches) and facilitated repairs.
* Developed younger students' leadership qualities and skills in teamwork and communication.
* Contributed to team recruitment efforts, gave presentations at various schools and attended multiple club rushes.

**HUMAN PLAYER ON DRIVE TEAM for FIRST FRC The Dirty Mechanics Robotics Team 3932**

02/2019 - 03/2019

* Facilitated game pieces throughout the field during competitive matches.

**SAFETY CAPTAIN for FIRST FRC The Dirty Mechanics Robotics Team 3932**

02/2018 - 03/2019

* Ensured students, mentors, and visitors were safe when inside the pits (robot maintenance/repair area) at competitions.
* Interviewed by judges for potential safety award.
* Gained experience as the only eighth grader on the team being near the robot majority of the time.
* Created safety kits for all teams who attended.
* **Awards:** Dean’s List Semi-Finalist 2021

**SKILLS**

* **Certified:** Autodesk Inventor, Python, Autodesk Revit, MATLAB Onramp
* **Proficient:** SOLIDWORKS, Creo Parametric 7, 3D printing, Programming in C, Microsoft Office Applications & standard machine shop equipment.