

James “Wyatt” Cross

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EDUCATION

University of Florida, Gainesville, FL

Expected Graduation – May 2026

Bachelor of Science, Aerospace Engineering

GPA: 3.65

- University of Florida Honors College
- University Research Scholars Program

Relevant Coursework:

- Autonomous Vehicles
- Design and Manufacturing Laboratory
- Computer Aided Graphics and Design
- MATLAB Programming
- Professional Communication for Engineers

EXPERIENCES

Undergraduate Research Assistant

Sep. 2022 – Present

Nonlinear Controls and Robotics Group

- Supported the Air Force Office of Scientific Research: Center of Excellence in Assured Autonomy in Contested Environments by preparing various unmanned vehicles for experiments
- Wrote ROS2 code in Python to enable synchronized demonstrations of autonomous vehicles
- Implemented a remote emergency stop system to increase safety around ground robots
- Designed and fabricated parts to increase robot ground clearance and protect sensors

UF Swamp Launch IREC Payloads Team Member

Aug. 2022 – Present

- Conceptualized and designed autonomous quadcopter payload for the Intercollegiate Rocket Engineering Competition (IREC)
- Validated controls software by constructing a test stand to isolate axis of motion

UF AIAA Region II Student Conference Director

Apr. 2023 – Present

- Communicated with professionals from industry, government, and academia to coordinate the upcoming 2024 AIAA Region II Student Conference
- Presented to 30+ students on the process and benefits of pursuing independent research

Research and Creativity Course Teaching Assistant at UF

Jul. 2023 – Aug. 2023

- Presented various topics including reading a peer reviewed journal article, library resources, research design, creativity, and research opportunities to a medium-sized group of freshmen

University Research Scholars Program Peer Mentor

Jul. 2023 – Present

- Mentored two incoming freshmen on finding research, academic resources, and class selection

Portfolio Website: link.wcross.dev

2021 – Present

- Designed and coded a personal website to share my projects and research

PAPERS & PRESENTATIONS

Review of Autonomous Technologies for a Crewed Exploration of the Lunar South

March 28, 2023

Pole, J. Cross, AIAA 74th Annual Southeastern Regional Student Conference, Knoxville, TN

Placed 2nd in the Open Topic Category

HONORS

- Mechanical and Aerospace Outstanding Leadership Award Scholarship - **Spring 2023**
- Herbert Wertheim College of Engineering Dean’s List - **Fall 2022, and Spring 2023**
- UF Admissions Honors Scholarship
- UF Undergraduate Research Scholar
- Florida Academic Scholars Award

SKILLS

- Certified SOLIDWORKS Associate (CSWA): Certification ID: C-EMFYRHZ7XT
- Microsoft Word, PowerPoint, Excel
- Python, MATLAB, and Arduino
- Ubuntu Linux
- Robot Operating System 2