

Ethan Yemm

Embry-Riddle Aeronautical University

B.S. Aerospace Engineering

Minor: Computer Science

Expected May 2028 | U.S. Citizen

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Daytona Beach, FL



TECHNICAL SKILLS

Languages C, C++, Python, C#, TypeScript

Avionics Flight computers, GPS, onboard sensing, pyrotechnic control

Embedded Microcontrollers, sensors, telemetry, data acquisition, communications

Software Git, Linux, analysis tooling, full-stack integration

ENGINEERING EXPERIENCE

Icarus Sounding Rocket Program

2024–Present

Avionics Division Lead

Daytona Beach, FL

- Lead a 20+ member multidisciplinary division developing avionics, flight software, and launch infrastructure to deliver reliable, integrated systems for student-led sounding rocket missions.
- Direct technical integration from development through flight operations, coordinating flight computers, ground systems, telemetry, and launch-control infrastructure to improve mission readiness and cross-system reliability.

Embry-Riddle Orbital Research Association

2024–Present

Software Developer

Daytona Beach, FL

- Develop reusable software, communications, and ground-support infrastructure to reduce mission-specific development and accelerate integration of student and faculty research payloads.
- Support research campaigns from payload integration through flight operations, standardizing flight-support systems to improve repeatability and reliability across experimental missions.

FLIGHT SOFTWARE & AVIONICS PROJECTS

HAM Flight Computer Family — Avionics Division Lead

2025–Present

STM32 • Embedded C/C++ • CAN • SPI • I²C • Telemetry

- Develop modular STM32 flight computers integrating redundant sensing, data logging, GPS/telemetry, and autonomous flight functions to provide reliable onboard avionics for high-power sounding rockets.
- Scale the HAM architecture from compact, low-cost avionics to an 8-channel redundant flight system, reducing dependence on expensive COTS flight computers while supporting increasingly complex missions.

HAM Mini Flight Firmware — Embedded / Flight Software

2025–Present

C/C++ • Sensors • Telemetry • Data Logging

- Developed embedded flight software integrating sensing, telemetry, data acquisition, and logging to provide a custom avionics platform for high-power rocket flight.
- Validated the flight software through Mach 1 and approximately 10,000 ft, accurately recording vehicle and environmental measurements throughout flight.

Project Minerva — Software Team Lead

2024–Present

LoRa • Telemetry • Ground Stations • Embedded Systems

- Develop reusable software and communications infrastructure to reduce integration time and provide researchers with rapid, repeatable access to high-altitude balloon flight testing.

Hermes — Engineering & Mission Operations Platform

2025–Present

Angular • ASP.NET Core • SQL • REST APIs • Telemetry

- Architect and develop a full-stack engineering platform unifying project management, resource planning, mission readiness, and launch operations to improve coordination across a multidisciplinary aerospace organization.