

# RYAN SANTIAGO

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## PROFESSIONAL SUMMARY

I am a dedicated and detail-oriented aerospace engineering student with hands-on experience in mechanical systems, avionics, and diesel mechanics. My background includes working on complex systems and performing troubleshooting, repairs, and testing in both mechanical and aerospace contexts. Known for my strong analytical skills, problem-solving abilities, and collaborative nature, I am eager to apply my technical expertise and passion for innovation to contribute to cutting-edge technologies and work within multidisciplinary teams.

## EDUCATION

**Aerospace Engineering Exp. Grad. Date May 2026:** GPA: 3.3

**Saint Louis University** - Saint Louis, MO

Relevant Coursework: Thermodynamics, Electrical Engineering, MatLab and Aircraft Performance, Prototyping.

## SKILLS

- Diesel Mechanics
- Matlab/Python/C++
- Material Science
- 3D Printing
- Bilingual
- Avionics Design
- Solidworks/Onshape

## WORK HISTORY

### Avionics/ Embedded Systems Developer

**Saint Louis Rocket Propulsion Lab** – Saint Louis, MO

08/2023 - Present

- Spearheaded the development and integration of a custom rocket avionics system, enabling real-time telemetry transmission from vehicle to ground station; wrote embedded software and designed electrical interfaces for sensors, power, and communication subsystems.
- Adapted quickly to new embedded hardware and electrical systems, demonstrating the ability to work across disciplines combining mechanical, electrical, and software insight to solve high-consequence problems under pressure.

### President

**Saint Louis Rocket Propulsion Lab**— Saint Louis, MO

08/2025 - Present

- Led a cross-functional team of students and researchers in the design and development of a high-power rocket, focusing on mechanical system integration, ensuring performance goals were met in thermal, structural, and propulsion subsystems.
- Designed and optimized an SRAD propulsion system, providing mechanical engineering solutions to improve system reliability and efficiency, while incorporating key principles of materials selection and kinematics.
- Developed ground station program in Python to monitor real-time telemetry data, applying problem-solving skills to optimize system performance and ensure reliable communication during test flights.

### Team Lead

**Intercollegiate Rocket Engineering Competition 2025**

08/2024 – 06/2024

- Designed and developed printed circuit boards (PCBs) for aerospace applications, ensuring seamless integration with avionics systems, which improved system reliability and signal integrity under flight conditions.
- Led the team to the 4<sup>th</sup> best SRAD team and 36<sup>th</sup> overall out of 150 teams.

## Portfolio Link

[Ryan Santiago | Aerospace Engineer](#)