

Thor Kopenkoskey

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Career objective:

Motivated leader with extensive experience in AFJROTC Leadership, Scouting, and STEM research. Skilled in organization management, training, and project leadership. Seeking to apply leadership and technical expertise in an applied environment.

Education:

Computer Engineering Student, Florida Institute of Technology — Melbourne, FL

Satellite High School — Satellite Beach, FL

4.34 Weighted GPA | #1 Class Rank (2022–23, 2023–24)

Dual Enrollment, Eastern Florida State College | President's List 2025

Technical Skills:

- **Programming:** C++, Python, HTML, Arduino, ESP32
 - **Electronics:** PCB design, Kalman filter integration (IMU, Gyro, Magnetometer, GPS), telemetry systems, LoRa communication, and Embedded systems
 - **Software:** Onshape, Kicad, Openrocket, Openmotor
 - **Research:** Experimental design, data collection, and statistical analysis
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STEM Projects & Research:

- **Active Guidance Rocket and Flight Computer Development (2024–Present):** Designed and programmed an ESP32-based telemetry and control system using LoRa communication for a model rocket. Developed PCB schematics and firmware for servo, pyro, and sensor control.
<https://github.com/tskopen/Telemetry>
- **CubeSat Challenge (MIT 2024):** Led a team in designing a low-cost CubeSat communication system; achieved 5th place nationally.
- **Science Research Project (2024–2025):** Conducted a materials study combining waste Carbon Fiber and concrete to create a ductile break pattern. earned 1st Place in Engineering at the Intracoastal Science Fair and qualified for the State Science and Engineering Fair.

Interests:

Autonomous systems, aerospace systems engineering, leadership development, and experimental rocketry.

Awards and Honors:

Won 1st Place, Engineering Category, Intracoastal Science Fair - 2025

\$84,000 scholarship to the Florida Institute of Technology for Outstanding Scientific Ability and Curiosity - 2025

Invited to the following 2025 fairs:

Florida State Science Fair (SSEF)

Nelson Ying Fair

Lockheed Martin Fair

Won 5th Place Chemistry Category, Intracoastal Science Fair - 2024

Eagle Scout - 2024

Bronze, Gold, and Silver Palms

Air Force Distinguished Cadet - 2025

AFJROTC scholastic award - 2024

Florida Boys State Participate - 2025

Assembly Pro tempore, lead assembly of ~230 Boys - 2025

MIT's CubeSat Challenge - 5th place out of 32 teams, 2024

Relevant Coursework:

- Chem 1 + Lab - A
- Composition 1 - A
- Composition 2 - A
- Precalculus and trigonometry - A
- Principles of Programming - C++ focused - A
- Foundations of Programming - Python focused - A

Currently enrolled in:

- Digital Logic - A
 - Applied Discrete Mathematics - A
 - Calculus 1 - A
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Work Experience:

Customer Server/Trainer: Trusted to train 6 new employees, serve customers, run the shop in operations, count supplies, and close the shop/count money alone. Worked at the Fat Donkey since June 2024

Community Service & Volunteerism: Completed 140+ service hours**Scouting America (2009-Present)**

Community cleanups, facility projects, and civic events.

AFJROTC FL-035 (2021-Present)

Supported campus and community projects, including mural painting, gardening, and event operations.

City of Melbourne (2022-Present)

Participated in beach cleanups at High Tower Beach, promoting coastal preservation.

Leadership Experience:

Corps Commander FL-035: Led a 130+ cadet unit by planning schedules, delegating responsibilities, and standardizing operations; developed a 70-page cadet handbook to unify knowledge of AFJROTC policies, drill, and honor guard standards; implemented a digital tracking system for inspections to improve accountability and efficiency.

Eagle Scout: Throughout my journey to Eagle Scout, I learned the importance of consistently working towards a goal over time. The different types of leadership and working on becoming a servant leader, leading for others, not yourself. I organized and led an Eagle Scout project, communicating with several organizations to gather donations and materials, finding a proper work site, finding volunteers to assemble, and more.

Command Chief: Communicated and collaborated with the Top 3 and Training & Development to create corps-wide documents and tests, and ensured the readiness of the corps. Furthermore, created enlisted meetings for the training and cross-flight connection in the corps. Alongside assisting with Top 3 activities and goals, helping to increase above a 1800 service hours goal.

Senior Patrol Leader (2x): Organized and led Troop 323 in meetings every Monday from 7-9 pm in opening and closing ceremonies, activities, fundraisers, and Troop 323 events. Effectively communicated to the patrol leaders, adults, and other scouts to plan/coordinate properly for campouts, activities, and events. Reelected by scouts in my troop for a 2nd term.

Flight Commander (2x): Organized and led Delta and Bravo flights (School periods), communicated with element leaders to ensure cadets came prepared to school, encouraged cadets to take leadership roles and opportunities by helping with resumes, and fostered a team mentality and friendship among cadets

Training and Development (2x): Communicated and helped the Command Chief with creating tests, slideshows, study guides, enlisted meeting, and tracking promotion eligibility. Served as their assistant and team member for all tasks.

Instructor (2x): Taught Troop 323/345 with activities on reading maps, hiking safety, fire building, etc.
