

AZALEA SHILLINGTON

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Education

University of Illinois Urbana-Champaign

Physics (B.S.) and Electrical Engineering (B.S.)
2025 – 2029

Sycamore High School

Graduated Summa Cum Laude,
top 5% of class, GPA 4.45
(weighted)
2021 – 2025

Skills

Technical: Python, Java, Data Analysis, Computational Modeling, Onshape, KiCAD

Soft Skills: Team Leadership, Project Management, Public Speaking, Academic Writing

Awards

- Best Oral Presentation in Physical Sciences - National Research Centre of Egypt (Dec 2024)** Awarded for presentation on *Solar Coronal Heating Mechanisms*
- Sycamore Robotics Student of the Year (2024 & 2025)**
- Dean's List Semifinalist Award - FIRST Inspires (Feb 2024)**

Languages

English & French

Dual-discipline leader in physics and electrical engineering with experience in building and guiding effective teams to solve complex engineering and scientific challenges.

Experience

Aug 2025	The Illinois Space Society Avionics Engineer
-	<ul style="list-style-type: none">Actively designing avionics for high powered rocketry in attempt to launch a rocket to reach the Karman line in June of 2026.Focused on PCB design that handles live data, telemetry, and in-flight events.
May 2025	YMCA Greater Dayton Summer Camp Program Leader
-	<ul style="list-style-type: none">Managed a team of fellow employees, leading multiple week-long overnight youth development programs.Designed and executed daily programming focused on mentorship and team-building.
Aug 2025	MachBusters Robotics President
Jan 2023 – May 2025	<ul style="list-style-type: none">Led a team of 24-29 high school students through the full design, build, and competition cycle for complex, competitive robotics systems.Directed project timelines, resource allocation, and team dynamics to achieve challenging technical objectives.
Aug 2024 – Jan 2025	Ohio State University Department of Astronomy Research Mentee
-	<ul style="list-style-type: none">Researched coronal heating mechanisms under the guidance of Prof. Sultana Nahar.Presented research findings in an oral presentation at ICMMS in Dahab, Egypt.
June 2024 – Aug 2024	CIERA Northwestern University Research Mentee
-	<ul style="list-style-type: none">Researched on variability in black hole binary accretion disks under Prof. Deepika BollimpalliAnalyzed complex simulation data using Python to predict astrophysical behaviors by analyzing local frequencies.