

Avram Dreyer

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EDUCATION

Cornell University

Ithaca, NY

Bachelor of Science, Mechanical Engineering

Aug. 2025 – May 2029

- GPA: 4.06/4.3; ASME, Studio Photography Club, Amateur Radio Club
- Relevant Coursework: MATH 1920, MATH 2930, ENGRD 2020, CS 1112, ENGRI 1100, CHEM 2090

Bergen County Technical High School - Teterboro

Teterboro, NJ

High School Diploma, Aerospace Engineering

Sep. 2020 – Jun. 2025

- GPA: 3.99/4.0; National Honor Society, High Honor Roll, Departmental Award for Physics
- Relevant Coursework: AP Calculus BC, AP Physics C, AP Computer Science Principles, Digital Electronics, Applied Aerospace Engineering

WORK EXPERIENCE

Course Development Intern

Nov. 2024 – June 2025

New Jersey Center for Teaching and Learning (NJCTL)

Remote

- Educational organization focused on improving K-12 physics educational materials.
- Worked as a part-time intern improving NJCTL's online physics courses in AP Physics 2.
- Created answer keys and explanations for physics exercises using Moodle software.

Research Intern

Sep. 2024 – June 2025

Stevens Institute of Technology

Hoboken, NJ

- Private research university with a strong focus on engineering and technology.
- Interned under Professor Nicholas Parziale's research group, conducting hypersonic fluid dynamics research.
- Studied hypersonic boundary layers using Krypton Tagging Velocimetry (KTV) in the Mach 6 Stevens Shock Tunnel.
- Contributed to graduate-level fluid dynamics research for the US Navy Office of Naval Research (ONR).

Camp Counselor

Jun. 2024 – Aug. 2024, Jun. 2025 – Aug. 2025

Camp Wigwam For Boys

Waterford, ME

- A summer camp offering various outdoor activities and educational programs.
- Led and mentored a bunk of campers while managing an activity area.
- Educated kids in model rocketry and other STEM projects.
- Assisted in the successful construction and launch of a high-powered I-engine model rocket.

PROJECTS

CubeSat Thermal Heatsink

Sep. 2024 – Apr. 2025

NASA HUNCH Design and Prototype

Houston, TX

- Collaborated to design and build a novel prototype of a spacecraft thermal management system for a 1U CubeSat satellite.
- Competed in the NASA HUNCH space hardware design competition.
- Selected as one of five finalists for its category and chosen to be presented at Johnson Space Center in Houston, TX, to NASA engineers.

CERTIFICATIONS, SKILLS & INTERESTS

Technologies: Python, Autodesk Fusion 360, Autodesk Inventor, MATLAB, ANSYS Mechanical, Arduino

Skills: Soldering, Digital Electronics, Numerical Simulation, 3D Design, Analytical Reasoning

Interests: Hiking, Electronic Music, Climbing, Reading