

Elijah Feist

(443) 462-6572 | ecf55@cornell.edu

Linkedin: [ElijahFeist29](#) | Website: bit.ly/ECfeist

EDUCATION

Cornell University, College of Engineering, Ithaca, NY
Bachelor of Science, Mechanical Engineering

Expected May 2027

The Park School, Baltimore, MD

Diploma Received June 2023

Related Courses and Experience: Intro Computing, Applications of Operations Research In Engineering, Multivariable Calculus for Engineers, Physics II: Electricity and Magnetism, Differential Equations, Statics and Mechanics of Solids, Dynamics, Linear Algebra, Thermodynamics

SKILLS & INTERESTS

Python Programming • Aerospace • Guitar • Photography • Optics • Astronomy • Puzzles • Rock Climbing/Hiking

PROFESSIONAL EXPERIENCE

Intern, Space Telescope and Science Institute, Baltimore, MD

April 2023 – June 2023

- Utilized Jupyter Notebook and python astronomy tools to perform various tasks including, aperture photometry, imaging, and data analysis/sorting with the intent of categorizing James Webb Mid Infrared Instrument Images
- Read mechanical design reports, and online descriptions of physical and virtual tools utilized by the James Webb telescope in order to assess possible hardware/mechanical issues
- Compiled James Webb Mid Infrared Instrument readout data in excel and graphed it with intent to show trends

Airframe Subteam Member, CUAIR, Ithaca, NY

October 2023 – Present

- Cornell Unmanned Air Systems is a project team that builds an autonomous VTOL plane with a 3.7m wingspan. The airframe subteam designs and manufactures all of the aerodynamic components of the plane. This requires proficient use of Solidworks, ANSYS and general composite manufacturing processes.
- **Hatch Attach Mechanism:**
 - Created a locking mechanism to secure the front hatch of a plane during flight (with ease of use as a priority)
- **Gas Engine Electronics Bay:**
 - Utilized solidworks to design a mount for a gas engine's choke + throttle servos, and housing for various other required electronics (with vibration resistance, and weight reduction as priorities)
- **Composites Research and Testing:**
 - Organized meetings with other universities, and did personal research/manufacturing to better understand carbon fiber composites and how to efficiently use, and create them while building/designing a plane. Conducted ASTM material testing to obtain composite material properties.

LEADERSHIP EXPERIENCE

President, Park School Black Student Union, Baltimore, MD

September 2019 – June 2023

- Planned various events such as fishbowls, potlucks, and school wide assemblies (including the school's yearly Black History Month Assembly)
- Organized an event with the intent of networking by bring over 100 black, alumni, students, parents and faculty together over a meal

Captain, Park School Men's Varsity Lacrosse Team, Baltimore, MD

February 2020 – May 2023

- Led team of over 40 people to first championship appearance since 2007
- Organized tri-weekly pre-season training sessions and mentored younger players in technique and strategy
- Won two unsung-hero awards (one school wide, and one team) and was selected as an all conference athlete