

PIERCE BADER

Martinsville, NJ

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EDUCATION

Columbia University | New York, NY

August 2024 – May 2028 (expected)

Bachelor of Science in Mechanical Engineering

Relevant Coursework: Intro to Python, Intro to Electrical Engineering, Multivariable Calculus, Calculus II, Physics, Art of Engineering, Linear Algebra, Data Science, Economics.

The Bear Creek School | Redmond, WA

September 2020 – June 2024

Summa Cum Laude, 1500 SAT

Washington Aerospace Scholars | Seattle, WA

August 2022 – June 2023

Took a credit course in the University of Washington's aerospace engineering program. Selected for summer residency. Developed a plan for a manned mission to Mars. Led the budget team.

EXPERIENCE

TE Connectivity | Harrisburg, PA | Aerospace and Defense Engineering Intern

May 2025 – Aug. 2025

- Saved \$370,000 by reducing new product time-to-market in the New Product Introduction Lab.
- Implemented Six Sigma statistical analysis techniques to perform measurement system analyses, design of experiments studies, and capability studies using Minitab and JASP.
- Used Creo to create benchmarks for testing the capabilities of 3D printers and Keyence measurement systems.
- Designed a testing regime to prepare TE to deploy the Stratasys Origin 2 platform globally for manufacturing.
- Optimized 3D printing cell manufacturing processes using Stratasys Origin and BMF MicroArch DLP printers.
- Created a ticket portal for the 3D printing cell using PowerApps and led the reorganization of the cell's communications and data storage platforms.

Columbia Airplane Club | New York, NY | Chief Quality Control Engineer

Sept. 2024 – Present

- Constructed a UAV that ranked 16th out of 112 teams at the 2025 Design, Build, Fly in Tucson, Arizona.
- Facilitated weekly design reviews and build sessions alongside managing all club storage spaces and assets.
- Proactively implement engineering best practices to encourage continuous improvement and workplace safety.
- Elected as a member of the executive board to lead 30 undergraduate engineers through all phases of a national UAV design competition, ensuring regulatory compliance with the AIAA organizing committee.

ACTIVITIES

Columbia Space Initiative | New York, NY | CubeSat Team Member

Sept. 2024 – Present

- Working with the CubeSat team to develop and launch Columbia's first satellite by 2027.

UAV Design and Construction | Seattle, WA | Project Lead

March 2025 – Present

- Programmed Arduino based flight computer to log telemetry.
- Designed and manufactured a UAV with a wingspan of 1.1m.
- Built as a low-cost proof-of-concept for medium scale UAV construction techniques.

SKILLS & INTERESTS

- **Engineering:** SolidWorks, Creo, OnShape, Geometric Dimensioning and Tolerancing, DLP and FDM 3D Printing, Laser Cutting, Arduino
- **Computer Science:** Python, Java, C++, Swift, Minitab, JASP
- **Portfolio Management:** Tech-focused growth portfolio concentrated in defense and cybersecurity
- **Interests:** Club Tennis, Club Sailing, OSINT, Foreign Policy, Defense-Tech