

Kathryn A. Moskal
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EDUCATION

Cornell University <i>Bachelor's in Mechanical Engineering</i> Cumulative GPA: 3.6/4.0	Ithaca, NY Expected, May 2028 (Currently Sophomore)
Hall High School <i>High School Diploma</i> Rank: No Rank Cumulative GPA: 4.3/4.5	West Hartford, CT June 2024

SKILLS/INTERESTS

Computer: Ansys FEA, Ansys CFD, Blender, CAD Modeling (SolidWorks, OneShape, Fusion360), GitHub, Python, Scanning Electron Microscope, Microsoft Office, ImageJ/FIJI
Technical: Machining (Mill and Lathe), engineering analysis and design, data driven modeling, technical documentation, engineering drawings

PROFESSIONAL EXPERIENCES

ASTRA Lab, Cornell University Research Assistant	Ithaca, NY August 2025 – Present
<ul style="list-style-type: none">Independently develop CAD designs (Fusion360, Blender, Onshape) for nanoscale propulsion emitter caps as part of a NASA sponsored labCollaborate with a research team to 3D print, thermally harden, image with SEM, and analyze propulsion abilityAnalyze experimental data and present technical results at weekly lab meetings while following all safety protocolsAssist with mechanical setup and troubleshooting of vacuum chambers and support efforts to restore functionality of an older mass spectrometer	
Design Build Fly, Cornell University Mechanical Team Member	Ithaca, NY August 2025 – Present
<ul style="list-style-type: none">Design wing assemblies, elevator systems, and aircraft components using SolidWorksPerform mathematical analysis of aircraft flight and stability and document results in technical competition reportsUse Ansys CFD and Ansys FEA to evaluate aerodynamic performance, structural behavior, and overall aircraft stabilityCollaborate with teammates to iteratively build, test, and manufacture aircraft components using 3D printed parts, laser cut wood, and carbon fiber prepeg	
Crush Wine Bar Food Runner	West Hartford, CT May 2025 – August 2025
<ul style="list-style-type: none">Coordinated with kitchen and bar staff to deliver food and beverages efficiently in a fast paced environment	
Renbrook School Summer Adventure Counselor	West Hartford, CT June 2022 – August 2024
<ul style="list-style-type: none">Led and managed groups of children, ensuring safety, structure, and positive group dynamics	

LEADERSHIP & ACTIVITIES

Society of Women Engineers Member	Ithaca, NY August 2024 – Present
<ul style="list-style-type: none">Engaging in a professional and social network for mentorship, outreach, and technical workshopsCollaborating with peers to promote diversity, leadership, and professional development	
Particle Physics Lab Member	Ithaca, NY December 2024 – May 2025
<ul style="list-style-type: none">Completed and planned an independent research project predicting muon trajectories for planet characterizationQuickly adapted to new lab equipment and protocols, improving accuracy of experimental setup and data gathering	
Varsity Track and Field, Hall High School Team Captain	West Hartford, CT September 2020 – June 2024
<ul style="list-style-type: none">Led team organization while balancing training, competition schedules, and academic responsibilities	