

910 Echo Mountain Dr.
Stillwater, OK, 74075
(406) 880-1732
Samuel.Hiltz@okstate.edu
Portfolio: hilsamuel.github.io

Samuel Hiltz

EDUCATION

Oklahoma State University | Stillwater, OK

Bachelor of Science in Aerospace Engineering
Bachelor of Science in Mechanical Engineering
Bachelor of Science in Applied Physics

Expected May, 2026
GPA: 3.299

WORK EXPERIENCE

Teaching Assistant – Introduction to MAE Design	December, 2024 - Present
<ul style="list-style-type: none">Assists with the consulting design elements for teams in a class robotics competitionEvaluates team design progress reports and individual design assignments	
Research Assistant – Weather Mixing Analysis, Dr. Alyssa Avery	September, 2024 – Present
<ul style="list-style-type: none">Investigates distinctions between traditional weather balloons and newer weather UAVsUtilizes CM1 model data to analyze Eulerian and Lagrangian methodologies for atmospheric transport and mixing processes	
Research Assistant – Rubidium Bose-Einstein Condensate, Dr. Yingmei Liu	January, 2024 – June, 2024
<ul style="list-style-type: none">Assisted with the development of a Bose-Einstein Condensate using ultracold rubidium gas to investigate electromagnetic sensitivities	
Research Assistant – Perfect Point E-Drill CRADA, Dr. Kurt Rouser	August, 2023 – June, 2024
<ul style="list-style-type: none">Collaborated with Tinker Air Force Base to improve the process and effectiveness of an electrical discharging machine used in the removal of fasteners and rivets from aircraft equipment	

ACTIVITIES AND LEADERSHIP

NASA Micro-G NExT – International Space Station Team Member	August, 2022 – July, 2023
<ul style="list-style-type: none">Contracted by NASA to research, design, and test a mechanically powered, automatic zip-tie installer for use in a micro gravity environment	
OSU Mechanical and Aerospace Engineering Student Advisory Board	August, 2024 - Present
College of Engineering, Architecture, and Technology Student Council	January, 2023 - Present
OSU High Power Rocketry Team	August, 2022 - Present
OSU Student Government Association	August, 2023 - Present
<ul style="list-style-type: none">Oklahoma A&M Board of Regents Student RepresentativeOklahoma Regents Board for Higher Education Student RepresentativeOklahoma State University Faculty Council Student RepresentativeOSU Academic Standards and Policy Committee Student Representative2025 Vice-President of Student Affairs Search Committee	
American Physical Society	November, 2024 - Present
American Institute of Aeronautics and Astronautics	August, 2022 – Present
<ul style="list-style-type: none">Oklahoma State University Chapter President	November, 2024 - Present

SKILLS / AWARDS

Additive Manufacturing	MATLAB	Python	LabVIEW	C++	Wolfram Mathematica
Subtractive Manufacturing	Microsoft365	Simulink	SolidWorks	VBA	2025 OSU Cambridge Scholar