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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
- Assists with the consulting design elements for teams in a class robotics competition
 - Evaluates team design progress reports and individual design assignments
- Research Assistant – Weather Mixing Analysis, Dr. Alyssa Avery September, 2024 – Present
- Investigates distinctions between traditional weather balloons and newer weather UAVs
 - Utilizes 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
- 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
- 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
- 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
- Oklahoma A&M Board of Regents Student Representative
 - Oklahoma Regents Board for Higher Education Student Representative
 - Oklahoma State University Faculty Council Student Representative
 - OSU Academic Standards and Policy Committee Student Representative
 - 2025 Vice-President of Student Affairs Search Committee
- American Physical Society November, 2024 - Present
- American Institute of Aeronautics and Astronautics August, 2022 – Present
- 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