

EMILY WILLIAMS

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EDUCATION

University of Illinois at Urbana-Champaign

Bachelor of Science in Aerospace Engineering · Minor in Atmospheric Sciences

Dean's List, James Scholar, Tau Beta Pi, Alpha Omega Epsilon, Order of Omega

May 2021

GPA: 3.93/4.00

WORK EXPERIENCE

CU Aerospace

Undergraduate Research Assistant

Champaign, IL

Summer 2019

- Led procedural development processes for thermal vacuum and vibrational testing for monofilament vaporization propulsion thruster package
- Served as liaison between on-site and campus lab teams working on joint payload project

General Electric Aviation

GENx Product Operations Co-op/Intern

Cincinnati, OH

Summer 2018

- Reallocated 300+ GENx 1B booster fan blades in spares inventory to usable parts kitted for application on the assembly line, expediting the development of 20 affected engines
- Implemented program for tracking forecasted commits across multiple product lines to proactively address maintenance repair and overhaul (MRO) issues with executive team

KIE Web Development

Founder, Full-Stack Developer

Fall 2018 - Present

- Coding HTML/CSS and JavaScript to develop personal and professional websites hosted on GitHub for 10+ clients and businesses
- Leading joint consulting venture and engineering application to improve online presence of local businesses and personal branding of individuals

The Grainger College of Engineering at the University of Illinois at Urbana-Champaign

Lead Tutor and Peer Advisor

Fall 2019 - Present

- Leading reviews and tutoring for students through the Center for Academic Resources in Engineering
- Assisting in recruitment efforts for new tutors and administration logistics for walk-in tutoring

Head Engineering Learning Assistant for ENG 100

Fall 2019 - Present

- Instructing 20+ first-year aerospace students while providing direction, guidance, and mentorship
- Overseeing all Engineering Learning Assistants and ENG 100 course activities for all 11 departments

Course Assistant for CS 101

Fall 2018 - Present

- Supervising and guiding freshmen computer science students through laboratory sessions and office hours, facilitating learning of Python and MATLAB

LEADERSHIP AND ACTIVITIES

Women In Aerospace

President

Fall 2017 - Present

Spring 2019 - Present

- Created Departmental Development Committee of 6 representatives to improve female retention rate by coordinating outreach events with prominent women in engineering and industry leaders
- Collaborated with Aerospace Undergraduate Advisory Board of 8 to execute social mixers and other department-wide fundraising events

Satellite Development Organization

President

Fall 2017 - Present

Fall 2019 - Present

- Designed and developed new website and other media to rebrand and market towards recruiting new talent to work in the Laboratory for Advanced Space Systems at Illinois
- Creating and teaching new engineering course to introduce 25+ underclassmen to satellite development research opportunities on campus

Laboratory for Advanced Space Systems at Illinois

Program Manager

Fall 2017 - Present

Spring 2019 - Present

- Overseeing and monitoring all satellite mission progress across entire laboratory program through collaboration with mission coordinators and subteam leads
- Implementing robust scheduling system using Microsoft Project adaptable for tracking mission deliverables and responsibilities for 6 active satellite programs

SKILLS

Programming: Python, JavaScript, HTML/CSS, SQL, MATLAB, Bootstrap, LaTeX, Visual Studio, Full-Stack Development

Industry: PTC Creo, Siemens NX, MS Project/Visio, Soldering, Thermal Vacuum, 3D Printing, Technical Writing