

# 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 8 clients and businesses as of May 2019
- 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

*Tutor and Peer Advisor*

Fall 2019 - Present

- Leading reviews and tutoring for students through the Center for Academic Resources in Engineering

*Engineering Learning Assistant for ENG 100*

Fall 2019 - Present

- Instructing 20+ first-year aerospace students while providing direction, guidance, and mentorship

*Course Assistant for CS 101*

Fall 2018 - Present

- Supervising and guiding 35+ freshmen computer science students through laboratory sessions of introductory-level technical course, facilitating learning of Python, MATLAB, and symbolic algebra

## 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 20+ 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