

# Emily Williams

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## Education

### University of Illinois at Urbana-Champaign

May 2021

**B.S. in Aerospace Engineering · Minor in Atmospheric Sciences**

GPA: **3.93**/4.00

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

## Work Experience

### CU Aerospace

#### Undergraduate Research Assistant

Champaign, IL  
Summer 2019

- Leading procedural development processes for thermal vacuum and vibrational testing for monofilament vaporization propulsion thruster package

### 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

### CS 101: Introduction to Programming for Engineers and Scientists

#### Course Assistant

Fall 2018 - Present

- Supervising and guiding freshmen computer science students through laboratory sessions of introductory-level technical course
- Working directly with course administration team while holding office hours and discussion sections for students, facilitating learning of Python, MATLAB, and symbolic algebra

### KIE Web Development

#### Founder, Full-Stack Developer

Fall 2018 - Present

- Using HTML/CSS and JavaScript to develop personal and professional websites hosted on GitHub
- Partaking in joint consulting venture and engineering application to improve online presence of local businesses

## Curricular Involvement

### Women In Aerospace

Fall 2017 - Present

#### President

Spring 2019 - Present

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

### Laboratory for Advanced Space Systems at Illinois

Fall 2017 - Present

#### Program Manager

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 adaptable for tracking mission deliverables and responsibilities for five active satellite programs
- Developing software to display pass trends and visual data onscreen through mission control accessible webpages using HTML/CSS

#### Structural Test Engineer

Fall 2017 - Fall 2018

- Developed cumulative bill of materials of structural components of satellite mission by remodeling and dimensioning in Creo
- Restructured current satellite bus assembly model to ensure tolerances were met
- Oversaw use and experiments involving 3D printers, thermal vacuums, and soldering equipment