

# 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

## Work Experience

### General Electric Aviation

#### GENx Product Operations Co-op/Intern

Cincinnati, OH  
Summer 2018

- Executed technical solutions with cross-functional global teams in time-sensitive cases involving changes in design with FARO arm elimination and forward fan shaft
- 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

- Nominated to supervise and guide 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

Spring 2019 - Present

- Coding and developing personal and professional websites for clients and their businesses
- Using HTML/CSS and Java/JavaScript to create webpages 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

#### Secretary

Spring 2018 - 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

#### Systems Engineer

Fall 2018 - Spring 2019

- Drafting proposals for future missions for satellites for low-Earth orbit research
- Coordinating payload trade studies and designing structural components for future satellites

#### Structural Test Engineer

Fall 2017 - Fall 2018

- Developed cumulative Bill of Materials of structural components of CubeSail by remodeling and dimensioning in Creo for NASA's CubeSat Launch Initiative
- Restructured current IlliniSat-2 satellite bus assembly model to ensure tolerances were met
- Oversaw use and experiments involving 3D printers, thermal vacuums, and soldering equipment