

# 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: **3.91**/4.00

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

## Work Experience

### General Electric Aviation

#### **Incoming Engineering Co-op/Intern**

Summer 2019

- Accepted role working various projects including component design, analysis, development and testing, aerodynamics and thermodynamic design, and engine tests

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

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

### ENG 100: Engineering Orientation

#### **Incoming Engineering Learning Assistant**

Fall 2019

- Will instruct and facilitate one ENG 100 section of 20-25 first-year aerospace undergraduate students
- Will provide direction, guidance, and mentorship to students in their ENG 100 section beginning Fall 2019 semester

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

#### **Course Assistant**

Fall 2018

- 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

## Curricular Involvement

### Women In Aerospace

#### **Secretary**

Spring 2018 - Present

- Created Aerospace Departmental Development Committee to improve female retention rate
- Rebranded and revamped organization's website to include previous and current events

#### **External Representative**

Fall 2017 - Spring 2018

- Organized roundtables with prominent women in engineering and business industry leaders
- Collaborated with Aerospace Undergraduate Advisory Board to execute social mixer

### Laboratory for Advanced Space Systems at Illinois

#### **Program Manager**

Spring 2019 - Present

- Overseeing and monitoring all satellite mission progress across entire laboratory program

#### **Systems Engineer**

Fall 2018 - Present

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

#### **Structural Engineer**

Fall 2017 - Fall 2018

- Developed cumulative Bill of Materials for NASA's CubeSat Launch Initiative
- Restructured current satellite bus assembly model in Creo Parametric

### Illinois Space Society

#### **Test Engineer**

Spring 2019 - Present

- Assisting with manufacturing and thermal vacuum testing of Micrometeoroid Impact Detection and Suppression device on Micro-g Neutral Buoyancy Experiment Design Team