

Emily Williams

emilyjw2@illinois.edu · emilyjwilliams.github.io · 815-341-4058

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

Manufacturing Engineer

Spring 2019 - Present

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