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: **3.93**/4.00
Dean's List, James Scholar, Tau Beta Pi

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 — 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