EMILY WILLIAMS

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EDUCATION

University of Illinois at Urbana-Champaign **May 2021**
Bachelor of Science 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
- Leading procedural development processes for thermal vacuum and vibrational testing for Summer 2019
  monofilament vaporization propulsion thruster package

General Electric Aviation
GEnx Product Operations Co-op/Intern Cincinnati, OH
- Reallocated 300+ GEnx 1B booster fan blades in spares inventory to usable parts kitted for Summer 2018
  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

KIE Web Development
Founder, Full-Stack Developer Fall 2018 - Present
- Coding HTML/CSS and JavaScript to develop personal and professional websites hosted on
  GitHub for 5 clients and businesses as of May 2019
- Leading joint consulting venture and engineering application to improve online presence of
  local businesses and personal branding of individuals
- Developing sister site called Howie Work for independent freelance web developers and open projects

The Grainger College of Engineering at the University of Illinois at Urbana-Champaign
Tutor and Peer Advisor Fall 2019 - Present
- Leading reviews and tutoring for students through the Center for Academic Resources in Engineering
Engineering Learning Assistant for ENG 100 Fall 2019 - Present
- Instructing 20+ first-year aerospace students while providing direction, guidance, and mentorship
Course Assistant for CS 101 Fall 2018 - Present
- Supervising and guiding 35+ freshmen computer science students through laboratory sessions
  of introductory-level technical course, facilitating learning of Python, MATLAB, and symbolic algebra

LEADERSHIP AND ACTIVITIES

Women In Aerospace **Fall 2017 - Present**
President Spring 2019 - Present
- Created Departmental Development Committee of 6 representatives to improve female retention
  rate by coordinating outreach events with prominent women in engineering and industry leaders
- Collaborated with Aerospace Undergraduate Advisory Board of 8 to execute social mixers and
  other department-wide fundraising events

Satellite Development Organization **Fall 2017 - Present**
President Fall 2019 - Present
- Designed and developed new website and other media to rebrand and market towards
  recruiting new talent to work in the Laboratory for Advanced Space Systems at Illinois
- Creating and teaching new engineering course to introduce 20+ underclassmen to satellite
  development research opportunities on campus

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 using Microsoft Project adaptable for tracking mission
  deliverables and responsibilities for 5 active satellite programs
- Developing software in Visual Studio to display pass trends and visual data onscreen through
  mission control accessible webpages using HTML/CSS

SKILLS

Programming: Python, JavaScript, HTML/CSS, SQL, MATLAB, Bootstrap, LaTeX, Visual Studio, Full-Stack Development
Industry: Creo Parametric, Siemens NX, MS Project/Visio, Soldering, Thermal Vacuum, 3D Printing, Technical Writing