

Sarah Henry

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EDUCATION

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
Bachelor of Science in Aerospace Engineering
Minor in Atmospheric Sciences

Expected May 2024
GPA: 3.56 / 4.00

EXPERIENCE

Undergraduate Researcher, National Weather Center REU, University of Oklahoma May 2023 – Present

- Researches compound heat waves and air pollution episodes in the urban environment with Chenghao Wang
- Reads literature related to urban climatology, heat waves, urban heat island, and compound events

Undergraduate Research Assistant, Zhuo Wang, University of Illinois December 2022 – Present

- Researches the effect of climate change on tropical cyclones genesis in Pacific and Atlantic basins
- Uses a Scientific-Linux environment with shell scripting and Python to analyze and graph model output data
- Analyzes CESM2 output data with 15 ensemble members for 3 experiments from 1950-2050
- Reads literature related to general circulation models, tropical climatology and tropical cyclones

Course Assistant, Aerospace Dynamical Systems, University of Illinois August 2022 – December 2022

- Graded homework assignments and quizzes as the primary grader for a course of more than 100 students
- Answered course questions and posted course announcements in Slack, and proctored a quiz

Engineering Intern, Norman Filter Company, Bridgeview, IL May 2022 – August 2022

- Designed and operated pneumatic and water flow test stand configurations to collect flow coefficient data
- Analyzed data in MATLAB with an intern team to determine standard filter product flow coefficients
- Modeled and drafted parts to supplement standard product in SolidWorks following industry standards
- Exposed to manufacturing processes such as CNC turning and milling, GTAW and resistance welding

EXTRACURRICULARS & LEADERSHIP

Illinois Student Organization of Meteorology, Vice President, Forecasting Team August 2022 – Present

- Organizes and oversees club committee meetings to plan fundraising and social events
- Leads general and social meetings to discuss current weather and atmospheric sciences related events
- Forecasts the Urbana-Champaign weather with a student run and lead team

Illini Rowing, Elected Member of Integrity Committee August 2021 – May 2022

- Managed schedule of an athlete with that of a student; sat on Integrity Committee to vote on club actions

Society of Women Engineers, Graphics Chair (August 2020- May 2021) August 2020 - Present

- Advocates for women in engineering and technology fields in a chapter of an international organization
- Attends meetings from general to technical or soft skill-specific workshops to grow and learn as an engineer
- Created graphics for social media platforms to promote the organization within and beyond U of I

TECHNICAL SKILLS

SolidWorks
Siemens NX 8

Python
MATLAB

Microsoft Office
Linux/UNIX