Abigail McDonnell

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EDUCATION

University of Illinois Urbana-Champaign

Urbana, IL

Bachelor of Science in Atmospheric Sciences

Expected May 2025

• Coursework: Computing and Data Analysis, Climate Processes, Introduction to Computer Science I, Synoptic Dynamic Weather Analysis, General Physical Meteorology

TECHNICAL SKILLS

Languages: Python, Linux

Libraries: Xarray, NumPy, Pandas, Cartopy, matplotlib

Models: CMIP6, WRF Models, WPS Models

EXPERIENCE

Climate Dynamics and Data Science at UIUC

January 2022 – Present

University of Illinois Urbana-Champaign

Urbana, IL

- Conducting research on constraining climate model projections based on historical performance under Prof. Cristian Proistosescu
- Organized CMIP6 data and extracted global predictions of 30 different climate models
- Presented research at the American Geophysical Union Fall 2022 conference

Scholars Transforming Through Research

October 2022 - Present

Council on Undergraduate Research

Alexandria, VA

- Learned to communicate with policy makers promoting the importance of undergraduate research experiences
- Encouraged action towards reforming current climate policy

Tutor August 2022 – December 2022

America Reads / America Counts

Urbana, IL

- Tutored STEM students on reading and mathematics skills
- Fostered a supportive and positive learning environment to motivate students

ACTIVITIES

Girls in Engineering, Math, and Science (GEMS)

August 2017 - May 2021

Cary Grove High School

Cary, IL

- Educated young girls about different applications of math and science in industry
- Guided young girls towards positive role models to encourage STEM involvement

Connect Crew August 2019 – May 2021

Cary Grove High School

Cary, IL

- Mentored freshman class as a member of a student leadership group
- Coordinated welcome events to introduce freshman to high school life
- Taught orientation classes to new students, which created a supportive community

Summer Volunteer May 2017 – August 2020

Cary Area Library

Cary, IL

• Instructed educational classes to local students

- Organized classes by planning educational and fun activities
- Lead various community events which involved working with children

Registered Student Organisations
Speech Team, University Chorus, Virtual Reality Club, ISTORM (American Meteorological Society)

Aug. 2021 – Present