

Lucas J. Sterzinger
Curriculum Vitae

Address and Phone Censored for GitHub
<https://github.com/lsterzinger>

EDUCATION

PhD, Atmospheric Science 2017 - Present
University of California, Davis, Davis, CA
Anticipated: Fall 2022

Bachelor of Science, Atmospheric Sciences 2012 - 2017
University of North Dakota, Grand Forks, ND
Minor: Mathematics

Bachelor of Science, Aeronautics 2012 - 2017
University of North Dakota, Grand Forks, ND

WORK EXPERIENCE

Graduate Student Researcher 2017 - Present
Atmospheric Science Graduate Group, UC Davis
Dr. Adele Igel, Faculty Advisor

- Works on various research related to cloud and precipitation physics. Projects include:
 - Effect of ice crystal habit (shape) on orographic snowfall in the Sierra Nevada Mountains. (Funding: Internal)
 - Examining the relationship between mixed-phase Arctic cloud dissipation and aerosol properties. (Funding: DOE ASR)

Intern Summer 2021
Summer Internship in Parallel Computational Science (SIParCS)
National Center for Atmospheric Research (NCAR), Boulder, CO

- Worked on development of tools to access cloud-hosted netCDF4 data

Undergraduate Research Assistant 2016 - 2017
Dept. of Atmospheric Sciences, University of N. Dakota
Dr. Gretchen Mullendore, Faculty Advisor

- Worked on the “Big Weather Web” project examining potential uses for cloud infrastructure for numerical weather prediction.

Undergraduate Teaching Assistant 2015 - 2017
Dept. of Atmospheric Sciences, University of N. Dakota

- Independently taught Introduction to Meteorology lab, complete with weekly lectures and laboratory experiments.

Technical Support Specialist 2012 - 2017
Univ. of N. Dakota School of Medicine and Health Sciences

- Responsible for direct technology support to faculty, staff, and students. Also worked on managing video conference systems, networks, and servers.

SERVICE

UC Davis Graduate Student Association

- General Assembly Representative 2019-Present
- Elections Committee 2019-2020

UC Davis Academic Senate

Committee on Information Technology

Graduate Student Representative 2020-2021

PUBLICATIONS

The Effects of Ice Habit on Simulated Orographic Snowfall 2021

Sterzinger, L. J., & Igel, A. L. - *Journal of Hydrometeorology*

<https://doi.org/10.1175/JHM-D-20-0253.1>

Models in the Cloud: A Cost Exploration

of Cloud Computing for the Atmospheric Sciences

Nov. 2017

News@Unidata Blog

<https://www.unidata.ucar.edu/blogs/news/entry/models-in-the-cloud-a>

CONFERENCES

Arctic Mixed-Phase Cloud Dissipation and Its

Relationship to Low CCN Concentrations [Poster]

Jan. 2021

American Meteorology Annual Meeting 2021

Effects of Aerosol Concentration on the Dissipation

of Arctic Mixed-Phase Clouds [eLightning]

Dec. 2020

American Geophysics Union Fall Meeting 2020

Effect of Ice Habit on Modeled

Predictions of Orographic Precipitation [Poster]

Dec. 2019

American Geophysics Union Fall Meeting 2019

Effects of Ice Habit on Sierra Nevada Snowfall

and Implications for Climate Change [Poster]

Dec. 2018

American Geophysics Union Fall Meeting 2018

COMPUTER SKILLS

Languages & Software: Python, Julia, MATLAB, Fortran, C

Operating Systems: Unix/Linux, MacOS, Windows

MEMBERSHIPS

American Meteorological Society

American Geophysics Unions

LANGUAGES

English

French (Bilingual Fluency)

German (2 years of courses)