Adam S. Lucas | C. V.

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RESEARCH EXPERIENCE

Graduate Researcher
University of Oregon | Project Advisor: David Sutherland

- Using the glacier modeling software 'icepack' to model seasonal variations in the glacier dynamics of LeConte Glacier.
- Processing multibeam data collected during previous field seasons to investigate the sediment dynamics in LeConte Bay.

Undergraduate Researcher
Appalachian State University | Project Advisor: William Armstrong

- Thesis Title: *Modeling the role of frontal ablation in the 21st century evolution of lake-terminating glaciers on the Juneau Icefield, Alaska, U.S.A.*
- Used the 'Open Global Glacier Model' (OGGM) to model the effects of frontal ablation on the lake-terminating glaciers of the Juneau Icefield.

EDUCATION

University of Oregon | M.S. Earth Sciences
Expected Spring 2026

Appalachian State University | B.S. in Environmental Science, Conc. in Earth Systems
Fall 2020 – Spring 2024

- Minor in Geology & Minor in Mathematics
- GPA: 3.85/4.0

CONFERENCES / MEETINGS

ISSM Workshop | Dartmouth College, Expected to Attend March 2025

- Registered to attend the upcoming 2025 Ice Sheet System Model Workshop.

American Geophysical Union | Washington D.C., December 2024

- Attended AGU 24.

App. State OSR Celebration of Research and Creative Endeavors | May 2024

- Presented AGU 23 poster for the Office of Student Research.

American Geophysical Union | San Francisco, December 2023

Lucas, A., Armstrong, W., McNeil, C., Sutherland, D., Overeem, I., & Campbell, S. Modeling the role of frontal ablation in the 21st century evolution of lake-terminating glaciers on the Juneau Icefield, Alaska, U.S.A. AGU Fall Meeting, December 2023.

Southeast Friends of the Pleistocene Field Meeting | Linville Falls, Spring 2022

- Attended a field presentation on the formation of Linville Gorge, NC, by the process of stream capture.

WORK EXPERIENCE

Graduate Teaching Fellow **September 2024 - Present**
University of Oregon Earth Sciences | Eugene, OR

- Taught 4 lab sections of ERTH 102 – Exploring Earth's Environment with ~25 students each.

Engineering Intern II **Summer 2024**
Engineering Intern I **Summer and Winter 2022**
CDG Inc. | Charlotte, NC

- Performed both field and lab tests to determine the quality of construction materials in order for construction to continue for residential and industrial projects for companies such as Duke Energy and Charlotte-Mecklenburg Schools.
- Field Testing - Dynamic Cone Penetrometer, Hand Auger Borings, and Rebar Inspections.
- Lab Testing - Proctor tests, Atterberg Limits, Compressive Strength of Concrete Cylinders and Grout Prisms, Moisture Content of Soil and Bark, and Grain Size Analysis.

Answersphere (Geology Tutor) **August 2022 – May 2024**
Appalachian State Geological and Environmental Sciences | Boone, NC

- Assisted students in studying for introductory Earth science classes.

Teaching Assistant **January 2022 - April 2022**
Appalachian State Geological and Environmental Sciences | Boone, NC

- Assisted the professor in teaching students in a class of 20 students.
- Answered student's questions and helped students with rock identification.

VOLUNTEERING/OUTREACH

App. State Geological and Environmental Science (GES) Outreach
Events Include:

- Schiele Museum Fossil Fair (Spring 2022 & 2023)
- Hiddenite Celebration of the Arts (Fall 2022 & 2023)
- GES Open House (Spring & Fall 2022)
- Live Staking with the Watauga Riverkeeper (Spring 2022)
- Cove Creek Cleanup (Spring 2023)

App. State College of Arts and Science Corps
Events Include:

- Morgan Science Lecture Series Greeter
- App. State Open House (Fall 2023)

App. State GES Peer Mentor

- Assisted underclassmen and transfer students with classes and finding opportunities in the geosciences at App. State.

App. State GES Community Building Student Committee

- Committee works to build a strong and diverse community within the App. State GES Department, by planning social events, sharing career opportunities, and building equity and diversity.

FIELD WORK

Conductivity/Temperature/Depth Measurements | Shakes Lake, SE Alaska, September 2024

- Collected CTD casts in transects across the proglacial Shakes Lake.

Automatic Weather Station Maintenance | Hayden Glacier, OR, September 2024

- Dismantled an AWS above Hayden Glacier, located in the Three Sisters Wilderness, Oregon.

TECHNOLOGY/SOFTWARE/SKILLS

- MATLAB
- Python
- Open Global Glacier Model
- ENVI
- QGIS
- Adobe Suite
- Microsoft Suite
- 40 Hour HAZWOPER

AWARDS/HONORS

- Appalachian Excellence Scholarship (App. State, Fall 2020)
- Promising New Major Award (GES Department, Spring 2022)
- Undergraduate Research Assistantship (GES Department, Fall 2023)
- Departmental Honors (GES Department, Spring 2024)
- University of Oregon Earth Sciences Recruitment Award (Spring 2024)
- Environmental Science Academic Achievement Award (Spring 2024)
- Roy Sidle Award for Outstanding Achievement in Environmental Science Research (Spring 2024)

RELEVANT COURSES

- Continuum Mechanics
- Ice Physics
- Glaciology
- Hydrogeology
- Quantitative Data Analysis in Earth & Environmental Science
- Introduction to Geophysics
- Quantifying Environmental Change
- Geological and Env. Field Methods
- Calculus 1, 2, & 3
- Differential Equations
- Linear Algebra
- Environmental Remote Sensing
- Principles of Structural Geology & Tectonics
- Global Biogeochemical Cycles
- Preparation for Careers in Earth & Environmental Sciences

PROFESSIONAL MEMBERSHIPS

- Geological Society of America
- American Geophysical Union