Clinton Alden

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Github
LinkedIn

EDUCATION

Doctor of Philosophy, Civil Engineering March 2025 - 2028 (expected)
University of Washington, Mountain Hydrology Research Group

Selected Coursework: Physical Hydrology, Geospatial Data Analysis, Snow Modeling

Master of Science, Civil Engineering September 2023 - March 2025
University of Washington, Mountain Hydrology Research Group

GPA: 3.87
Thesis: *The Impact of Warming Temperatures on Snowpack Structure*

Bachelor of Science, Atmospheric Sciences Aug 2019 - May 2023
University of Utah

GPA: 3.80
Selected Coursework: Snow and Avalanche Dynamics, Atmospheric Dynamics, Physical Meteorology, Numerical Weather Prediction

WORK EXPERIENCE

Graduate Research/Teaching Assistant Sep 2023 - Present
University of Washington, Department of Civil and Environmental Engineering *Seattle, Washington*

- Teaching Assistant for Data Analysis in Water Sciences, Fall 2025

- Graduate Research Assistant in Professor Jessica Lundquist's Mountain Hydrology Research Group

Applied Hydrometeorological Consulting Jan 2026 - Present
Clinton Alden Consulting *Remote*

- Advise private-sector clients on the quality, limitations, and appropriate use of meteorological and hydrologic datasets
- Provide technical guidance on best practices for environmental data analysis

Avalanche Awareness Instructor Sep 2024 - Present
Northwest Avalanche Center *North Bend, Washington*

- Taught avalanche awareness classes to the general public, discussing snow and weather
- Both classroom and field-based instruction to audiences of all ages

Forecaster/Co-Founder Nov 2025 - Present
CascadeMountainWeather.com *Remote*

- Co-founded and led forecasting for a mountain weather and snow information platform
- Produce regular synoptic- and mesoscale-scale forecast discussions for a public audience
- Develop and maintain automated weather model visualization and real-time dashboards

Lab Assistant - Atmospheric Sciences Jun 2022 - Aug 2023
UC San Diego, Center for Western Weather and Water Extremes (CW3E) *Remote*

- Conducted research on atmospheric rivers and cloud properties using MODIS-Terra satellite observations, working with Dr. Minghua Zheng
- Supported ensemble sensitivity guidance for C-130 and NOAA G-IV dropsonde missions during the Atmospheric River Reconnaissance campaign

Teaching Assistant December 2021 - May 2023
University of Utah, Department of Atmospheric Sciences *Salt Lake City, Utah*

- Teaching assistant for undergraduate atmospheric science courses (Atmos 1000; instructor: Prof. Jim Steenburgh)
- Led office hours, graded coursework, and supported instruction for 250 students
- Assisted with field-based instruction for Atmos 5260 (Snow and Avalanche Dynamics) in the Wasatch Mountains

PRESENTATIONS

Department of Civil and Environmental Engineering Seminar 12 February 2026
University of Washington
"From SWE to Ski: Placing the 2026 Washington Snowpack in Historical Context"

Computer Science for the Environment 27 January 2026
eScience Institute, University of Washington
"Is that a cloud? Snow–cloud discrimination using geostationary satellites"

Northwest Snow and Avalanche Workshop 25 October 2025
Northwest Avalanche Center
"Turning Your World Upside Down: Atmospheric temperature inversions and their impacts on snow conditions"

Northwest Snow and Avalanche Workshop 26 October 2024
Northwest Avalanche Center
"Reading Between the Layers: What will our snowpack look like with climate change?"

32nd Conference on Weather Analysis and Forecasting 19 July 2023
American Meteorological Society
"An Overview of a Heavy Precipitation Event over California in October 2021: Roles of an Extreme Atmospheric River and Explosive Extratropical Cyclone"

Yampa Basin Rendezvous 23 September 2022
Center for Western Weather and Water Extremes
Atmospheric river impacts in the Yampa Basin

CW3E Friday Science Seminar 16 September 2022
Center for Western Weather and Water Extremes
Atmospheric river impacts in Northern California

MEDIA OUTREACH

11 February 2026 - KUOW National Public Radio Seattle - "The snow flaked on us this year. That's got meteorologists worried"

5 January 2026 - Seattle Weekly - "Flood science: How December's atmospheric river soaked Washington"

18 January 2024 - The Mercury News - "Dangerous avalanches linked to one weird night - and what you need to know to stay safe"