

Dawson Verley

M.S. Student in Energy and Resources / Machine Learning for Sustainable Energy Systems

verley@berkeley.edu | (907) 687-8475 | dawsonv.github.io

EDUCATION

M.S. in Energy and Resources, Expected Spring 2026

University of California, Berkeley

- ❖ *Relevant Coursework:* Data-Driven Control; Advanced Topics in Learning and Decision Making; Probability and Random Processes; Quantitative Policy Analysis; Energy and Society
- ❖ *Teaching:* Data, Environment and Society (ENERES 131); Data Science for Economists (ECON 148)
- ❖ *Primary Advisor:* Professor Duncan Callaway (ERG, EECS)
- ❖ Student Member, Institute of Electrical and Electronics Engineers (IEEE)

B.A. in Political Science with Honors and Distinction, Awarded Spring 2022

Stanford University

- ❖ *Relevant coursework:* Data Science, Intro to Statistical Learning, Machine Learning for Social Scientists, Deep Learning, Intro to R, Intro to Python Programming, Intro to Scientific Python, Research Design
- ❖ Phi Beta Kappa; GPA 4.052

PRIOR EXPERIENCE

Research Data Analyst, September 2023 – July 2024

Department of Political Science – Stanford University, Stanford, CA

- ❖ Developed an ML-based entity resolution method for large, multi-source datasets.
- ❖ Combined this with large-scale earth observation data to study global climate impacts.

Legislative Aide (Natural Resources Committee), January 2023 – January 2024

Alaska State House — Juneau, AK

- ❖ Worked with stakeholders to navigate complex issues in energy and natural resources policy.
- ❖ Briefed legislators on CCUS, grid decarbonization, and climate change adaptation.

Research Fellow (Computational Science), August 2022 – January 2023

Regulation, Evaluation and Governance Lab — Stanford Law School, Stanford, CA

- ❖ Assessed the impact of California's Mandatory Minimum Penalty program on water quality using administrative data from the California State Water Resources Control Board.

SKILLS AND INTERESTS

Technical Skills: Python (PyTorch), R (tidyverse), ML, RL, statistical modeling, data-driven control

Research Interests: applied machine learning, energy systems, public policy, climate change

Current Projects: Offline RL for Building Energy Efficiency; Distribution Shift Detection in Energy Systems; Uncertainty Quantification and Conformal Prediction for Robust Energy System Management