Gavin Scoville
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EDUCATION

Western Washington University, Bellingham, WA

Bachelor of Arts - Economics   August 2024

- **Minors — Mathematics, Environmental Science**
- GPA 3.94 — Honor Roll (4 years). Graduated with Honors: Cum Laude
    - Marine and Coastal Science Scholars Program
    - Economics Department Conference Travel Award
    - Economics Department Academic Excellence Award
    - Distinguished Graduate Award
- Course Highlights— *Stream Ecology (A), Topics in Marine and Coastal Science (A), Machine Learning and Statistical Learning (A), Advanced Environmental Economics (A), Mechanics of Materials (A), Multivariable Calculus and Analytical Geometry II (A)*

Research Abroad — Okavango Delta, Botswana,   September 2023

- Three month conservation biology program with Round River Conservation Studies
- Collected biological field data and survey data, integrating community outreach
- Identified how changing hydrological patterns are affecting people and the landscape

PUBLICATIONS, RECENT PROJECTS, AND PRESENTATIONS

- Performed analysis and played an integral part in developing the peer-reviewed paper:
  Glosser, D., Fish, N., **Scoville, G**., & Oos, K. (2026). Effect of temperature and atmosphere on the optical, thermal, and structural properties of fly ash particles. *Powder Technology*, *468*, 121650.
  https://doi.org/10.1016/j.powtec.2025.121650

- Identified patterns in global forest growth using machine learning techniques. Conducted in an internship with leading dendrochronologist Dr. Andy Bunn (see GitHub repository):

- Presented a lecture giving an overview of non-market valuation techniques to food-system researchers at the 2024 Agriculture Food and Human Values Society (AFHVS) international food systems conference
  Scoville, G., Plakias Z. (2024, June 7). *A Review of Quantitative Methods for Measuring Social Impacts of Food System Policies* [Conference presentation]. https://gavinscoville.github.io/GavinScoville/portfolio/AFHVS/

- Additional sample work available on my personal website:
  https://gavinscoville.github.io/GavinScoville/portfolio/

RESEARCH INTERESTS

   I am intently interested in developing solutions to the world's most challenging water resource issues. As resource issues have changed over time, my focus has moved from preventative measures such as utilizing environmental economics to internalize water pollution externalities, towards adaptive strategies such as building artificial reef structures. Because the water cycle trickles through every aspect of our economy and ecology, this resource requires an interdisciplinary management approach. I am excited to apply my diverse background, love of stochastic systems, strong quantitative skills, and unending passion for creative problem solving to researching hydrological systems.

RESEARCH EXPERIENCE

Concentrated Solar Power Research Assistant   June 2025-Sep 2025
- Identified trends and statistical patterns using R and machine learning techniques
- Visualized data with custom graphs built in the R programming language
- Collaborated to publish peer-reviewed paper

Estuarine Science Field and Lab Technician   June 2024-Sep 2024

- Collected sediment cores and survey data in PNW estuaries
- Utilized lab and statistical techniques to infer carbon cycling and sedimentation rates

Environmental Economics Research Assistant   April 2024-June 2024

- Reviewed literature for Dr. Plakias's Agricultural Economics Program at WWU
- Researched cutting-edge techniques for cost-benefit analysis of Environmental Projects
- Presented my findings at the AFHVS international conference in Syracuse, NY

Forest Ecology Data Science Internship   Jan 2024-Aug 2024

- Built machine learning algorithms for analyzing the International Tree Ring Database (IRTDB)
- Identified global patterns in how climate change is affecting forest health

Okavango Delta Research Assistant   Sep 2023 - Dec 2023

- Collected Biological Data in the Okavango Delta
- Studied how changes in hydrology affect both the landscape and people
- Supported Botswana's Community Based Natural Resource Management program

Center for Economics and Business Research Research Assistant   Sep 2022 - Sep 2023

- Produced lifecycle analysis studies such as a report tracing recycling supply chains for Washington State
- Improved the design of our economic forecasts reports by automating data collection and building custom visualizations

MENTORSHIP AND COMMUNITY ENGAGEMENT

Math and Economics Tutoring   Sep 2022 - Sep 2023
- Identified and applied alternative learning tools for teaching students with different learning styles
- Utilized socratic methods and problem based learning to motivate students
- Helped all of my students pass their classes after working together

Community Engagement and Indigenous Partnerships Cohort   March 2023
- Participated in a six-week cohort on Indigenous–non-Indigenous partnerships focused on community engagement, truth, and reconciliation (White Swan Environmental)
- Gained training in how to form healthy Indigenous–non-Indigenous partnerships to address challenges such as resource management

Outdoor Leadership   Sep 2020 - Present
- Led dozens of trips introducing WWU students to camping, canoeing, skiing, climbing, and backpacking
- Empowered people to be comfortable navigating their public lands

RELEVANT SKILLS

Research and Data Skills: Handling large and messy time-series datasets for ecological, hydrological, and behavior modeling. Applying machine learning methods to identify complex patterns. Interpreting messy data to motivate decision making.

Technical/Programming: R programming language, Python, GitHub, STATA, SQL, GIS

Field/Lab Methods: Fluvial sedimentation analysis, discharge measurement, sediment coring, tension and compression testing, river flow monitoring, tree coring, riparian habitat assessments

Field Skills: Backcountry navigation, backpacking, climbing, equipment maintenance and repair, operating heavy equipment, operating motorized and non-motorized water vessels, first aid

ADDITIONAL PROFESSIONAL EXPERIENCE

Climbing Arborist   Sep 2024 - Present
- Climbed trees & operated saws in challenging conditions with a diverse team of people
- Inspired clients to become effective stewards of their local landscape

Painter   June 2022 - Sep 2022
- Exceeded productivity expectations while painting and remodeling houses

Line Cook   June 2021 - Sep 2021
- Prepared dishes with a fast-paced team for a high end Hawaiian restaurant
- Thrived under pressure, performing best when the restaurant depended on me

Farm Hand   June 2020 - Sep 2020
- Raised livestock at Winzer Farms in Ellensburg, WA
- Operated heavy equipment such as an excavator, tractor, and a 1962 Ford dump truck