# **Gavin Scoville**

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#### **EDUCATION**

# Western Washington University, Bellingham, WA Bachelor of Arts - Economics, August 2025

- Minors Mathematics, Environmental Science
- GPA 3.94 Honor Roll (4 years). Graduated with Honors: Cum Laude
  - Marine and Coastal Science Scholars Program
  - · RSP Pilot Project Grant Funding
  - · Awarded Economics Department Travel Funding
  - Economics Department Academic Excellence Scholarship
  - 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 program collecting biological field data and survey data
- · Identified how changing hydrological patters are effecting people and the landscape
- · Mixed data collection with community outreach and classes

## RECENT PUBLICATIONS AND PROJECTS

- Performed Analysis and Writing for 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. *PowderTechnology*, 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 <u>GitHub repository</u>):
- Presented <u>a lecture giving</u> an overview of non-market valuation techniques to food-system researchers at the 2024 AFHVS international food systems conference.
- Additional sample works available on my personal website: https://gavinscoville.github.io/GavinScoville/portfolio/

## **RESEARCH INTERESTS**

My research interests revolve around solutions to some of the world's most challenging water resource issues. As resource issues have changed over time, my concentration has moved from preventative measures like utilizing environmental economics to internalize water pollution externalities, towards adaptive strategies like building artificial reef structures. The water cycle trickles through every aspect of our economy and ecology; It's a resource that needs an interdisciplinary management approach. I am exited to apply my diverse background, my love of stochastic systems, and my 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 published peer-reviewed paper

#### **Estuarian Field and Lab Technician**

June 2025-Sep 2025

- 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** 2024

April 2024-June

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

# Forest Ecology Data Science Internship

Jan 2024-Aug 2024

- Built machine learning algorithms for analyzing the ITRDB global tree ring data
- Identified global patterns in how climate change is effecting forest health

# **Okavango Delta Research Assistant**

Sep 2023 - Dec 2023

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

#### Center for Economics and Business Research Assistant Researcher

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

- Found 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

- Lead trips introducing people to camping, canoeing, skiing, climbing, and backpacking
- · Helped people become more comfortable navigating their public lands

### **RELEVANT SKILLS**

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

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

**Field/Lab Methods:** Fluvial Sedimentation Analysis. Discharge Measurement. Sediment Coring. Tension and Compression Testing. River Flow Monitoring. Coring Tree Rings. Riparian Habitat Assessments

**Field Skills:** Navigating, backpacking, climbing, equipment maintenance and repair, operating heavy equipment, operating 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
- · Excited clients about becoming 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 bar
- · Thrived under pressure, preforming best when the restaurant depended on me

Farm Hand June 2020 - Sep 2020

- · Raised Livestock at Winzor Farms in Ellensburg, WA
- Operated Heavy Equipment such as excavator, tractor, and a 1962 Ford dumptruck