

Jacob Gifford

Address

School of Economic Sciences
Washington State University
Pullman, WA 99163

Contact Information

jacob.gifford1@wsu.edu
Hulbert Hall 107A
<https://jgifford01.github.io/>
(208) 503-9733

Education

- **Ph.D., Economics** **Expected 2027**
Washington State University, WA
Primary Advisor: Jonathan Yoder (Director of Washington Water Research Center)
- **B.S., Economics** **2023**
Minors in Mathematics and GIS
Brigham Young University - Idaho, Rexburg, ID
Cum Laude

Refereed Publications

- Gifford, J., & Oliver, J. (2021). Black Lives Matter and Granger Causal Testing: A Signal of Economic Deprivation. *Modern Economy*, 12(11), 1666-1685 <https://doi.org/10.4236/me.2021.1211084>

Organizational Publications

- Gifford, J. (2023) A Probabilistic Peak Flood Risk Model of the Henrys Fork in Fremont County. Fremont County GIS Office.
- Gifford, J. Martin, M. (2022) College of Business and Communication Diversity and Inclusion Report. Brigham Young University - Idaho (please request access).
- Sarpong D., Osei-Asare Y., Gray B., Tsekpo E. (2022) FarmGrow: Farm Development Plans for Small-holder Cocoa Farmers in Ghana Endline Report. Grameen Foundation (Contributions).

Research in Progress

- Working under the Technology for Trade grant to model water markets under institutional and environmental constraints, to improve use efficiency and improve our understanding of the mechanisms for optimal resource allocation between human and environmental systems.

Fellowships, Grants, Honors, & Awards

- Ezra Taft Benson Award for Excellence in Economics, Brigham Young University - Idaho
- Thomas E. Ricks Academic Grant, Brigham Young University - Idaho
- Eagle Scout Award Recipient

Research Interests

- Computational socio-hydrologic (agent-based) modeling, remote sensing, spatial statistics, market/mechanism design, algorithmic game theory, and geographic information science

Professional Experience

- Research Assistant, Jonothan Yoder, School of Economic Sciences, WSU; Technology for Trade Project 2024
- GIS Analyst Intern, Fremont County Idaho GIS Office 2023
- GIS Consultant, Better in our Backyard 2023
- Research Lead, College of Business and Communication, Brigham Young University - Idaho 2022
- Research Assistant, Jeffrey Oliver, Department of Sociology, Brigham Young University - Idaho 2021
- Research Analyst, Grameen Foundation 2021-2022

Teaching

- SOC 295-R Games in Economic Sociology, Department of Sociology, Brigham Young University-Idaho 2021-2022

Service

- Economics Society President, BYU-Idaho 2021
- Community Service Volunteer in Melbourne Australia, LDS Church 2017-2019

Computer Programming and Software

- Proficient in Python and R for various applications including algorithm development and testing, Geographic Information Systems, statistical analysis, and machine learning.
- Experienced with Esri suite, QGIS, Pix4D, and GeoDa for tasks such as remote sensing and socio-spatial analysis.
- Skilled in hydrologic modeling using HEC-RAS and EPA SWMM.
- Knowledgeable in JavaScript, HTML, and SQL for website design and database management.

Foreign Language

- Portuguese

Last Update: 28 January 2022