Westin Guthrie

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Albuquerque, New Mexico

Education

University of New Mexico

<u>PhD student in Geography</u> - present
<u>Master of Science in Geography</u> - July 2023
<u>Bachelor of Science in Geography</u> - December 2019
Minor in English

Skills

- ArcGIS
- Microsoft Office Suite programs
- Adobe Illustrator
- Python (primary libraries: pandas, numpy, seaborn, matplotlib)
- R (statistical analysis, used to understand predictors to fire and parameterize a forest landscape model)
- QGIS
- Explaining technical concepts to others when unfamiliarity is present

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Master's Thesis (Awarded Thesis Distinction)

My thesis sought to answer:

How will contemporary and future climate scenarios impact the frequency and severity of fire intersecting with an expanding wildland-urban interface (WUI) in southern California?

- Using LANDIS-II to model forest succession and project wildfires to the year 2100
- Using R and Python for data visualization, landscape attributes, initial forest communities, and statistical regressions to parameterize models

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Work Experience

University of New Mexico - Lab Manager (20 hours per week)
Albuquerque
August 2023 - present

- Manage the ASPIRE lab website by adding content and organization
- Point of contact for parties interested in checking out field equipment
- Order supplies for the lab
- Put in tickets for cleanings or IT fix-its

University of New Mexico - Research/Teaching Assistant (20 hours per week, May-August 40 hours)
Albuquerque
August 2022 - May 2023 - Teaching Assistant (20 hours per week)

- Sole instructor for 5 lab sections for an undergraduate course
- Helped facilitate knowledge and thought about physical geography research
- Utilized Canvas to provide feedback, grade, and set up coursework

July 2021 - July 2022 - Research Assistant (20 hours per week)

- Used Python to produce maps and plots of various forest succession information
- Worked with Forest Inventory Analysis data to create age equations for tree species

- Worked with LANDIS-II, a forest landscape succession model, to parameterize and model forest succession in southern California

September 2022 - December 2022- Research Assistant (10 hours per week)
- Editing papers for a research project using daily Planet imagery for object-based image analysis in the Sevilleta National Wildlife Refuge

Maxar - GIS Analyst (40 hours per week)
March 2021 - July 2021

- Quality control for 3d maps using in-house software
- Cloud masking for 3d maps using in-house software

Earth Data Analysis Center (EDAC) - Data Services Assistant (12 hours per week)
Albuquerque, New Mexico
May 2019 - December 2019
- Analyzed aerial photography and Google Earth
- Talked to clients about services and took aerial photo orders
- Georeferenced aerial images using ArcMap and ERDAS Imagine
- Filed photos and maps within the library

Volunteering

St. John Vianney Catholic Church
Rio Rancho, New Mexico
August 2017 - 2021
- Leading small groups prompting discussion and thought about Catholic theology

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