

Corvallis, OR | (503) 545-1413 | kadenflick@gmail.com | https://kadenflick.github.io/

EDUCATION

OREGON STATE UNIVERSITY, Corvallis, OR | GPA 3.67

- **Expected graduation: June 2022**
- Bachelor of Science, Geography and Geospatial Science with a Minor in Computer Science
- Certificate in Geographic Information Science (GIS)

EXPERIENCE

OREGON DEPARTMENT OF HUMAN SERVICES, Salem, OR

Internship - Emergency Management Unit

Summer 2021

- Built end-to-end case management system to track and resettle survivors of disasters in Oregon.
- Situation Unit Leader for Emergency Management Unit Oregon Wildfires Taskforce for the 2021 fire season.
- Provided GIS support for the Emergency Management Unit and compiled daily SITREPS for over 350 people and departments across Oregon state government.

Internship – Office of Research, Reporting, Analytics, and Implementation

Fall 2021 – Present

- Made recommendations and built products to facilitate the incorporation of geospatial data and GIS workflows into statewide longitudinal dataset development projects.
- Compiled and presented potential geospatial data contributions for ongoing projects to Directors and Deputy Directors of collaborating State agencies.

PROJECTS

Assembly Area Selection and Critical Bridge Identification in Coos County, Oregon

2020

- Expanded on previous work done by DOGAMI to identify hazard, critical bridge, and assembly locations, focusing on the interior of the county not covered by previous analyses.
- Identified 7 new assembly areas and 17 new critical bridges in the interior population centers of the county, increasing the number of people served by over 8,000.
- Made recommendations for outfitting assembly areas with emergency supplies.

Site Report and Management Plan – East Hill Farm Site, Corvallis OR

2021

- Collected and compiled spatial and other data about the site, including locations of existing infrastructure and trails, hazards, important species, and demography for surrounding areas.
- Made management recommendations and developed locations for new infrastructure, including an additional parking area, 6 interpretive signs, and 2 miles of new trails.
- Emphasized the role of public education surrounding invasive and native species to meet landowner and stakeholder management goals.

Oregon Protected Area Land Cover Change

2021

- Examined land cover change on GAP Status 1 and 2 protected areas in Oregon over 25-year period using LCMap Land Cover Change raster data for years 1990-2015 and GAP-US protected area polygons.
- Developed automated raster clipping workflow using Python to reduce manual processing time and speed up analysis.

Cascadia Subduction Zone Event Annotated Bibliography

2021

- Conducted a literature review of the government documents, media pieces, and lines of effort at both the state and federal level to understand the impacts that the CSZE will have on Oregon.
- Emphasized the human element of the CSZE by comparing it to the 2011 earthquake and subsequent tsunami in Japan.

Social Vulnerability Index Automation

Ongoing

- Generalized CDC Social Vulnerability Index workflow, allowing any tabular data to be used to develop combinations of custom Social Vulnerability Indexes at any spatial scale.
- Developed an automated Social Vulnerability Index workflow using Python to create easily reproducible tabular and spatial data products.

Wildfire in Oregon Ongoing

• Examined the impact of Anthropogenic Climate Change and forest management practices over the last century on wildfire intensity, severity, and frequency in Oregon.

- Conducted a literature review and developed 2 interactive maps to explore the impact of wildfire on human health and the built environment especially with respect to differences in power, access, and vulnerability using the 2020 wildfires in Oregon as a case study.
- Developed personal preparedness and policy recommendations to increase resilience to wildfire in Oregon.

PORTLAND KAYAK COMPANY, Portland, OR

2015-2019

Instructor and Lead Guide

- Led multiple tours per day, teaching basic kayaking skills. Developed tour routines based on customers'abilities. Taught and guided clients from around the world.
- Streamlined rental processes that deal with hundreds of customers a day.
- Rescued dozens of clients with no injuries due to preparedness and safety planning.

RELEVANT COURSEWORK

Technical Education

- GEOG 360 GIS I: Geographic Information Systems & Theory
- GEOG 361 GIS II: Analysis & Applications
- GEOG 462 GIS III: Programming for Geospatial Analysis
- GEOG 370 Geovisualization: Cartography
- GEOG 480 Remote Sensing I: Principles and Applications
- CS 340 Introduction to Databases
- CS 361 Software Engineering I
- CS 362 Software Engineering II

Practical Application

- GEOG 451 Planning Principles and Practices for Resilient Communities
- GEOG 452 Sustainable Site Planning
- GEOG 430 Resilience-based Natural Resource Management
- GEOG 332 Climate & Health
- GEOG 324 Ecological Biogeography
- GEOG 350 Geography of Natural Hazards
- CS 290 Web Development

SKILLS AND CERTIFICATIONS

GIS: ArcGIS Pro, ArcGIS Online, ArcGIS Collector, ArcGIS StoryMaps **Development:** Python, Arcade, C++, HTML, CSS, SQL, JavaScript

Project Management: Agile, team management, design and specification, project asset management, release schedules

Public Speaking: Presentations, reports, classes, trainings **Writing:** Reports, memos, design documents, situation reports

Incident Command System:

- Introduction to Incident Command System, ICS-100
- Basic Incident Command System for Initial Response, ICS-200
- An Introduction to the National Incident Management System, ICS-700
- National Response Framework, An Introduction, ICS-800
- Basic Emergency Operations Center Functions, ICS-2200