

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.

#### Wildfire in Oregon

2022

- 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 based on solutions in published literature.

### **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.

### 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