



INFO

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PROFESSIONAL SKILLS



PROGRAMMING



WEB GIS



RDBMS



JAMES RAINES

GEOGRAPHER



EXPERIENCE

12/17 - present

WEB DEVELOPMENT AND AUTOMATION

National Park Service - Resource Information Division
Full stack development of Web sites and WebGIS applications. SQL database management and automation using JavaScript and Python.

01/17 - 01/18

GRADUATE RESEARCHER

University of Colorado Denver | USGS with CESU agreement
Grant recipient to study the effects of land use/cover change in monarch butterfly migration habitat on population decline. Performed GIS and wrote technical reports.

11/16 - 05/17

TEACHING ASSISTANT & GEOSPATIAL TUTOR

University of Colorado Denver
Courses taught:
GIS (GEOG 4080/5080); Cartography (GEOG 4081/5081)
Developed course material, administered lectures, and tutoring.

09/16 - 04/17

TRANSPORTATION & MOBILITY INTERN

City and County of Denver
Performed GIS services to inform multi-year plans for Denveright and Vision Zero. Developed python scripts to automate workflow of large datasets (200,000+ features).

07/15 - 06/16

PROGRAM COORDINATOR

Central Texas Food Bank
Managed the Mobile Pantry Distribution over 21 counties.
Used GIS to inform a 3-year program expansion plan.
Developed policy, cultivated agency partnerships, and supervised trainings and distributions

03/12 - 07/15

OPERATIONS

Microsoft
Oversaw a 2-million dollar supply chain. Managed databases for business projections, inventory, and archives. Performed audits, and led workshops.



EDUCATION

In progress

MASTER OF GEOGRAPHY AND GEOSPATIAL SCIENCE

University of Colorado Denver; 4.0 GPA
Gamma Theta Upsilon - International Geography Honor Society
CLAS Dean's Advisory Council - GES Graduate Representative
STEM accredited Professional Science Master's degree (PSM)

In progress

MASTER'S GISCI CERTIFICATE

University of Colorado Denver; 4.0 GPA
18 credit hours including: GIS, remote sensing, Web GIS, GIS programming, cartography, and RDBMS

2015

BACHELOR OF GEOGRAPHY

University of Texas at Austin
Minor in government



RESEARCH

In progress

EFFECTIVENESS OF NATURAL PROTECTED AREAS IN MEXICO

University of Colorado Denver

Thesis: Do federally decreed national protected areas mitigate forest cover loss and forest fragmentation? National study of natural protected areas in Mexico from 2000 to 2010.

In progress

MONARCH BUTTERFLY MIGRATION HABITAT

University of Colorado Denver | USGS

How has monarch butterfly migration habitat contributed to population change from 2000 to 2010? Land use/land cover study.

In progress

FOREST FRAGMENTATION IN COSTA RICA

University of Colorado Denver

Generatation of a national assessment of forest fragmentation using the morphological spatial pattern analysis algorithm.

2015

RESEARCH ASSISTANT

University of Texas at Austin

Researched conservations methods for the Andean Cloud Forest of Ayabaca, Peru. Additionally, analyzed the efficacy of the Payments for Ecosystem Services program for the Osa Peninsula of Costa Rica



PROJECTS

2017 - present

FOSS4G WEBSITE EDITOR

University of Colorado Denver

Managed content for the univeristy's FOSS4G website.

URL: <https://geospatial.ucdenver.edu/foss4g/>

2017

WEB MAP APP DEVELOPER

Environmental Center at Fort Lewis

Developed a dynamic open-source web map application to promote gleaning and local food iniatives.

URL: <https://lorax521.github.io/DurangoGleaning/>

2017

REMOTE SENSING ANALYSIS

In response to Missionary Ridge Fire of 2003

Analyzed the recovery areas after the Missionary Ridge Fire of 2003. Performed through open-source programming.

2013 - 2016

FOUNDER/OWNER/CFO

Austin Audio Cooperative

Founded an audio/visual event production company.

Managed events with 1000+ people. Strategized company direction, built partnerships, and designed accounting and inventory applications.