



# JAMES RAINES

DEVELOPER

## HELLO!

MY NAME IS JAMES RAINES - I AM A FULL STACK DEVELOPER AND GEOSPATIAL PROFESSIONAL. I LEAD DEVELOPMENT FOR FEMA HQ AND LOVE EXPLORING AND BUILDING OPEN-SOURCE TOOLS.

## EDUCATION

### MASTER OF GEOSPATIAL SCIENCE, 4.0

2017

Programming | RDBMS | GIS | Spatial Statistics | Remote Sensing  
Gamma Theta Upsilon - International Geography Honor Society  
CLAS Dean's Advisory Council - GES Graduate Representative  
STEM accredited Professional Science Master's degree (PSM)

### BACHELOR OF GEOGRAPHY

2015

GIS | Statistics | Environmental Science | Social Science  
Research Assistant - Conservation GIS for Andean Cloud Forest

## EXPERIENCE

### GEOSPATIAL DEVELOPER—FEMA

09/18- PRESENT

- Managed the development of scientific web and desktop applications for natural disaster risk analysis.
- Architected SaaS web platforms for hazard modeling. Implemented frontend design in Angular and backend REST APIs using Django with a PostgreSQL database.
- Lead development of a risk modeling Python library used in a suite of desktop utilities. Ancillary stack included SQL Server, SQLite, and C#.

### GIS & WEB DEVELOPER—NATIONAL PARK SERVICE

12/17 - 09/18

- Developed and designed a suite of Angular components for nps.gov, NPS map builder application, and park asset management.
- Implemented REST services using Node.js and collaborated on REST microservices using .NET CORE with a SQL Server database.
- Built a library of geospatial common models and class definitions using Leaflet.js.

### GEOSPATIAL RESEARCHER—US GEOLOGICAL SURVEY

01/17 - 01/18

- Provided habitat change research for the monarch butterfly.
- Performed maximum entropy modeling for habitat delineation in R and Python.

### TEACHING ASSISTANT—UNIVERSITY OF COLORADO DENVER

11/16 - 05/17

- Courses taught: GEOG 4081/5081 Cartography; GEOG 4080/5080 GIS
- Developed course material, administered lectures, and tutoring

### TRANSPORTATION PLANNING INTERN—CITY OF DENVER

09/16 - 04/17

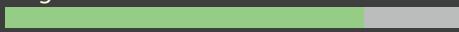
### PROGRAM COORDINATOR—CENTRAL TEXAS FOOD BANK

09/15 - 06/16

## SKILLS

### FRONT END

#### Angular 4+



#### JavaScript

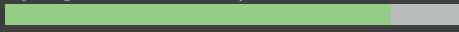


#### HTML & CSS

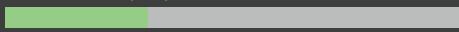


### BACK END

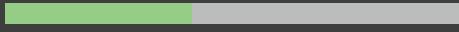
#### Django and Flask (Python)



#### .NET Core (C#)



#### Express/Node.js (TypeScript)

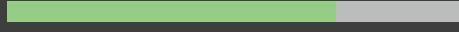


### DATABASES

#### PostgreSQL & PostGIS

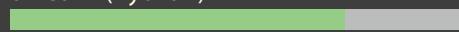


#### SQL Server & SQL Server Spatial

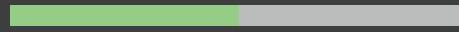


### DATA SCIENCE & SPATIAL ANALYTICS

#### Sklearn (Python)



#### R



#### GIS



### DevOps Platforms & Tools

- Git, Agile (SCRUM & Kanban), AWS