EDS 223: Geospatial Analysis & Remote Sensing

Spatial data science portfolio

Due: December 15, 2023 by midnight

Assignment overview:

Create an online portfolio and resume to showcase your spatial data science and communication skills.

- Create 3 presentation-worthy GitHub repositories based on assignments 2-4 or labs 8 & 9
 - Pick projects that highlight the skills you are most interested in highlighting to potential employers
- Create a blog post based on one assignment of your choosing
 - Pick the project you that you feel is most important in highlighting your skills
- Use these items to showcase your EDS skills in your resume

Repositories:

The goal of creating new repositories is to transform your existing repositories from answers to homework assignments into repositories that showcase an environmental workflow. The audience for a repository are potential collaborators who want to understand your workflow. Therefore, it is appropriate to include outputs that demonstrate the use of self-checks as well as intermediate and final results. (See below for how this differs for the blog post!)

Each repository should include the following:

- Clear structure
 - Resource on repository structure
 - Example of a great repo from Sam Csik
- Name
 - Should be brief, but informative (e.g. "assignment 2" is not acceptable)

README

- Slightly longer, informative title
- Short paragraph or bullets describing the purpose of the repo
- Block quote explaining contents and structure of the repo
- Any further explanations for downloading and storing data (e.g. will data be included in repo, or stored locally and included in .gitignore)
- Refer to information from EDS 214 on creating effective READMEs
- .gitignore
 - o Includes all files to ignore
- Rproj
- Rmd
 - You have flexibility in the exact structure, but it should include:
 - Background on the topic, including any references
 - An overview of the goals of the workflow
 - A description of the datasets being used, including any references
 - In the original assignments I provided text for these items.
 It is ok to recycle my text and references, but you should revise and restructure.
 - Text explaining each step in the workflow
 - This should be updated significantly from the original assignment. The goal is to make this look like a piece of analysis, not answers to a homework assignment.
 - o All code should adhere to best coding practices (see <u>assignment rubric</u>)

Blog post:

The goal of creating a blog post is practice communicating your work in a different format. The audience of a blog post is more general than that of the repository, therefore you may be more selective in which code and output you display. In this case you are building a narrative around your work as opposed to demonstrating how it works, so you may want to only display intermediate and final results as opposed to results of self-checks and not output code.

The blog post should include the following:

The assignment is a starting place

- You should use the background provided in the assignment as a starting place, but update the text and provide additional information and at least one additional reference.
- The style is up to you, but it should incorporate the following elements clearly:
 - A problem statement or question that your analysis will address
 - Background on why this issue is important
 - o Explanation of the data sources, analyses, and results
 - Clear, consistently formatted figures
 - I.e. informative axis labels/legends, visually appealing and consistent colors and fonts
 - Discussion of conclusions, including any potential caveats or future directions
- Posted on your personal website
 - Resources on add a blog post to your Quarto site from Sam Csik
- Example of an excellent blog post from Clarissa Boyajian created for EDS 222

Updated resume:

For this assignment, you will turn in an updated version of your resume including links to all repositories and the blog post. Each should be used as evidence for skills that are listed on your resume. The goal of linking these to your resume is to practice distilling the work you've done this quarter into skills that you will communicate to potential employers.

If you do not feel comfortable sharing your resume, you may submit text formatted in a similar style.

Please check out example formatting and resumes from the Career Team.

Please submit the following:

- A pdf with the naming convention "LastName-FirstName-EDS223.pdf"
- Email to Allie Caughman and Ruth Oliver