GEOlab Entry Assessment

Instructions: Please provide brief responses (up to a few sentences each), *not an essay*.

Joining the Lab

What program option do you want to pursue? (Select one)

Masters [ ]   5-year Ph.D. [ ]   Ph.D. only [ ]

How did you hear about and what interests you in our lab?

How do you see yourself fitting into the lab? What can you contribute vs what can you learn?

Research

Describe your scientific goals and your typical research approach.

How would you use remote sensing and geospatial data to study the environment, hazards, or energy?

Describe some limitations of using remote sensing for environmental and hazard studies. How can one compensate for these limitations?

Technical Competencies

Name some spatial data formats that you've worked with.

Instructions: On a scale of 0-10 (0 = No experience at all, 10 = Completely proficient)
How do you rate your image processing and geospatial analysis skills? ___

How do you rate your coding skills?
        R ___   Python ___   Java ___   JavaScript ___   C++ ___ Others: _____

Practice

Download the vessel traffic data for any vessel at any period of time and the satellite image of any type of your choosing. Visualize the location of the vessel on the satellite image and **submit the figure(s) in the document**. *It is suggested that you use programming to solve the problem. Alternatively, you can use GIS software, but please describe your workflow.*

Submission

Please submit your answers to geolab-apply@psu.edu in a common file format (e.g. doc, docx, pdf). Please use the following email subject format **GEOlab-entry-assesement_<Your last name>-<Your first name>**. *If you have codes, please submit it as a separate file or with a link pointing to the code.*