**Rubric**

**Task:** In this project, you are tasked with developing a computer vision model to identify ships from satellite imagery and using this model in conjunction with AIS ship tracking data to identify ships that are suspected of smuggling.

**How will I know I have succeeded?** You will meet expectations on CS2 Create Case Study when you follow the criteria in the rubric below.

| Spec Category | Spec Details |
| --- | --- |
| Formatting | Under this assignment, submit all sections described in this rubric. Submit each as separate files. Written portion, code file, and the visualization. |
| Written Portion | Submit as a Word doc on collab  The doc must include:   * Brainstorm section: This case study involves some abstract problem solving. In order to help you think through the problem before jumping into coding or mapping work, write out a paragraph about how you are thinking about the problem. This should read very casually and could be written in a stream of consciousness kind of format. Include bullets of ideas explored even if you later decide against approaching the problem in that way. The purpose of this section is for you to be intentional about brainstorming different approaches, and for the grader to assess your ideas. * A two paragraph section in which you reflect on your process and findings and describe in detail:   + Your method for solving this problem: How did you build your computer vision model? How did you extract and bring the satellite images into your workflow? How are you assessing your model’s accuracy? How are you bringing the model into the specific context of the problem and making it applicable?   + Your conclusions: How successfully did your model identify ships? What strengths does your solution have? What potential weaknesses do you foresee being a challenge with applying your deliverable? |
| Code File | Attach your file which includes all of the code you used for this project. The code should be thoroughly commented so a viewer with little context would be able to understand your process |
| Visualization | Attach the satellite image provided after the computer vision model has highlighted each of the ships its detected. Using the location information provided, circle which of the ships you suspect of smuggling. |