

Case Study Rubric

Due: TBD

Submission Format:

- Upload link to Github repository

Why am I doing this? This study is an opportunity for you to learn new skills and utilize deep learning through training an image recognition model considering real-world applications. You are going to have the opportunity to practice your skills with training a VGG16 CNN model and performing analysis. You will create a github repository to showcase your skills.

What am I going to do: In this assignment you will synthesize the materials provided in the Github repository given to you. You will take the code provided and use it to train a model with the dataset provided. You will be guided through the process and deliverables will include the following:

- Github repository including README to orient the repo
- Well documented code
- Written Summary of your learnings and takeaways

Tips for success

- When developing your code and model add many comments to be able to track and follow each step
- Understand that training the model takes patience, you will most likely need to request access to Rivanna
 - To create a more accurate model you might have to run the model for longer (run more epochs), start low and then determine how many more you would like to do

How will I know I have Succeeded? You will meet expectations on CS3 Create Case Study when you follow the criteria in the rubric below.

Spec Category	Spec Details
Formatting	<ul style="list-style-type: none">• One Github repository (submitted via Canvas)<ul style="list-style-type: none">○ Must contain:<ul style="list-style-type: none">■ README.md

	<ul style="list-style-type: none"> ■ Code File ■ Written Summary
README.md	<ul style="list-style-type: none"> ● Page to orient reader including a map of documentation and brief summary of the case study details
Code File	<ul style="list-style-type: none"> ● Google Colab notebook including all the script used to create and test model, should include: <ul style="list-style-type: none"> ○ Code for model ○ Testing model accuracy ○ Comments throughout to explain each step
Written Summary	<ul style="list-style-type: none"> ● Create a brief summary of what you learned in this case study. Reflect on how you could continue to incorporate these skills in your data science career. Include the challenges you faced and how you overcame them.