CS3 Rubric – Case Study Create

DS 4002 – Spring 2025 – Ezra Attisso
Due: Apr 28
Submission format: Upload link to Github repo to Canvas AND hard copy.

Individual Assignment

Why am I doing this? This is your opportunity to synthesize the lessons learned during this course and prepare one of your projects for delivery through a different mechanism than the in-class presentation. It is also your chance to contribute to those coming after you**.** The deliverable you will create is a case study targeted at a 2nd year UVA student. The reframing of your work with a new target audience gives you the chance to practice reaching a broader audience.

What am I going to do? In assignment CS2 you reviewed case studies created by your fellow students. Now in CS3 you have the opportunity to create a case study based on the work of ONE OF YOUR PROJECTS. (N.B.: your rubric for assessment, this document, is not the same as they received theirs, pay close attention to this rubric). First you will select one of ONE OF YOUR PROJECTS from this semester and think of a way to share that experience with future students. You will develop a case study targeting a 2nd year student. Then you will produce several items to hook the student as well to guide them through the process. Deliverables include:

Your final deliverables should include:

- A GitHub repository containing all materials used
- The images for the plants and diseases you chose to analyze
- A data dictionary
- Well documented, commented source code

Tips for success:

- Make your file names all uniform and easily interpretable. The naming convention you choose will determine the speed at which your code will be able to run.
- Be sure to partition your code frequently! The complexity of your code (especially come model-building) will ramp up dramatically as you progress - ResNet is notorious for how finicky the syntax can be. Give yourself the space to easily identify, and debug your code to save you time and headaches.

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.

Formatting	● One GitHub repository (submitted via link on Canvas)

	○ Create a new GitHub repository for this assignment titled "CS3_PlantDetection" that contains a: ▪ README.md ▪ LICENSE.md ▪ Source Code File ▪ Your Data ▪ REFERENCES.md
README.md	● Brief study of what you've produced for the case study. Does not have to be too detailed, but should be enough information to orient people to your repository.
Source Code File	● Well-document jupyter notebook file that contains the code used to execute your image and statistical analysis. In the source code you must include: ○ Data for wrangling of images ○ Data for RESnet model architecture ○ Data for analysis execution ○ Comments throughout
REFERENCES.md	● Goal: Markdown file titled "References.md" which cites all sources which you referenced in helping you create your model and any analyses in IEEE Documentation style. Also include brief annotations under each citation on how each source helped for this case study.