CART 451 FALL 2022

DELIVERABLE FOR IN CLASS EXERCISE I

DUE: NOVEMBER 1st :: 6PM ::

WHAT: A PDF Uploaded to your Git Repository and provide a link to the relevant Moodle assignment link.

The purpose of this report is to provide a summary, an analysis and some creative input for the in-class exercise that we did on October 25th, 2022. This report combined with your *active * in class attendance is worth 5% of your total semester grade.

Please answer the questions below to the best of your ability.

This is an individual assignment. You may work with other people BUT each one of you must have their own data sets as well as their own report.

PART A: The construction of a model with only your data.

- 1. Please provide a description of <u>the initial data set</u> you brought to class. What were the objects, how many ... and why you chose those specific objects. Provide an image of each distinct object.
- 2. What was the purpose of the task you were asked to do in class?
- 3. Describe in a series of steps what you did to complete the initial task in class
- 4. How well did your dataset do in terms of Accuracy, Precision and Recall?
- 5. Take screen grabs of the graphs available through the Feature Explorer for both the training and test/ live classification sets. Discuss the graphs in detail.
- 6. Provide brief postulations for how you think you could get your model to perform better. What does better mean?

PART B: The construction of a model with one of your objects and one of someone else's objects:

- 1. Please provide a description of the data used to construct the model. What were the objects, how many ... and why you chose those specific objects. Provide an image of each distinct object.
- 2. What was the purpose of this task in contrast to PART A
- 3. How well did your revised dataset do in terms of Accuracy, Precision and Recall?
- 4. Take screen grabs of the graphs available through the Feature Explorer for both the training and test/ live classification sets. Discuss the graphs in detail.
- 5. Provide brief postulations for how this model performed in contrast to PART A. Why?

PART C: Think of how to integrate this task:

Provide a written scenario: (not necessarily useful nor functional) – meaning you can dream up what you wish... without constraint... - for how and when such a task (Object Detection) could be used or embedded in ... what, why, where, with whom.

And provide a storyboard describing the scenario above as well.