

CART451 - Exercise 1 - UNFINISHED. GIVE ME A FEW HOURS SORRY

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

1. Please provide a description of the initial data set you brought to class. What were the objects, how many ... and why you chose those specific objects. Provide an image of each distinct object.

I used three objects for this experiment: a pokemon figurine, a Bluetooth speaker, and a stack of dice.



Here are all three objects in their respective order. The reason I chose the pokemon figurine is that it contains intricate details and I was curious to see how the AI would analyze it. I chose the speaker because it seemed like a simple and safe shape. Finally, I selected the stack of dice to find out whether numbers could affect AI.

2. What was the purpose of the task you were asked to do in class?

To train an AI program into recognizing physical objects.

3. Describe in a series of steps what you did to complete the initial task in class

In short:

1. Create an Edge Impulse project
2. Upload images under certain labels
3. Select image parameters
4. Train the program
5. Test the program
6. Deploy the program!

4. How well did your dataset do in terms of Accuracy, Precision and Recall?

Nearly had perfect results in every category.

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.