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8/29/2023

Project Proposal

1. What is the problem what this project will solve?

The problem that this project will solve is object detection and classification of playing cards in 3-D space. Given any photo and combination of playing cards the model will output the location and name of the card.

1. What data will I use to solve this problem?

The data that I will use for this project is a dataset that is from Kaggle.

( [Playing Cards Object Detection Dataset | Kaggle](https://www.kaggle.com/datasets/andy8744/playing-cards-object-detection-dataset) )

1. What is my outline for this problem?

The approach I will use for this problem will be likely using the yolo version 7 architecture for image location and classification. The inputs for this model are an image, (pixels), and numbers representing the bounding box and class label, ( numbers identifying each).

1. What is my final deliverable?

The final deliverable will be a web app that will “hopefully” work out of the box. That is

the aim.

1. What computational resources will I need at a minimum to do this project?

The training will likely be done either locally on a small gpu (3060) or in the cloud. The end product will likely need a cloud instance to be ready to serve users.