

Project Scope: The task was to implement a way to determine what the image contains and the objects within it. To do so, I used libraries such as TensorFlow, Matplotlib, Numpy, PILLOW, six, and many more to display and determine the contents of the image.

How it Works: (shown below) First, we need to download or point to an image on the computer. We are using the current code with a file in the computer. Next, to be able to actually do work on it, we need to resize the image to the desired size. Lastly, we load the newly resized image and run the detector on it from an open-source platform with a model. To actually know our boundaries/objects, we need to draw/add a bounding box to the image and then draw boxes with formatted labels and scores. When the program outputs “Program Completed”, we are done and the image will show up on the desktop with the objects determined.

Testing Procedure: The testing procedure was using several images and determine if the program was able to correctly identify the objects in the picture. When the code had a pretty good idea of what was in all the images I tried, I felt confident that it was an excellent way to detect the objects in the picture. Since the model we used was very complex, it takes a while for us to run the program and maybe I will test the code with different models. Since my laptop is not configured to work with a GPU, that may be the reason for the long program run time.

