Guided Projects Artificial Intelligence & Machine Learning

Guided Projects: Deep Learning

Object Detection

Object detection, regardless of whether performed via **deep learning or other computer vision** techniques, builds on **image classification** model and seeks to localize precisely where in the image each object appears. When performing **object detection**, given an input image, we wish to obtain the **object bounding box**, the class or the label the object belongs to and the **probability** of the **object belonging** to the **predicted class**.

Question:

Implement a pre-trained model such as **RCNN** or **YOLO** for the task of object detection. You may detect vehicles or humans given an image. Now implement the same on a video. For each frame of the video, draw the bounding box on the image and then store the results in an array and convert the final output back into a video