



ASSIGNMENT 6

Object Detection



BY

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CODE-

```
import cv2
import numpy as np

thres = 0.45 # Threshold to detect object
nms_threshold = 0.2

cap = cv2.VideoCapture(0)
cap.set(3,1280)

configPath = 'haarcascade_objectdetection.pbtxt'
weightsPath = 'haarcascade_allobjects.pb'

net = cv2.dnn_DetectionModel(weightsPath,configPath)
net.setInputSize(320,320)
net.setInputScale(1.0/ 127.5)
net.setInputMean((127.5, 127.5, 127.5))
net.setInputSwapRB(True)

while True:
    success,img = cap.read()
    classIds, confs, bbox = net.detect(img,confThreshold=thres)
    bbox = list(bbox)
    confs = list(np.array(confs).reshape(1,-1)[0])
    confs = list(map(float,confs))
    print(confs)
    indices = cv2.dnn.NMSBoxes(bbox,confs,thres,nms_threshold)
    print(indices)

    for i in indices:
```


