**Module 8**

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Batch: 05062021-9AM(Weekend)

Topic: Computer Vision and Image Processing

Write a code to track the pedestrian in a video. Use haar cascade pretrained model to achieve the same.

import cv2

import numpy as np

# Create our body classifier

body\_classifier = cv2.CascadeClassifier('E:/ARTIFICIAL INTELIGENCE/Assignment/Computer vision and image processing/haarcascade\_fullbody.xml')

# Initiate video capture for video file

cap = cv2.VideoCapture('E:/ARTIFICIAL INTELIGENCE/Assignment/Computer vision and image processing/walking.avi')

# Loop once video is successfully loaded

while cap.isOpened():

# Read first frame

ret, frame = cap.read()

#frame = cv2.resize(frame, None,fx=0.5, fy=0.5, interpolation = cv2.INTER\_LINEAR)

gray = cv2.cvtColor(frame, cv2.COLOR\_BGR2GRAY)

# Pass frame to our body classifier

bodies = body\_classifier.detectMultiScale(gray, 1.2, 3)

# Extract bounding boxes for any bodies identified

for (x,y,w,h) in bodies:

cv2.rectangle(frame, (x, y), (x+w, y+h), (0, 255, 255), 2)

cv2.imshow('Pedestrians', frame)

if cv2.waitKey(1) == 13: #13 is the Enter Key

break

cap.release()

cv2.destroyAllWindows()