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import cv2
haar_cascade = r"C:\Users\RINI\Downloads\cars.xml"
video = r"C:\Users\LAVANYA K\Downloads\car_v.mp4"

cap = cv2.VideoCapture(video)
car_cascade = cv2.CascadeClassifier(haar_cascade)
# reads frames from a video
ret, frames = cap.read()

# convert frames to gray scale
gray = cv2.cvtColor(frames, cv2.COLOR_BGR2GRAY)

# Detects cars of different sizes in the input image
cars = car_cascade.detectMultiScale(gray, 1.1, 1)
# To draw a rectangle in each cars
for (x,y,w,h) in cars:
    cv2.rectangle(frames,(x,y),(x+w,y+h),(0,0,255),2)

# Display frames in a window
cv2.imshow('video', frames)
# loop runs if capturing has been initialized.
while True:
    # reads frames from a video
    ret, frames = cap.read()

    # convert to gray scale of each frames
    gray = cv2.cvtColor(frames, cv2.COLOR_BGR2GRAY)

    # Detects cars of different sizes in the input image
    cars = car_cascade.detectMultiScale(gray, 1.1, 1)

    # To draw a rectangle in each cars
    for (x,y,w,h) in cars:
        cv2.rectangle(frames,(x,y),(x+w,y+h),(0,0,255),2)

    # Display frames in a window
    cv2.imshow('video', frames)

    # Wait for Esc key to stop
    if cv2.waitKey(33) == 27:
        break

# De-allocate any associated memory usage

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cv2.destroyAllWindows()
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