

```
from google.colab import drive
drive.mount('/content/drive')
%cd "/content/drive/MyDrive/Data/3"
```

Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount('/content/drive/MyDrive/Data/3')

## ▼ People Detection

```
import cv2
from google.colab.patches import cv2_imshow
import numpy as np

# Create our body classifier
body_classifier = cv2.CascadeClassifier('/content/drive/MyDrive/Data/3/Haarcascades/haarcascade_fullbody.xml')

# Initiate video capture for video file
cap = cv2.VideoCapture('/content/drive/MyDrive/Data/3/images/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)

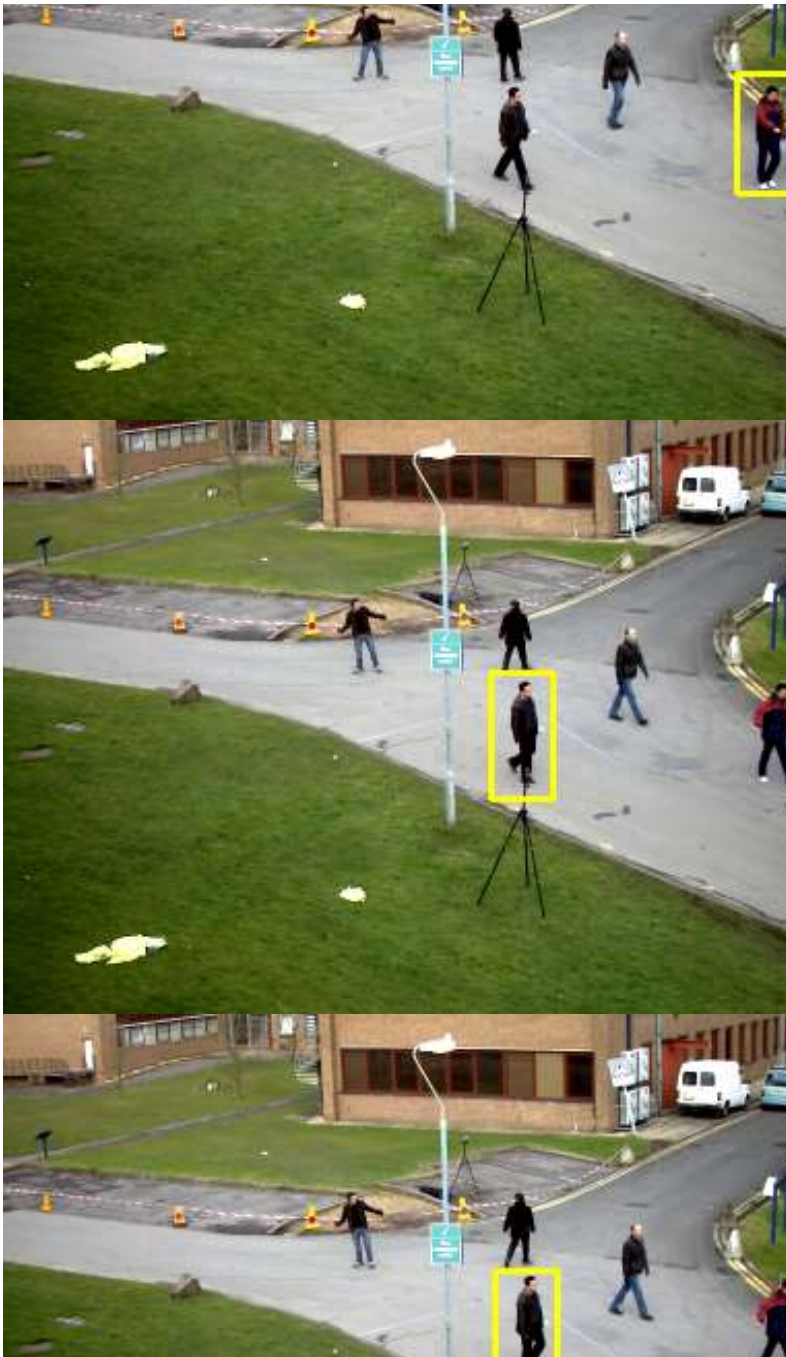
    gray = cv2.cvtColor(frame, cv2.COLOR_BGR2GRAY)
    # Pass frame to our body classifier
    bodies = body_classifier.detectMultiScale(gray, 1.2, 3)

    # 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(frame)

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

cap.release()
cv2.destroyAllWindows()
```





## ▼ Car Detection



```
import cv2
import time
import numpy as np

# Create our body classifier
car_classifier = cv2.CascadeClassifier('/content/drive/MyDrive/Data/3/Haarcascades/haarcascade_car.xml')

# Initiate video capture for video file
cap = cv2.VideoCapture('/content/drive/MyDrive/Data/3/images/cars.avi')
while cap.isOpened():

    time.sleep(.05)
```

```
# Read first frame
ret, frame = cap.read()
gray = cv2.cvtColor(frame, cv2.COLOR_BGR2GRAY)

# Pass frame to our car classifier
cars = car_classifier.detectMultiScale(gray, 1.4, 2)

# Extract bounding boxes for any bodies identified
for (x,y,w,h) in cars:
    cv2.rectangle(frame, (x, y), (x+w, y+h), (0, 255, 255), 2)
    cv2.imshow(frame)

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

cap.release()
cv2.destroyAllWindows()
```

