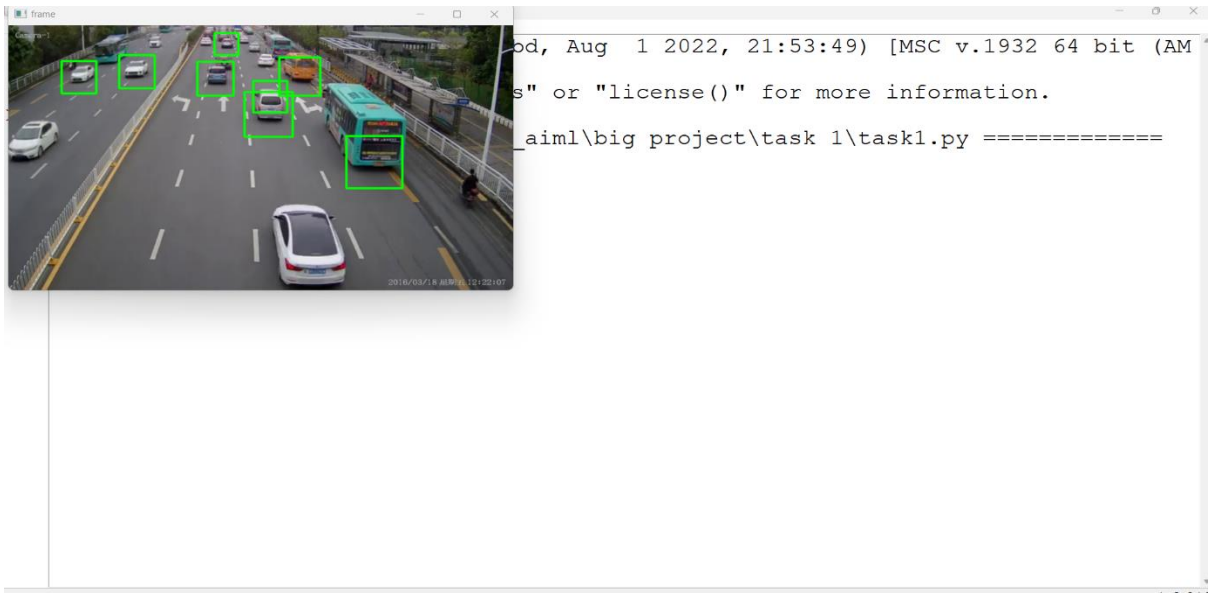
VEHICLE DETECTION &TRACKING

SOURCE CODE:

```
import cv2
cars_cascade = cv2.CascadeClassifier('cars.xml')


def detect_cars(frame):
    cars = cars_cascade.detectMultiScale(frame, 1.15, 4)
    for (x, y, w, h) in cars:
        cv2.rectangle(frame, (x, y), (x+w,y+h), color=(0, 255, 0), thickness=2)
    return frame


def Simulator():
    CarVideo = cv2.VideoCapture('cars1.mp4')
    while CarVideo.isOpened():
        ret, frame = CarVideo.read()
        controlkey = cv2.waitKey(1)
        if ret:
            cars_frame = detect_cars(frame)
            cv2.imshow('frame', cars_frame)
        else:
            break
        if controlkey == ord('q'):
            break


    CarVideo.release()
    cv2.destroyAllWindows()


if __name__ == '__main__':
    Simulator()
```

OUTPUT:


frame
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s" or "license()" for more information.
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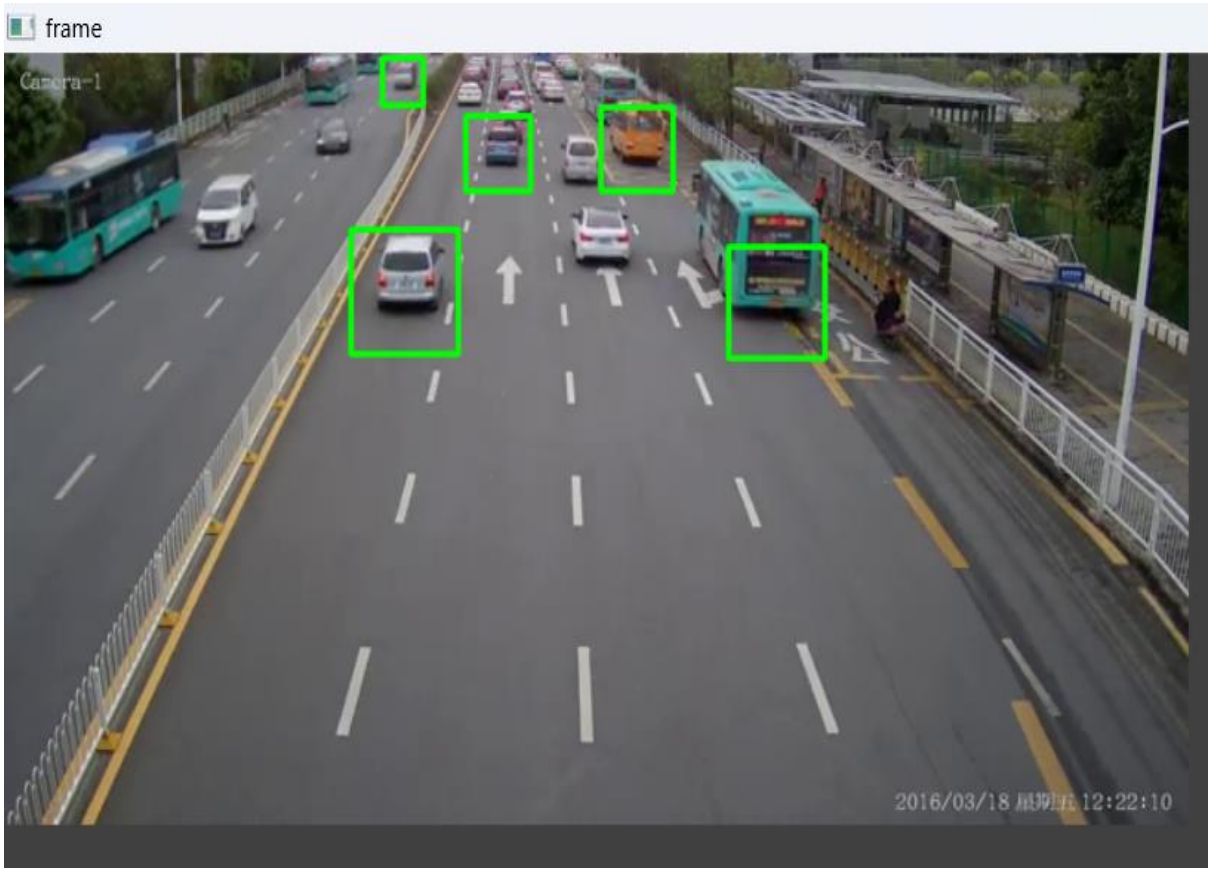
frame
Camera-1
2016/03/18 12:22:10