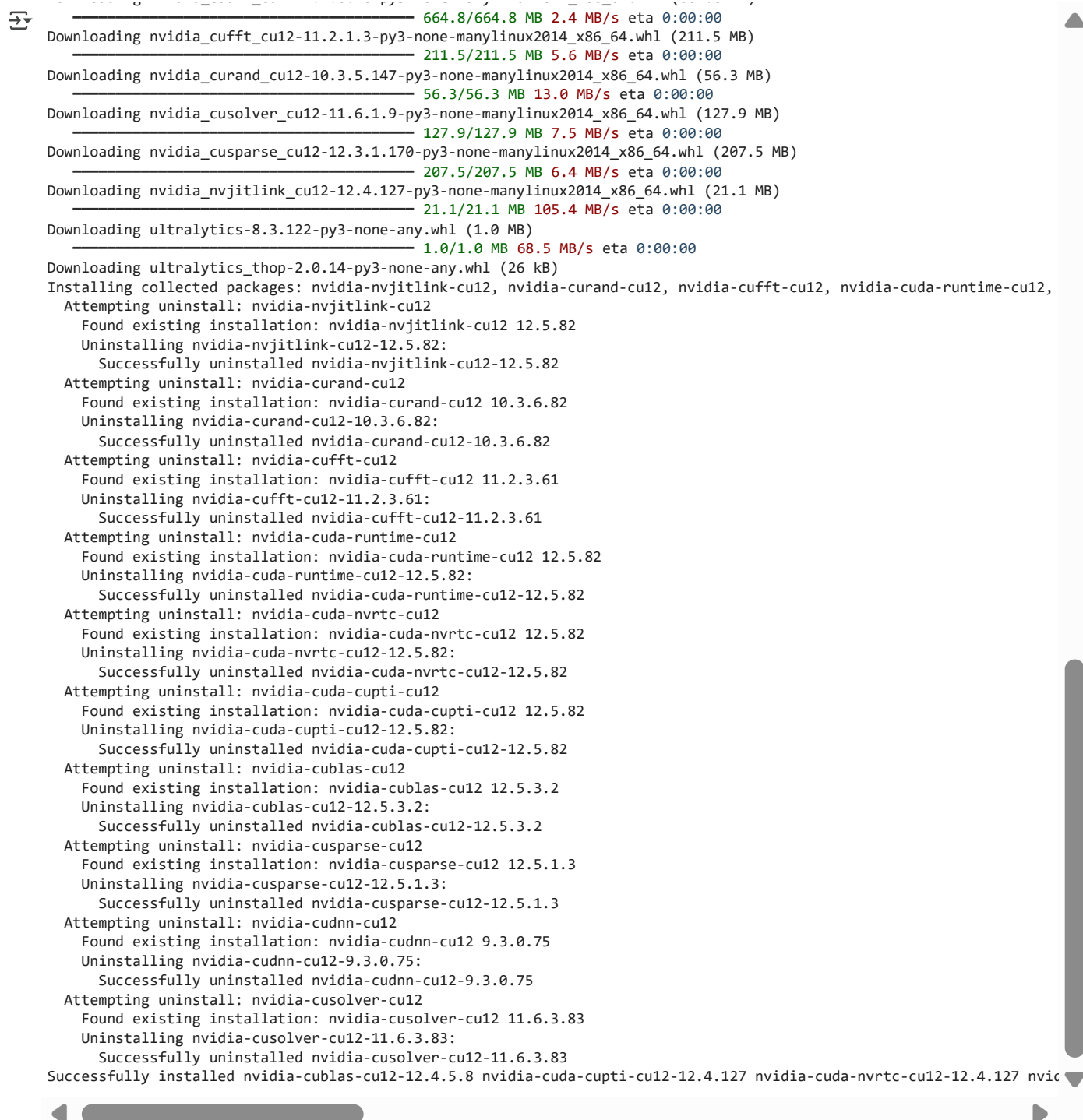


```
!git clone https://github.com/ultralytics/yolov5
%cd yolov5
!pip install -r requirements.txt
```



```

664.8/664.8 MB 2.4 MB/s eta 0:00:00
Downloading nvidia_cufft_cu12-11.2.1.3-py3-none-manylinux2014_x86_64.whl (211.5 MB)
211.5/211.5 MB 5.6 MB/s eta 0:00:00
Downloading nvidia_curand_cu12-10.3.5.147-py3-none-manylinux2014_x86_64.whl (56.3 MB)
56.3/56.3 MB 13.0 MB/s eta 0:00:00
Downloading nvidia_cusolver_cu12-11.6.1.9-py3-none-manylinux2014_x86_64.whl (127.9 MB)
127.9/127.9 MB 7.5 MB/s eta 0:00:00
Downloading nvidia_cusparses_cu12-12.3.1.170-py3-none-manylinux2014_x86_64.whl (207.5 MB)
207.5/207.5 MB 6.4 MB/s eta 0:00:00
Downloading nvidia_nvjitlink_cu12-12.4.127-py3-none-manylinux2014_x86_64.whl (21.1 MB)
21.1/21.1 MB 105.4 MB/s eta 0:00:00
Downloading ultralytics-8.3.122-py3-none-any.whl (1.0 MB)
1.0/1.0 MB 68.5 MB/s eta 0:00:00
Downloading ultralytics_thop-2.0.14-py3-none-any.whl (26 kB)
Installing collected packages: nvidia-nvjitlink-cu12, nvidia-curand-cu12, nvidia-cufft-cu12, nvidia-cuda-runtime-cu12,
Attempting uninstall: nvidia-nvjitlink-cu12
Found existing installation: nvidia-nvjitlink-cu12 12.5.82
Uninstalling nvidia-nvjitlink-cu12-12.5.82:
Successfully uninstalled nvidia-nvjitlink-cu12-12.5.82
Attempting uninstall: nvidia-curand-cu12
Found existing installation: nvidia-curand-cu12 10.3.6.82
Uninstalling nvidia-curand-cu12-10.3.6.82:
Successfully uninstalled nvidia-curand-cu12-10.3.6.82
Attempting uninstall: nvidia-cufft-cu12
Found existing installation: nvidia-cufft-cu12 11.2.3.61
Uninstalling nvidia-cufft-cu12-11.2.3.61:
Successfully uninstalled nvidia-cufft-cu12-11.2.3.61
Attempting uninstall: nvidia-cuda-runtime-cu12
Found existing installation: nvidia-cuda-runtime-cu12 12.5.82
Uninstalling nvidia-cuda-runtime-cu12-12.5.82:
Successfully uninstalled nvidia-cuda-runtime-cu12-12.5.82
Attempting uninstall: nvidia-cuda-nvrtc-cu12
Found existing installation: nvidia-cuda-nvrtc-cu12 12.5.82
Uninstalling nvidia-cuda-nvrtc-cu12-12.5.82:
Successfully uninstalled nvidia-cuda-nvrtc-cu12-12.5.82
Attempting uninstall: nvidia-cuda-cupti-cu12
Found existing installation: nvidia-cuda-cupti-cu12 12.5.82
Uninstalling nvidia-cuda-cupti-cu12-12.5.82:
Successfully uninstalled nvidia-cuda-cupti-cu12-12.5.82
Attempting uninstall: nvidia-cublas-cu12
Found existing installation: nvidia-cublas-cu12 12.5.3.2
Uninstalling nvidia-cublas-cu12-12.5.3.2:
Successfully uninstalled nvidia-cublas-cu12-12.5.3.2
Attempting uninstall: nvidia-cusparses-cu12
Found existing installation: nvidia-cusparses-cu12 12.5.1.3
Uninstalling nvidia-cusparses-cu12-12.5.1.3:
Successfully uninstalled nvidia-cusparses-cu12-12.5.1.3
Attempting uninstall: nvidia-cudnn-cu12
Found existing installation: nvidia-cudnn-cu12 9.3.0.75
Uninstalling nvidia-cudnn-cu12-9.3.0.75:
Successfully uninstalled nvidia-cudnn-cu12-9.3.0.75
Attempting uninstall: nvidia-cusolver-cu12
Found existing installation: nvidia-cusolver-cu12 11.6.3.83
Uninstalling nvidia-cusolver-cu12-11.6.3.83:
Successfully uninstalled nvidia-cusolver-cu12-11.6.3.83
Successfully installed nvidia-cublas-cu12-12.4.5.8 nvidia-cuda-cupti-cu12-12.4.127 nvidia-cuda-nvrtc-cu12-12.4.127 nvidia-cufft-cu12-11.2.1.3 nvidia-curand-cu12-10.3.5.147 nvidia-cusolver-cu12-11.6.1.9 nvidia-cusparses-cu12-12.3.1.170 ultralytics-8.3.122 ultralytics_thop-2.0.14

```

```
# Install required packages
!pip install ultralytics supervision pytesseract
!apt-get update && apt-get install -y libgl1-mesa-glx
!apt-get install tesseract-ocr -y
```

Requirement already satisfied: nvidia-cusparse-cu12==0.6.2 in /usr/local/lib/python3.11/dist-packages (from torch>=1.8.0->torch) (0.6.2)

Requirement already satisfied: nvidia-nccl-cu12==2.21.5 in /usr/local/lib/python3.11/dist-packages (from torch>=1.8.0->torch) (2.21.5)

Requirement already satisfied: nvidia-nvtx-cu12==12.4.127 in /usr/local/lib/python3.11/dist-packages (from torch>=1.8.0->torch) (12.4.127)

Requirement already satisfied: nvidia-nvjitlink-cu12==12.4.127 in /usr/local/lib/python3.11/dist-packages (from torch>=1.8.0->torch) (12.4.127)

Requirement already satisfied: triton==3.2.0 in /usr/local/lib/python3.11/dist-packages (from torch>=1.8.0->ultralytics) (3.2.0)

Requirement already satisfied: sympy==1.13.1 in /usr/local/lib/python3.11/dist-packages (from torch>=1.8.0->ultralytics) (1.13.1)

Requirement already satisfied: mpmath<1.4, >=1.1.0 in /usr/local/lib/python3.11/dist-packages (from sympy==1.13.1->torch) (1.3.0)

Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.11/dist-packages (from python-dateutil>=2.7->matplotlib) (1.16.0)

Requirement already satisfied: MarkupSafe>=2.0 in /usr/local/lib/python3.11/dist-packages (from jinja2->torch>=1.8.0->ultralytics) (2.1.5)

Downloading supervision-0.25.1-py3-none-any.whl (181 kB)

181.5/181.5 kB 6.1 MB/s eta 0:00:00

Downloading pytesseract-0.3.13-py3-none-any.whl (14 kB)

Installing collected packages: pytesseract, supervision

Successfully installed pytesseract-0.3.13 supervision-0.25.1

Get:1 [https://developer.download.nvidia.com/compute/cuda/repos/ubuntu2204/x86\\_64](https://developer.download.nvidia.com/compute/cuda/repos/ubuntu2204/x86_64) InRelease [1,581 B]

Get:2 <https://cloud.r-project.org/bin/linux/ubuntu> jammy-cran40/ InRelease [3,632 B]

Get:3 <http://security.ubuntu.com/ubuntu> jammy-security InRelease [129 kB]

Hit:4 <http://archive.ubuntu.com/ubuntu> jammy InRelease

Get:5 <https://r2u.stat.illinois.edu/ubuntu> jammy InRelease [6,555 B]

Get:6 [https://developer.download.nvidia.com/compute/cuda/repos/ubuntu2204/x86\\_64](https://developer.download.nvidia.com/compute/cuda/repos/ubuntu2204/x86_64) Packages [1,607 kB]

Get:7 <http://archive.ubuntu.com/ubuntu> jammy-updates InRelease [128 kB]

Hit:8 <https://ppa.launchpadcontent.net/deadsnakes/ppa/ubuntu> jammy InRelease

Hit:9 <https://ppa.launchpadcontent.net/graphics-drivers/ppa/ubuntu> jammy InRelease

Get:10 <http://archive.ubuntu.com/ubuntu> jammy-backports InRelease [127 kB]

Hit:11 <https://ppa.launchpadcontent.net/ubuntugis/ppa/ubuntu> jammy InRelease

Get:12 <https://r2u.stat.illinois.edu/ubuntu> jammy/main amd64 Packages [8,869 kB]

Get:13 <http://security.ubuntu.com/ubuntu> jammy-security/universe amd64 Packages [1,244 kB]

Get:14 <http://security.ubuntu.com/ubuntu> jammy-security/main amd64 Packages [2,844 kB]

Get:15 <http://archive.ubuntu.com/ubuntu> jammy-updates/universe amd64 Packages [1,544 kB]

Get:16 <https://r2u.stat.illinois.edu/ubuntu> jammy/main amd64 Packages [2,701 kB]

Get:17 <http://archive.ubuntu.com/ubuntu> jammy-updates/main amd64 Packages [3,155 kB]

Fetched 22.4 MB in 5s (4,186 kB/s)

Reading package lists... Done

W: Skipping acquire of configured file 'main/source/Sources' as repository '<https://r2u.stat.illinois.edu/ubuntu> jammy' is not a source repository

Reading package lists... Done

Building dependency tree... Done

Reading state information... Done

libgl1-mesa-glx is already the newest version (23.0.4-0ubuntu1~22.04.1).

0 upgraded, 0 newly installed, 0 to remove and 38 not upgraded.

Reading package lists... Done

Building dependency tree... Done

Reading state information... Done

tesseract-ocr is already the newest version (4.1.1-2.1build1).

0 upgraded, 0 newly installed, 0 to remove and 38 not upgraded.

!pip install paddleocr paddlepaddle



Requirement already satisfied: decorator in /usr/local/lib/python3.11/dist-packages (from paddlepaddle) (4.4.2)

Collecting astor (from paddlepaddle)

Downloading astor-0.8.1-py2.py3-none-any.whl.metadata (4.2 kB)

Collecting opt\_einsum==3.3.0 (from paddlepaddle)

```

Downloading astor-0.8.1-py2.py3-none-any.whl (27 kB)
Downloading lmbd-1.6.2-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (297 kB)
297.8/297.8 kB 26.5 MB/s eta 0:00:00
Downloading pyclicker-1.3.0.post6-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (969 kB)
969.6/969.6 kB 61.3 MB/s eta 0:00:00
Downloading python_docx-1.1.2-py3-none-any.whl (244 kB)
244.3/244.3 kB 22.5 MB/s eta 0:00:00
Downloading rapidfuzz-3.13.0-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_x86_64.whl (3.1 MB)
3.1/3.1 MB 97.6 MB/s eta 0:00:00
Building wheels for collected packages: fire
Building wheel for fire (setup.py) ... done
Created wheel for fire: filename=fire-0.7.0-py3-none-any.whl size=114249 sha256=7e75501ed4a273ee790d7e14a1a1d47ccc184
Stored in directory: /root/.cache/pip/wheels/46/54/24/1624fd5b8674eb1188623f7e8e17cdf7c0f6c24b609dfb8a89
Successfully built fire
Installing collected packages: pyclicker, lmbd, rapidfuzz, python-docx, opt_einsum, fire, astor, paddlepaddle, paddleocr
Attempting uninstall: opt_einsum
Found existing installation: opt_einsum 3.4.0
Uninstalling opt_einsum-3.4.0:
Successfully uninstalled opt_einsum-3.4.0
Successfully installed astor-0.8.1 fire-0.7.0 lmbd-1.6.2 opt_einsum-3.3.0 paddleocr-2.10.0 paddlepaddle-3.0.0 pyclicker

```

```

# Traffic Compliance System - Deep Learning Project
# This notebook implements a comprehensive traffic compliance detection system capable of:
# 1. Detecting standard traffic violations (speeding, lane changes)
# 2. Detecting multiple riders on motorcycles (>2 people)
# 3. Detecting riders without helmets
# 4. License plate recognition

```

```

import os
import cv2
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
from datetime import datetime
from google.colab import files, drive
import torch
from IPython.display import display, HTML, Image
import pytesseract
from PIL import Image as PILImage
from ultralytics import YOLO
import supervision as sv
from IPython.display import Video

# Mount Google Drive for saving results (optional but recommended)
# drive.mount('/content/drive')

# Create project directory
PROJECT_DIR = '/content/drive/MyDrive/DL Project/traffic_compliance_system'
os.makedirs(PROJECT_DIR, exist_ok=True)
os.makedirs(f"{PROJECT_DIR}/detected_violations", exist_ok=True)
os.makedirs(f"{PROJECT_DIR}/processed_frames", exist_ok=True)

```

```
# 2nd installation code
```

```
video_path = "/content/drive/MyDrive/Uploaded videos/traffic3.mp4"
```

```
!python "/content/drive/MyDrive/DL Project/Scripts/main.py" "{video_path}"
```

```
class_names = ['helmet', 'mobile_usage', 'no_helmet', 'triple_ride']
```

```

!python /content/yolov5/detect.py --weights "/content/drive/MyDrive/DL Project/model/best_3rider.pt" \
--source "/content/drive/MyDrive/DL Project/traffic_compliance_system/processed_video.mp4" \
--conf 0.3 \
--save-txt \
--save-conf \
--project /content/traffic_compliance_outputs \
--name filtered_output \
--exist-ok

```

```
!python "/content/drive/MyDrive/DL Project/Scripts/emergency.py"
```

```
!python "/content/drive/MyDrive/DL Project/Scripts/seatbelt.py"
```

```
output_path = "/content/traffic_compliance_outputs/filtered_output/processed_video(after_seatbelt).mp4"  
  
display(Video(output_path, embed=True))
```

 Creating new Ultralytics Settings v0.0.6 file 

View Ultralytics Settings with 'yolo settings' or at '/root/.config/Ultralytics/settings.json'

Update Settings with 'yolo settings key=value', i.e. 'yolo settings runs\_dir=path/to/dir'. For help see <https://docs.ultra>

Enhanced Traffic Compliance System - Deep Learning Project

=====

This system can detect:

1. Standard traffic violations (speeding, lane changes)
2. Multiple riders on motorcycles (>2 people)
3. Riders without helmets
4. License plate recognition

=====

Downloading <https://github.com/ultralytics/assets/releases/download/v8.3.0/yolov8n.pt> to 'yolov8n.pt'...

100% 6.25M/6.25M [00:00<00:00, 93.0MB/s]

Using general purpose model for helmet detection. Fine-tuning recommended for better results.

Processing video for violations...

0: 384x640 1 car, 4 motorcycles, 1 bus, 52.4ms  
Speed: 6.0ms preprocess, 52.4ms inference, 409.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 7.5ms  
Speed: 1.3ms preprocess, 7.5ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 1 bicycle, 1 car, 4 motorcycles, 1 bus, 2 umbrellas, 7.9ms  
Speed: 1.6ms preprocess, 7.9ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 3 motorcycles, 1 bus, 12.6ms  
Speed: 2.1ms preprocess, 12.6ms inference, 2.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 13.9ms  
Speed: 1.9ms preprocess, 13.9ms inference, 2.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 2 bicycles, 1 car, 3 motorcycles, 1 bus, 2 umbrellas, 13.2ms  
Speed: 1.7ms preprocess, 13.2ms inference, 2.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 5 motorcycles, 1 bus, 14.4ms  
Speed: 1.8ms preprocess, 14.4ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 19.0ms  
Speed: 1.8ms preprocess, 19.0ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 1 bicycle, 1 car, 5 motorcycles, 1 bus, 1 umbrella, 11.9ms  
Speed: 1.9ms preprocess, 11.9ms inference, 2.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 5 motorcycles, 1 bus, 19.8ms  
Speed: 1.8ms preprocess, 19.8ms inference, 5.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 13.7ms  
Speed: 1.7ms preprocess, 13.7ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 3 bicycles, 1 car, 5 motorcycles, 1 bus, 1 umbrella, 8.7ms  
Speed: 2.0ms preprocess, 8.7ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 5 motorcycles, 8.8ms  
Speed: 1.7ms preprocess, 8.8ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 12.6ms  
Speed: 1.7ms preprocess, 12.6ms inference, 2.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 1 bicycle, 1 car, 5 motorcycles, 9.3ms  
Speed: 1.2ms preprocess, 9.3ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 3 motorcycles, 1 truck, 8.2ms  
Speed: 1.6ms preprocess, 8.2ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 7.9ms  
Speed: 1.6ms preprocess, 7.9ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 1 bicycle, 1 car, 3 motorcycles, 1 truck, 8.4ms  
Speed: 1.6ms preprocess, 8.4ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 3 motorcycles, 9.0ms  
Speed: 1.7ms preprocess, 9.0ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 8.5ms  
Speed: 1.6ms preprocess, 8.5ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 3 bicycles, 1 car, 3 motorcycles, 8.4ms  
Speed: 1.6ms preprocess, 8.4ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 4 motorcycles, 11.2ms  
Speed: 1.7ms preprocess, 11.2ms inference, 2.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 8.7ms  
Speed: 1.9ms preprocess, 8.7ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 1 bicycle, 1 car, 4 motorcycles, 1 umbrella, 8.8ms  
Speed: 1.6ms preprocess, 8.8ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 4 motorcycles, 8.8ms  
Speed: 2.3ms preprocess, 8.8ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 11.2ms  
Speed: 1.7ms preprocess, 11.2ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 2 bicycles, 1 car, 4 motorcycles, 1 umbrella, 8.7ms  
Speed: 1.7ms preprocess, 8.7ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 4 motorcycles, 8.7ms  
Speed: 1.6ms preprocess, 8.7ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 9.7ms  
Speed: 1.6ms preprocess, 9.7ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 1 car, 4 motorcycles, 1 umbrella, 8.7ms  
Speed: 1.8ms preprocess, 8.7ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 4 motorcycles, 8.6ms  
Speed: 1.8ms preprocess, 8.6ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 8.9ms  
Speed: 1.6ms preprocess, 8.9ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 1 car, 4 motorcycles, 9.0ms  
Speed: 1.7ms preprocess, 9.0ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 4 motorcycles, 1 truck, 12.5ms  
Speed: 1.9ms preprocess, 12.5ms inference, 2.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 12.2ms  
Speed: 2.0ms preprocess, 12.2ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 1 car, 4 motorcycles, 1 truck, 1 traffic light, 1 umbrella, 9.1ms  
Speed: 1.2ms preprocess, 9.1ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 4 motorcycles, 1 truck, 9.2ms  
Speed: 4.2ms preprocess, 9.2ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 9.8ms  
Speed: 1.6ms preprocess, 9.8ms inference, 2.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 1 car, 4 motorcycles, 1 truck, 13.7ms  
Speed: 1.8ms preprocess, 13.7ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 4 motorcycles, 1 truck, 11.8ms  
Speed: 1.7ms preprocess, 11.8ms inference, 2.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 12.2ms  
Speed: 1.8ms preprocess, 12.2ms inference, 2.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 1 car, 4 motorcycles, 1 truck, 1 umbrella, 12.5ms  
Speed: 1.9ms preprocess, 12.5ms inference, 4.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 4 motorcycles, 1 truck, 13.2ms  
Speed: 1.7ms preprocess, 13.2ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 9.8ms  
Speed: 1.8ms preprocess, 9.8ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 1 car, 4 motorcycles, 1 truck, 1 umbrella, 12.8ms  
Speed: 1.7ms preprocess, 12.8ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 3 motorcycles, 1 truck, 10.9ms  
Speed: 1.8ms preprocess, 10.9ms inference, 3.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 15.1ms  
Speed: 1.6ms preprocess, 15.1ms inference, 2.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 2 bicycles, 1 car, 3 motorcycles, 1 truck, 2 umbrellas, 12.0ms  
Speed: 1.8ms preprocess, 12.0ms inference, 2.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 2 motorcycles, 1 truck, 13.3ms  
Speed: 1.8ms preprocess, 13.3ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 11.9ms  
Speed: 1.7ms preprocess, 11.9ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 1 bicycle, 1 car, 2 motorcycles, 1 truck, 2 umbrellas, 12.3ms  
Speed: 1.6ms preprocess, 12.3ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 3 motorcycles, 1 truck, 12.3ms  
Speed: 1.8ms preprocess, 12.3ms inference, 2.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 11.8ms  
Speed: 1.5ms preprocess, 11.8ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 1 car, 3 motorcycles, 1 truck, 1 umbrella, 11.7ms  
Speed: 1.6ms preprocess, 11.7ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 5 motorcycles, 1 truck, 11.9ms  
Speed: 1.7ms preprocess, 11.9ms inference, 2.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 12.8ms  
Speed: 1.5ms preprocess, 12.8ms inference, 2.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 1 car, 5 motorcycles, 1 truck, 1 umbrella, 13.0ms  
Speed: 1.7ms preprocess, 13.0ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 640x576 (no detections), 49.1ms  
Speed: 10.9ms preprocess, 49.1ms inference, 0.4ms postprocess per image at shape (1, 3, 640, 576)

0: 384x640 1 car, 3 motorcycles, 1 truck, 7.4ms  
Speed: 2.0ms preprocess, 7.4ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 1 car, 3 motorcycles, 1 truck, 1 umbrella, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 5 motorcycles, 1 truck, 6.7ms  
Speed: 2.0ms preprocess, 6.7ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 7.3ms  
Speed: 1.2ms preprocess, 7.3ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 1 car, 5 motorcycles, 1 truck, 1 umbrella, 6.9ms  
Speed: 1.2ms preprocess, 6.9ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 cars, 3 motorcycles, 1 truck, 7.3ms  
Speed: 1.5ms preprocess, 7.3ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 7.4ms  
Speed: 1.3ms preprocess, 7.4ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 2 cars, 3 motorcycles, 1 truck, 1 umbrella, 7.1ms  
Speed: 1.3ms preprocess, 7.1ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 cars, 4 motorcycles, 1 truck, 7.2ms  
Speed: 1.9ms preprocess, 7.2ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 7.6ms  
Speed: 1.3ms preprocess, 7.6ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 2 cars, 4 motorcycles, 1 truck, 7.1ms  
Speed: 1.2ms preprocess, 7.1ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 4 motorcycles, 1 truck, 6.8ms  
Speed: 1.7ms preprocess, 6.8ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 1 bicycle, 1 car, 4 motorcycles, 1 truck, 6.5ms  
Speed: 1.1ms preprocess, 6.5ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 4 motorcycles, 1 truck, 7.2ms  
Speed: 1.5ms preprocess, 7.2ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 2 bicycles, 1 car, 4 motorcycles, 1 truck, 2 umbrellas, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 cars, 4 motorcycles, 1 truck, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 6.7ms  
Speed: 1.1ms preprocess, 6.7ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 2 cars, 4 motorcycles, 1 truck, 6.7ms  
Speed: 1.1ms preprocess, 6.7ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 4 motorcycles, 1 truck, 6.9ms

Speed: 1.6ms preprocess, 6.9ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 8.0ms  
Speed: 1.2ms preprocess, 8.0ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 1 car, 4 motorcycles, 1 truck, 1 umbrella, 7.2ms  
Speed: 1.2ms preprocess, 7.2ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 6 motorcycles, 1 truck, 11.1ms  
Speed: 1.5ms preprocess, 11.1ms inference, 2.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 13.1ms  
Speed: 1.7ms preprocess, 13.1ms inference, 2.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 1 car, 6 motorcycles, 1 truck, 1 umbrella, 8.6ms  
Speed: 1.5ms preprocess, 8.6ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 5 motorcycles, 1 truck, 7.0ms  
Speed: 1.4ms preprocess, 7.0ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 7.3ms  
Speed: 1.3ms preprocess, 7.3ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 1 car, 5 motorcycles, 1 truck, 1 umbrella, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 5 motorcycles, 1 truck, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 1 car, 5 motorcycles, 1 truck, 2 umbrellas, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 4 motorcycles, 1 truck, 7.5ms  
Speed: 1.7ms preprocess, 7.5ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 19 persons, 7.0ms  
Speed: 1.2ms preprocess, 7.0ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 19 persons, 4 motorcycles, 1 truck, 2 umbrellas, 7.4ms  
Speed: 1.2ms preprocess, 7.4ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 640x352 (no detections), 45.3ms  
Speed: 1.5ms preprocess, 45.3ms inference, 0.4ms postprocess per image at shape (1, 3, 640, 352)

0: 384x640 5 motorcycles, 1 truck, 7.1ms  
Speed: 1.8ms preprocess, 7.1ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 19 persons, 7.1ms  
Speed: 1.4ms preprocess, 7.1ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 19 persons, 5 motorcycles, 1 truck, 2 umbrellas, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 640x416 (no detections), 41.1ms  
Speed: 2.0ms preprocess, 41.1ms inference, 0.5ms postprocess per image at shape (1, 3, 640, 416)

0: 384x640 3 motorcycles, 1 truck, 7.1ms  
Speed: 1.5ms preprocess, 7.1ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 18 persons, 7.4ms  
Speed: 1.2ms preprocess, 7.4ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 18 persons, 3 motorcycles, 1 truck, 7.4ms  
Speed: 1.2ms preprocess, 7.4ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 640x352 (no detections), 10.0ms  
Speed: 1.6ms preprocess, 10.0ms inference, 0.3ms postprocess per image at shape (1, 3, 640, 352)

0: 384x640 3 motorcycles, 2 buss, 1 truck, 7.2ms  
Speed: 1.4ms preprocess, 7.2ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 17 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 17 persons, 3 motorcycles, 2 buss, 1 truck, 2 umbrellas, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 640x352 (no detections), 8.7ms  
Speed: 1.3ms preprocess, 8.7ms inference, 0.3ms postprocess per image at shape (1, 3, 640, 352)  
Processed 100 frames out of 572 (17.5%)

0: 384x640 3 motorcycles, 1 truck, 9.0ms



0: 384x640 3 motorcycles, 1 truck, 8.0ms  
Speed: 2.0ms preprocess, 9.0ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 20 persons, 8.8ms  
Speed: 1.7ms preprocess, 8.8ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 20 persons, 3 motorcycles, 1 truck, 1 umbrella, 10.2ms  
Speed: 1.7ms preprocess, 10.2ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 640x384 (no detections), 64.4ms  
Speed: 2.2ms preprocess, 64.4ms inference, 0.5ms postprocess per image at shape (1, 3, 640, 384)

0: 384x640 1 car, 3 motorcycles, 1 truck, 11.3ms  
Speed: 3.9ms preprocess, 11.3ms inference, 12.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 17 persons, 21.6ms  
Speed: 3.6ms preprocess, 21.6ms inference, 8.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 17 persons, 1 car, 3 motorcycles, 1 truck, 1 umbrella, 25.6ms  
Speed: 3.9ms preprocess, 25.6ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 640x384 (no detections), 25.2ms  
Speed: 15.8ms preprocess, 25.2ms inference, 0.5ms postprocess per image at shape (1, 3, 640, 384)

0: 384x640 3 motorcycles, 1 truck, 30.7ms  
Speed: 1.9ms preprocess, 30.7ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 40.5ms  
Speed: 26.8ms preprocess, 40.5ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 3 motorcycles, 1 truck, 1 umbrella, 13.7ms  
Speed: 8.3ms preprocess, 13.7ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 4 motorcycles, 1 truck, 8.9ms  
Speed: 2.5ms preprocess, 8.9ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 8.5ms  
Speed: 2.6ms preprocess, 8.5ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 4 motorcycles, 1 truck, 1 umbrella, 8.3ms  
Speed: 1.7ms preprocess, 8.3ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 3 motorcycles, 1 truck, 9.0ms  
Speed: 1.8ms preprocess, 9.0ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 8.4ms  
Speed: 1.6ms preprocess, 8.4ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 1 bicycle, 1 car, 3 motorcycles, 1 truck, 2 umbrellas, 8.1ms  
Speed: 1.6ms preprocess, 8.1ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 4 motorcycles, 1 truck, 8.6ms  
Speed: 1.8ms preprocess, 8.6ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 8.8ms  
Speed: 1.7ms preprocess, 8.8ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 2 bicycles, 4 motorcycles, 1 truck, 2 umbrellas, 8.9ms  
Speed: 1.6ms preprocess, 8.9ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 motorcycles, 1 truck, 12.0ms  
Speed: 1.9ms preprocess, 12.0ms inference, 2.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 13.1ms  
Speed: 1.7ms preprocess, 13.1ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 2 bicycles, 7 motorcycles, 1 truck, 2 umbrellas, 10.2ms  
Speed: 1.4ms preprocess, 10.2ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 4 motorcycles, 14.9ms  
Speed: 3.0ms preprocess, 14.9ms inference, 3.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 16 persons, 14.6ms  
Speed: 2.0ms preprocess, 14.6ms inference, 3.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 16 persons, 2 bicycles, 4 motorcycles, 2 umbrellas, 13.6ms  
Speed: 1.7ms preprocess, 13.6ms inference, 2.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 1 truck, 11.8ms  
Speed: 2.3ms preprocess, 11.8ms inference, 2.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 16 persons, 11.9ms  
Speed: 1.7ms preprocess, 11.9ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 16 persons, 2 bicycles, 3 motorcycles, 1 truck, 13.2ms

Speed: 1.7ms preprocess, 13.2ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 2 motorcycles, 1 truck, 9.9ms  
Speed: 1.8ms preprocess, 9.9ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 7.0ms  
Speed: 1.2ms preprocess, 7.0ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 1 bicycle, 1 car, 2 motorcycles, 1 truck, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 3 motorcycles, 1 truck, 6.8ms  
Speed: 1.3ms preprocess, 6.8ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 6.6ms  
Speed: 1.1ms preprocess, 6.6ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 1 bicycle, 1 car, 3 motorcycles, 1 truck, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 2 motorcycles, 1 truck, 6.8ms  
Speed: 1.3ms preprocess, 6.8ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 1 bicycle, 1 car, 2 motorcycles, 1 truck, 9.0ms  
Speed: 1.3ms preprocess, 9.0ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 3 motorcycles, 1 truck, 7.0ms  
Speed: 1.9ms preprocess, 7.0ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 6.9ms  
Speed: 1.2ms preprocess, 6.9ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 1 bicycle, 1 car, 3 motorcycles, 1 truck, 6.7ms  
Speed: 1.3ms preprocess, 6.7ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 1 truck, 7.3ms  
Speed: 1.5ms preprocess, 7.3ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 6.8ms  
Speed: 1.3ms preprocess, 6.8ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 1 motorcycle, 1 truck, 7.2ms  
Speed: 1.3ms preprocess, 7.2ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 7.2ms  
Speed: 1.5ms preprocess, 7.2ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 2 motorcycles, 1 truck, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 6.9ms  
Speed: 1.3ms preprocess, 6.9ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 6.4ms  
Speed: 1.1ms preprocess, 6.4ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 2 motorcycles, 1 truck, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 1 truck, 9.9ms  
Speed: 1.8ms preprocess, 9.9ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 1 bicycle, 3 motorcycles, 1 truck, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 1 truck, 9.1ms  
Speed: 1.7ms preprocess, 9.1ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 16 persons, 6.5ms  
Speed: 1.4ms preprocess, 6.5ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 16 persons, 1 bicycle, 3 motorcycles, 1 truck, 9.6ms  
Speed: 1.5ms preprocess, 9.6ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 5 motorcycles, 1 truck, 12.0ms  
Speed: 1.8ms preprocess, 12.0ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 1 bicycle, 5 motorcycles, 1 truck, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 7.1ms  
Speed: 1.2ms preprocess, 7.1ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 16 persons, 7.0ms  
Speed: 1.1ms preprocess, 7.0ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 16 persons, 1 bicycle, 3 motorcycles, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 3 motorcycles, 6.9ms  
Speed: 1.8ms preprocess, 6.9ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 16 persons, 7.0ms  
Speed: 1.2ms preprocess, 7.0ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 16 persons, 1 bicycle, 1 car, 3 motorcycles, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 3 motorcycles, 7.2ms  
Speed: 1.7ms preprocess, 7.2ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 6.7ms  
Speed: 1.3ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 1 bicycle, 1 car, 3 motorcycles, 1 umbrella, 7.0ms  
Speed: 2.4ms preprocess, 7.0ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 4 motorcycles, 7.1ms  
Speed: 1.6ms preprocess, 7.1ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 6.4ms  
Speed: 1.2ms preprocess, 6.4ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 1 bicycle, 1 car, 4 motorcycles, 1 umbrella, 6.7ms  
Speed: 1.3ms preprocess, 6.7ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 1 bus, 6.7ms  
Speed: 1.3ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 6.4ms  
Speed: 1.1ms preprocess, 6.4ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 1 bicycle, 3 motorcycles, 1 bus, 1 umbrella, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 4 motorcycles, 7.1ms  
Speed: 1.7ms preprocess, 7.1ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 7.5ms  
Speed: 1.2ms preprocess, 7.5ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 1 bicycle, 4 motorcycles, 6.9ms  
Speed: 1.2ms preprocess, 6.9ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 7.2ms  
Speed: 1.7ms preprocess, 7.2ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 1 bicycle, 2 motorcycles, 1 truck, 6.9ms  
Speed: 1.4ms preprocess, 6.9ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 6.8ms  
Speed: 2.3ms preprocess, 6.8ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 6.8ms  
Speed: 1.1ms preprocess, 6.8ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 1 bicycle, 2 motorcycles, 2 umbrellas, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 7.2ms  
Speed: 1.5ms preprocess, 7.2ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 6.9ms  
Speed: 1.2ms preprocess, 6.9ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 2 motorcycles, 1 umbrella, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 7.6ms  
Speed: 1.8ms preprocess, 7.6ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 6.4ms  
Speed: 1.2ms preprocess, 6.4ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 1 bicycle, 2 motorcycles, 2 umbrellas, 8.2ms  
Speed: 1.2ms preprocess, 8.2ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 6.8ms  
Speed: 1.6ms preprocess, 6.8ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 3 motorcycles, 2 umbrellas, 6.4ms  
Speed: 1.2ms preprocess, 6.4ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 6.8ms  
Speed: 1.6ms preprocess, 6.8ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 3 motorcycles, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 4 motorcycles, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 16 persons, 11.3ms  
Speed: 1.6ms preprocess, 11.3ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 16 persons, 4 motorcycles, 13.9ms  
Speed: 1.8ms preprocess, 13.9ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 1 truck, 7.7ms  
Speed: 1.8ms preprocess, 7.7ms inference, 2.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 7.2ms  
Speed: 1.4ms preprocess, 7.2ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 1 bicycle, 3 motorcycles, 1 truck, 2 umbrellas, 6.4ms  
Speed: 1.3ms preprocess, 6.4ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 4 motorcycles, 6.7ms  
Speed: 1.5ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 4 motorcycles, 2 umbrellas, 7.0ms  
Speed: 1.2ms preprocess, 7.0ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 9.6ms  
Speed: 1.5ms preprocess, 9.6ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 2 motorcycles, 1 truck, 1 umbrella, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 6.6ms  
Speed: 1.3ms preprocess, 6.6ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 1 bicycle, 2 motorcycles, 1 umbrella, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 6.9ms  
Speed: 1.7ms preprocess, 6.9ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 1 bicycle, 2 motorcycles, 1 umbrella, 8.9ms  
Speed: 1.2ms preprocess, 8.9ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 7.3ms

0: 384x640 2 motorcycles, 1 truck, 7.3ms  
Speed: 1.6ms preprocess, 7.3ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 7.4ms  
Speed: 1.4ms preprocess, 7.4ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 1 bicycle, 2 motorcycles, 1 truck, 1 umbrella, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 7.0ms  
Speed: 1.3ms preprocess, 7.0ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 1 bicycle, 2 motorcycles, 1 truck, 2 umbrellas, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 1 truck, 6.6ms  
Speed: 1.5ms preprocess, 6.6ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 6.3ms  
Speed: 1.2ms preprocess, 6.3ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 1 bicycle, 3 motorcycles, 1 truck, 1 umbrella, 7.1ms  
Speed: 1.2ms preprocess, 7.1ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 6.7ms  
Speed: 1.7ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 7.7ms  
Speed: 1.6ms preprocess, 7.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 2 bicycles, 2 motorcycles, 1 truck, 6.3ms  
Speed: 1.2ms preprocess, 6.3ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 7.3ms  
Speed: 1.2ms preprocess, 7.3ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 1 bicycle, 2 motorcycles, 1 truck, 6.9ms  
Speed: 1.2ms preprocess, 6.9ms inference, 2.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 8.5ms  
Speed: 2.0ms preprocess, 8.5ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 1 bicycle, 2 motorcycles, 2 trucks, 1 umbrella, 6.9ms  
Speed: 1.2ms preprocess, 6.9ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 2 trucks, 6.4ms  
Speed: 1.4ms preprocess, 6.4ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 6.5ms  
Speed: 1.1ms preprocess, 6.5ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 1 bicycle, 1 motorcycle, 2 trucks, 1 umbrella, 11.4ms  
Speed: 1.4ms preprocess, 11.4ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 10.1ms  
Speed: 1.7ms preprocess, 10.1ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 7.3ms  
Speed: 1.3ms preprocess, 7.3ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 2 motorcycles, 2 trucks, 1 umbrella, 7.5ms  
Speed: 1.3ms preprocess, 7.5ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 7.0ms  
Speed: 1.3ms preprocess, 7.0ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 2 motorcycles, 1 truck, 2 umbrellas, 6.9ms  
Speed: 1.1ms preprocess, 6.9ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 7.2ms  
Speed: 1.7ms preprocess, 7.2ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 8.8ms

Speed: 1.2ms preprocess, 8.8ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 2 motorcycles, 2 trucks, 2 umbrellas, 6.5ms  
Speed: 1.1ms preprocess, 6.5ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 174.5ms  
Speed: 1.8ms preprocess, 174.5ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 7.0ms  
Speed: 1.3ms preprocess, 7.0ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 2 motorcycles, 1 truck, 2 umbrellas, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 2 trucks, 7.1ms  
Speed: 1.6ms preprocess, 7.1ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 6.9ms  
Speed: 1.3ms preprocess, 6.9ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 3 motorcycles, 2 trucks, 1 umbrella, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 2 trucks, 6.9ms  
Speed: 1.6ms preprocess, 6.9ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 1 motorcycle, 2 trucks, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)  
Processed 250 frames out of 572 (43.7%)

0: 384x640 2 trucks, 6.6ms  
Speed: 1.7ms preprocess, 6.6ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 2 trucks, 6.6ms  
Speed: 1.1ms preprocess, 6.6ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 trucks, 7.8ms  
Speed: 1.6ms preprocess, 7.8ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 6.8ms  
Speed: 1.1ms preprocess, 6.8ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 2 trucks, 6.7ms  
Speed: 1.1ms preprocess, 6.7ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 2 trucks, 6.6ms  
Speed: 1.5ms preprocess, 6.6ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 7.0ms  
Speed: 1.2ms preprocess, 7.0ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 1 motorcycle, 2 trucks, 1 umbrella, 6.7ms  
Speed: 1.1ms preprocess, 6.7ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 1 truck, 7.3ms  
Speed: 1.2ms preprocess, 7.3ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 11.0ms  
Speed: 1.4ms preprocess, 11.0ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 1 motorcycle, 1 truck, 1 umbrella, 6.6ms  
Speed: 1.1ms preprocess, 6.6ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 2 trucks, 6.8ms  
Speed: 1.6ms preprocess, 6.8ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 6.6ms  
Speed: 1.1ms preprocess, 6.6ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 1 motorcycle, 2 trucks, 2 umbrellas, 6.5ms  
Speed: 1.1ms preprocess, 6.5ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 2 trucks, 8.6ms  
Speed: 1.3ms preprocess, 8.6ms inference, 2.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 12.8ms  
Speed: 1.8ms preprocess, 12.8ms inference, 3.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 1 motorcycle, 2 trucks, 1 umbrella, 10.5ms

Speed: 1.8ms preprocess, 10.5ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 3 trucks, 7.0ms  
Speed: 1.5ms preprocess, 7.0ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 7.2ms  
Speed: 1.2ms preprocess, 7.2ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 1 motorcycle, 3 trucks, 2 umbrellas, 7.2ms  
Speed: 1.3ms preprocess, 7.2ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 1 truck, 7.4ms  
Speed: 1.5ms preprocess, 7.4ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 7.1ms  
Speed: 2.3ms preprocess, 7.1ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 1 motorcycle, 1 truck, 2 umbrellas, 6.9ms  
Speed: 1.2ms preprocess, 6.9ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 2 trucks, 6.9ms  
Speed: 2.2ms preprocess, 6.9ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 1 motorcycle, 2 trucks, 2 umbrellas, 6.8ms  
Speed: 1.4ms preprocess, 6.8ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 2 motorcycles, 1 truck, 8.4ms  
Speed: 1.4ms preprocess, 8.4ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 9.0ms  
Speed: 1.4ms preprocess, 9.0ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 1 car, 2 motorcycles, 1 truck, 2 umbrellas, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 2 motorcycles, 1 truck, 7.2ms  
Speed: 1.4ms preprocess, 7.2ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 6.5ms  
Speed: 1.1ms preprocess, 6.5ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 1 car, 2 motorcycles, 1 truck, 2 umbrellas, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 1 truck, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 1 motorcycle, 1 truck, 2 umbrellas, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 6.8ms  
Speed: 1.7ms preprocess, 6.8ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 6.4ms  
Speed: 1.2ms preprocess, 6.4ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 2 motorcycles, 1 truck, 2 umbrellas, 7.5ms  
Speed: 1.5ms preprocess, 7.5ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 1 truck, 7.0ms  
Speed: 1.4ms preprocess, 7.0ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 1 motorcycle, 1 truck, 2 umbrellas, 6.6ms  
Speed: 1.1ms preprocess, 6.6ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 6.7ms  
Speed: 1.3ms preprocess, 6.7ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 2 motorcycles, 1 truck, 2 umbrellas, 6.5ms  
Speed: 1.1ms preprocess, 6.5ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 6.4ms  
Speed: 1.2ms preprocess, 6.4ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 8.6ms  
Speed: 1.1ms preprocess, 8.6ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 2 motorcycles, 1 truck, 2 umbrellas, 6.9ms  
Speed: 1.2ms preprocess, 6.9ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 6.9ms  
Speed: 1.7ms preprocess, 6.9ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 2 motorcycles, 1 truck, 2 umbrellas, 8.6ms  
Speed: 1.1ms preprocess, 8.6ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 7.4ms  
Speed: 1.5ms preprocess, 7.4ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 7.0ms  
Speed: 1.2ms preprocess, 7.0ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 2 motorcycles, 1 truck, 1 umbrella, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 1 truck, 6.8ms  
Speed: 1.4ms preprocess, 6.8ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 7.5ms  
Speed: 1.2ms preprocess, 7.5ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 1 motorcycle, 1 truck, 1 umbrella, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 1 truck, 6.4ms  
Speed: 1.2ms preprocess, 6.4ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 7.0ms  
Speed: 1.2ms preprocess, 7.0ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 1 motorcycle, 1 truck, 1 umbrella, 6.3ms  
Speed: 1.2ms preprocess, 6.3ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 2 trucks, 7.2ms  
Speed: 1.8ms preprocess, 7.2ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 6.4ms  
Speed: 1.2ms preprocess, 6.4ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 1 motorcycle, 2 trucks, 1 umbrella, 6.9ms  
Speed: 1.2ms preprocess, 6.9ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 1 truck, 7.2ms  
Speed: 1.4ms preprocess, 7.2ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 1 motorcycle, 1 truck, 1 umbrella, 7.0ms  
Speed: 1.3ms preprocess, 7.0ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 2 trucks, 6.9ms  
Speed: 1.4ms preprocess, 6.9ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 1 motorcycle, 2 trucks, 1 umbrella, 9.9ms  
Speed: 1.4ms preprocess, 9.9ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 2 trucks, 7.7ms  
Speed: 1.2ms preprocess, 7.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 1 motorcycle, 2 trucks, 1 umbrella, 8.8ms  
Speed: 1.2ms preprocess, 8.8ms inference, 2.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 2 trucks, 7.7ms  
Speed: 1.6ms preprocess, 7.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)



0: 384x640 7 persons, 3 motorcycles, 2 trucks, 1 umbrella, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 2 trucks, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 3 motorcycles, 2 trucks, 1 umbrella, 7.0ms  
Speed: 1.2ms preprocess, 7.0ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 1 truck, 7.0ms  
Speed: 1.4ms preprocess, 7.0ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 7.2ms  
Speed: 1.2ms preprocess, 7.2ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 1 bicycle, 3 motorcycles, 1 truck, 1 umbrella, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 11.1ms  
Speed: 1.8ms preprocess, 11.1ms inference, 2.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 11.0ms  
Speed: 1.2ms preprocess, 11.0ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 2 motorcycles, 1 truck, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 640x448 (no detections), 42.0ms  
Speed: 2.0ms preprocess, 42.0ms inference, 0.4ms postprocess per image at shape (1, 3, 640, 448)

0: 384x640 3 motorcycles, 1 truck, 7.0ms  
Speed: 1.9ms preprocess, 7.0ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 6.9ms  
Speed: 1.2ms preprocess, 6.9ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 3 motorcycles, 1 truck, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 640x416 (no detections), 9.4ms  
Speed: 1.6ms preprocess, 9.4ms inference, 0.3ms postprocess per image at shape (1, 3, 640, 416)

0: 384x640 3 motorcycles, 2 trucks, 7.4ms  
Speed: 1.6ms preprocess, 7.4ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 7.4ms  
Speed: 1.3ms preprocess, 7.4ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 3 motorcycles, 2 trucks, 6.8ms  
Speed: 1.3ms preprocess, 6.8ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 640x448 (no detections), 9.6ms  
Speed: 1.7ms preprocess, 9.6ms inference, 0.3ms postprocess per image at shape (1, 3, 640, 448)

0: 384x640 3 motorcycles, 2 trucks, 7.3ms  
Speed: 1.7ms preprocess, 7.3ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 3 motorcycles, 2 trucks, 7.2ms  
Speed: 1.2ms preprocess, 7.2ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 640x416 (no detections), 9.4ms  
Speed: 1.7ms preprocess, 9.4ms inference, 0.4ms postprocess per image at shape (1, 3, 640, 416)

0: 384x640 3 motorcycles, 2 trucks, 7.0ms  
Speed: 1.7ms preprocess, 7.0ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 6.9ms  
Speed: 1.2ms preprocess, 6.9ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 3 motorcycles, 2 trucks, 7.8ms  
Speed: 1.2ms preprocess, 7.8ms inference, 3.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 6.9ms  
Speed: 1.7ms preprocess, 6.9ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 7.1ms  
Speed: 1.1ms preprocess, 7.1ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 2 motorcycles, 1 truck, 7.1ms  
Speed: 1.1ms preprocess, 7.1ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 6.8ms  
Speed: 1.4ms preprocess, 6.8ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 6.7ms  
Speed: 1.1ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 2 motorcycles, 2 trucks, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 6.8ms  
Speed: 1.4ms preprocess, 6.8ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 6.9ms  
Speed: 1.2ms preprocess, 6.9ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 2 motorcycles, 2 trucks, 1 umbrella, 7.0ms  
Speed: 1.2ms preprocess, 7.0ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 6.8ms  
Speed: 1.3ms preprocess, 6.8ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 8.3ms  
Speed: 1.2ms preprocess, 8.3ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 2 motorcycles, 1 truck, 1 umbrella, 7.0ms  
Speed: 1.2ms preprocess, 7.0ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 8.2ms  
Speed: 1.6ms preprocess, 8.2ms inference, 3.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 8.2ms  
Speed: 1.2ms preprocess, 8.2ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 1 bicycle, 2 motorcycles, 2 trucks, 1 umbrella, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 7.0ms  
Speed: 1.5ms preprocess, 7.0ms inference, 4.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 2 motorcycles, 1 truck, 7.0ms  
Speed: 1.2ms preprocess, 7.0ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 1 truck, 9.0ms  
Speed: 1.5ms preprocess, 9.0ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 8.3ms  
Speed: 1.1ms preprocess, 8.3ms inference, 2.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 3 motorcycles, 1 truck, 12.7ms  
Speed: 1.7ms preprocess, 12.7ms inference, 2.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 4 motorcycles, 2 trucks, 6.9ms  
Speed: 1.3ms preprocess, 6.9ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 6.5ms  
Speed: 1.1ms preprocess, 6.5ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 4 motorcycles, 2 trucks, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 4 motorcycles, 2 trucks, 7.3ms  
Speed: 1.9ms preprocess, 7.3ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 7.3ms  
Speed: 1.2ms preprocess, 7.3ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 2 bicycles, 4 motorcycles, 2 trucks, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 4 motorcycles, 1 truck, 7.4ms  
Speed: 1.4ms preprocess, 7.4ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 6.9ms  
Speed: 1.2ms preprocess, 6.9ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 1 bicycle, 4 motorcycles, 1 truck, 7.3ms  
Speed: 1.3ms preprocess, 7.3ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 4 motorcycles, 1 truck, 7.2ms

Speed: 1.6ms preprocess, 7.2ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 1 bicycle, 4 motorcycles, 1 truck, 7.3ms  
Speed: 1.3ms preprocess, 7.3ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 4 motorcycles, 2 trucks, 7.2ms  
Speed: 1.4ms preprocess, 7.2ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 7.5ms  
Speed: 1.3ms preprocess, 7.5ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 1 bicycle, 4 motorcycles, 2 trucks, 6.8ms  
Speed: 1.3ms preprocess, 6.8ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 2 trucks, 7.1ms  
Speed: 1.8ms preprocess, 7.1ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 7.3ms  
Speed: 1.2ms preprocess, 7.3ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 1 bicycle, 3 motorcycles, 2 trucks, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 2 trucks, 8.4ms  
Speed: 1.8ms preprocess, 8.4ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 8.0ms  
Speed: 1.2ms preprocess, 8.0ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 1 bicycle, 3 motorcycles, 2 trucks, 7.1ms  
Speed: 1.2ms preprocess, 7.1ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 2 trucks, 7.1ms  
Speed: 1.4ms preprocess, 7.1ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 2 bicycles, 3 motorcycles, 2 trucks, 9.7ms  
Speed: 1.4ms preprocess, 9.7ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 9.3ms  
Speed: 1.5ms preprocess, 9.3ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 12.5ms  
Speed: 2.6ms preprocess, 12.5ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 1 bicycle, 2 motorcycles, 2 trucks, 1 suitcase, 11.9ms  
Speed: 1.8ms preprocess, 11.9ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 11.8ms  
Speed: 1.8ms preprocess, 11.8ms inference, 2.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 10.7ms  
Speed: 1.8ms preprocess, 10.7ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 1 bicycle, 2 motorcycles, 1 truck, 12.7ms  
Speed: 1.8ms preprocess, 12.7ms inference, 2.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 13.0ms  
Speed: 1.8ms preprocess, 13.0ms inference, 2.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 14.1ms  
Speed: 1.8ms preprocess, 14.1ms inference, 2.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 2 bicycles, 2 motorcycles, 2 trucks, 14.0ms  
Speed: 1.9ms preprocess, 14.0ms inference, 4.2ms postprocess per image at shape (1, 3, 384, 640)  
Processed 400 frames out of 572 (69.9%)

0: 384x640 2 motorcycles, 2 trucks, 9.3ms  
Speed: 1.8ms preprocess, 9.3ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 9.4ms  
Speed: 1.7ms preprocess, 9.4ms inference, 5.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 1 bicycle, 2 motorcycles, 2 trucks, 9.4ms  
Speed: 1.7ms preprocess, 9.4ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 9.2ms  
Speed: 1.7ms preprocess, 9.2ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 11.8ms

Speed: 1.8ms preprocess, 11.8ms inference, 2.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 2 bicycles, 2 motorcycles, 2 trucks, 14.6ms  
Speed: 1.7ms preprocess, 14.6ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 12.3ms  
Speed: 1.7ms preprocess, 12.3ms inference, 3.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 10.0ms  
Speed: 2.3ms preprocess, 10.0ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 1 bicycle, 2 motorcycles, 2 trucks, 11.3ms  
Speed: 1.7ms preprocess, 11.3ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 8.8ms  
Speed: 1.7ms preprocess, 8.8ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 9.0ms  
Speed: 1.6ms preprocess, 9.0ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 1 bicycle, 2 motorcycles, 2 trucks, 8.9ms  
Speed: 1.7ms preprocess, 8.9ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 11.0ms  
Speed: 1.7ms preprocess, 11.0ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 9.8ms  
Speed: 2.4ms preprocess, 9.8ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 1 bicycle, 2 motorcycles, 2 trucks, 8.5ms  
Speed: 1.6ms preprocess, 8.5ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 8.7ms  
Speed: 1.9ms preprocess, 8.7ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 11.4ms  
Speed: 1.6ms preprocess, 11.4ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 2 motorcycles, 2 trucks, 8.7ms  
Speed: 1.6ms preprocess, 8.7ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 3 motorcycles, 2 trucks, 8.6ms  
Speed: 1.6ms preprocess, 8.6ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 9.5ms  
Speed: 1.7ms preprocess, 9.5ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 1 car, 3 motorcycles, 2 trucks, 9.2ms  
Speed: 1.7ms preprocess, 9.2ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 2 trucks, 11.7ms  
Speed: 1.9ms preprocess, 11.7ms inference, 2.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 12.9ms  
Speed: 1.7ms preprocess, 12.9ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 3 motorcycles, 2 trucks, 10.4ms  
Speed: 1.7ms preprocess, 10.4ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 2 motorcycles, 2 trucks, 12.5ms  
Speed: 1.7ms preprocess, 12.5ms inference, 2.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 8.7ms  
Speed: 1.6ms preprocess, 8.7ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 1 car, 2 motorcycles, 2 trucks, 8.9ms  
Speed: 1.8ms preprocess, 8.9ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 2 motorcycles, 2 trucks, 9.1ms  
Speed: 4.7ms preprocess, 9.1ms inference, 2.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 5 persons, 13.5ms  
Speed: 1.7ms preprocess, 13.5ms inference, 2.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 5 persons, 1 car, 2 motorcycles, 2 trucks, 9.7ms  
Speed: 1.7ms preprocess, 9.7ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 9.2ms  
Speed: 1.8ms preprocess, 9.2ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 8.4ms  
Speed: 1.8ms preprocess, 8.4ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 1 bicycle, 2 motorcycles, 2 trucks, 8.6ms  
Speed: 1.6ms preprocess, 8.6ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

Speed: 1.6ms preprocess, 8.6ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 14.2ms  
Speed: 1.6ms preprocess, 14.2ms inference, 3.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 10.0ms  
Speed: 2.2ms preprocess, 10.0ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 2 bicycles, 2 motorcycles, 2 trucks, 8.7ms  
Speed: 1.7ms preprocess, 8.7ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 9.0ms  
Speed: 1.9ms preprocess, 9.0ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 8.7ms  
Speed: 1.6ms preprocess, 8.7ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 1 bicycle, 2 motorcycles, 1 truck, 8.5ms  
Speed: 1.8ms preprocess, 8.5ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 2 trucks, 9.3ms  
Speed: 1.7ms preprocess, 9.3ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 8.8ms  
Speed: 1.6ms preprocess, 8.8ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 1 bicycle, 2 motorcycles, 2 trucks, 8.9ms  
Speed: 1.6ms preprocess, 8.9ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 1 truck, 8.6ms  
Speed: 1.6ms preprocess, 8.6ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 5 persons, 8.9ms  
Speed: 1.6ms preprocess, 8.9ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 5 persons, 1 bicycle, 3 motorcycles, 1 truck, 8.8ms  
Speed: 1.6ms preprocess, 8.8ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 1 truck, 8.9ms  
Speed: 1.7ms preprocess, 8.9ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 5 persons, 9.0ms  
Speed: 1.7ms preprocess, 9.0ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 5 persons, 3 motorcycles, 1 truck, 8.7ms  
Speed: 1.6ms preprocess, 8.7ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 8.8ms  
Speed: 1.7ms preprocess, 8.8ms inference, 2.2ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 5 persons, 8.7ms  
Speed: 1.7ms preprocess, 8.7ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 5 persons, 1 bicycle, 2 motorcycles, 1 truck, 8.8ms  
Speed: 1.6ms preprocess, 8.8ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 11.7ms  
Speed: 1.9ms preprocess, 11.7ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 12.7ms  
Speed: 1.8ms preprocess, 12.7ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 2 motorcycles, 1 truck, 1 boat, 13.9ms  
Speed: 1.8ms preprocess, 13.9ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 20.3ms  
Speed: 1.9ms preprocess, 20.3ms inference, 2.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 12.9ms  
Speed: 4.6ms preprocess, 12.9ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 2 motorcycles, 1 truck, 1 boat, 13.7ms  
Speed: 1.5ms preprocess, 13.7ms inference, 2.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 motorcycles, 13.8ms  
Speed: 1.7ms preprocess, 13.8ms inference, 2.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 10.5ms  
Speed: 1.6ms preprocess, 10.5ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 3 motorcycles, 1 chair, 16.4ms  
Speed: 5.6ms preprocess, 16.4ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 8.4ms  
Speed: 1.6ms preprocess, 8.4ms inference, 2.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 12.4ms  
Speed: 1.5ms preprocess, 12.4ms inference, 2.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 2 motorcycles, 11.0ms  
Speed: 1.6ms preprocess, 11.0ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 11.9ms  
Speed: 1.7ms preprocess, 11.9ms inference, 2.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 11.7ms  
Speed: 1.6ms preprocess, 11.7ms inference, 2.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 2 motorcycles, 11.3ms  
Speed: 1.6ms preprocess, 11.3ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 11.9ms  
Speed: 1.7ms preprocess, 11.9ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 11.5ms  
Speed: 1.7ms preprocess, 11.5ms inference, 2.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 1 bicycle, 2 motorcycles, 1 truck, 1 backpack, 11.4ms  
Speed: 1.6ms preprocess, 11.4ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 1 truck, 12.3ms  
Speed: 1.5ms preprocess, 12.3ms inference, 2.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 11.7ms  
Speed: 1.6ms preprocess, 11.7ms inference, 2.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 1 bicycle, 2 motorcycles, 1 truck, 11.5ms  
Speed: 2.6ms preprocess, 11.5ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 2 motorcycles, 12.7ms  
Speed: 1.5ms preprocess, 12.7ms inference, 2.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 12.2ms  
Speed: 1.6ms preprocess, 12.2ms inference, 3.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 1 car, 2 motorcycles, 14.0ms  
Speed: 1.7ms preprocess, 14.0ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 2 motorcycles, 10.3ms  
Speed: 1.6ms preprocess, 10.3ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 1 car, 2 motorcycles, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 7.0ms  
Speed: 1.6ms preprocess, 7.0ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 1 bicycle, 2 motorcycles, 6.6ms  
Speed: 1.1ms preprocess, 6.6ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 2 motorcycles, 17.4ms  
Speed: 2.0ms preprocess, 17.4ms inference, 2.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 7.4ms  
Speed: 2.1ms preprocess, 7.4ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 6 persons, 1 car, 2 motorcycles, 6.9ms  
Speed: 1.2ms preprocess, 6.9ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 2 motorcycles, 7.1ms  
Speed: 1.6ms preprocess, 7.1ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 8.1ms  
Speed: 1.2ms preprocess, 8.1ms inference, 2.1ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 1 car, 2 motorcycles, 1 umbrella, 8.8ms  
Speed: 1.3ms preprocess, 8.8ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 cars, 2 motorcycles, 1 bus, 6.9ms  
Speed: 1.2ms preprocess, 6.9ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 6.8ms  
Speed: 1.1ms preprocess, 6.8ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 2 cars, 2 motorcycles, 1 bus, 6.5ms  
Speed: 1.1ms preprocess, 6.5ms inference, 1.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 cars, 1 motorcycle, 1 bus, 7.8ms  
Speed: 1.7ms preprocess, 7.8ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 6.9ms  
Speed: 1.1ms preprocess, 6.9ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 2 cars, 1 motorcycle, 1 bus, 6.7ms  
Speed: 1.1ms preprocess, 6.7ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 cars, 1 motorcycle, 1 truck, 6.7ms  
Speed: 1.5ms preprocess, 6.7ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 6.5ms  
Speed: 1.1ms preprocess, 6.5ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 9 persons, 2 cars, 1 motorcycle, 1 truck, 6.7ms  
Speed: 1.1ms preprocess, 6.7ms inference, 1.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 3 motorcycles, 6.3ms  
Speed: 1.2ms preprocess, 6.3ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 6.0ms  
Speed: 1.1ms preprocess, 6.0ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 7 persons, 1 car, 3 motorcycles, 7.1ms  
Speed: 1.1ms preprocess, 7.1ms inference, 2.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 3 motorcycles, 6.9ms  
Speed: 1.5ms preprocess, 6.9ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 6.6ms  
Speed: 1.1ms preprocess, 6.6ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 1 car, 3 motorcycles, 7.0ms  
Speed: 1.1ms preprocess, 7.0ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 4 cars, 3 motorcycles, 6.9ms  
Speed: 1.5ms preprocess, 6.9ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 6.4ms  
Speed: 1.2ms preprocess, 6.4ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 4 cars, 3 motorcycles, 6.6ms  
Speed: 1.2ms preprocess, 6.6ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 2 motorcycles, 6.7ms  
Speed: 1.1ms preprocess, 6.7ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 6.2ms  
Speed: 1.2ms preprocess, 6.2ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 1 bicycle, 1 car, 2 motorcycles, 8.2ms  
Speed: 1.2ms preprocess, 8.2ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 cars, 2 motorcycles, 7.5ms  
Speed: 2.1ms preprocess, 7.5ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 6.4ms  
Speed: 1.1ms preprocess, 6.4ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 15 persons, 1 bicycle, 3 cars, 2 motorcycles, 6.2ms  
Speed: 1.1ms preprocess, 6.2ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 cars, 1 motorcycle, 10.7ms  
Speed: 1.5ms preprocess, 10.7ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 6.7ms  
Speed: 1.2ms preprocess, 6.7ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 2 bicycles, 3 cars, 1 motorcycle, 6.8ms  
Speed: 1.2ms preprocess, 6.8ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 2 motorcycles, 7.2ms  
Speed: 1.3ms preprocess, 7.2ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 6.5ms  
Speed: 1.1ms preprocess, 6.5ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 2 bicycles, 1 car, 2 motorcycles, 6.5ms  
Speed: 1.2ms preprocess, 6.5ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 1 motorcycle, 6.4ms

```
0: 384x640 1 car, 1 motorcycle, 6.7ms
Speed: 1.2ms preprocess, 6.4ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 6.4ms
Speed: 1.1ms preprocess, 6.4ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 14 persons, 2 bicycles, 1 car, 1 motorcycle, 6.6ms
Speed: 1.2ms preprocess, 6.6ms inference, 1.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 1 motorcycle, 7.0ms
Speed: 1.7ms preprocess, 7.0ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 6.5ms
Speed: 1.1ms preprocess, 6.5ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 2 bicycles, 1 car, 1 motorcycle, 1 umbrella, 7.0ms
Speed: 1.2ms preprocess, 7.0ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 cars, 1 motorcycle, 7.4ms
Speed: 1.5ms preprocess, 7.4ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 6.4ms
Speed: 1.2ms preprocess, 6.4ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 2 bicycles, 2 cars, 1 motorcycle, 6.6ms
Speed: 1.2ms preprocess, 6.6ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 1 motorcycle, 6.7ms
Speed: 1.4ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 6.5ms
Speed: 1.2ms preprocess, 6.5ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 1 bicycle, 1 car, 1 motorcycle, 6.7ms
Speed: 1.1ms preprocess, 6.7ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 1 motorcycle, 8.8ms
Speed: 1.5ms preprocess, 8.8ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 6.9ms
Speed: 1.2ms preprocess, 6.9ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 1 bicycle, 1 car, 1 motorcycle, 1 airplane, 6.8ms
Speed: 1.2ms preprocess, 6.8ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 3 cars, 2 motorcycles, 6.8ms
Speed: 1.5ms preprocess, 6.8ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 10.2ms
Speed: 1.6ms preprocess, 10.2ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 13 persons, 3 bicycles, 3 cars, 2 motorcycles, 6.7ms
Speed: 1.2ms preprocess, 6.7ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 cars, 1 motorcycle, 7.9ms
Speed: 1.2ms preprocess, 7.9ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 6.6ms
Speed: 1.2ms preprocess, 6.6ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 2 bicycles, 2 cars, 1 motorcycle, 1 umbrella, 6.5ms
Speed: 1.2ms preprocess, 6.5ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 cars, 2 motorcycles, 6.6ms
Speed: 1.7ms preprocess, 6.6ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 7.0ms
Speed: 1.2ms preprocess, 7.0ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 1 bicycle, 2 cars, 2 motorcycles, 6.6ms
Speed: 1.2ms preprocess, 6.6ms inference, 1.3ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 2 motorcycles, 7.0ms
Speed: 1.6ms preprocess, 7.0ms inference, 1.9ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 6.7ms
Speed: 1.2ms preprocess, 6.7ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 1 bicycle, 1 car, 2 motorcycles, 7.0ms
Speed: 1.2ms preprocess, 7.0ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 2 motorcycles, 7.3ms
Speed: 1.5ms preprocess, 7.3ms inference, 2.0ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 7.1ms
```



```
Speed: 1.2ms preprocess, 7.1ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 12 persons, 1 car, 2 motorcycles, 9.0ms
Speed: 1.2ms preprocess, 9.0ms inference, 2.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 1 motorcycle, 7.1ms
Speed: 1.3ms preprocess, 7.1ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 7.1ms
Speed: 1.2ms preprocess, 7.1ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 1 car, 1 motorcycle, 6.7ms
Speed: 1.2ms preprocess, 6.7ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)
Processed 550 frames out of 572 (96.2%)

0: 384x640 1 car, 3 motorcycles, 7.1ms
Speed: 1.8ms preprocess, 7.1ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 7.0ms
Speed: 1.2ms preprocess, 7.0ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 1 car, 3 motorcycles, 6.8ms
Speed: 1.2ms preprocess, 6.8ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 7.0ms
Speed: 1.4ms preprocess, 7.0ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 6.8ms
Speed: 1.2ms preprocess, 6.8ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 2 motorcycles, 6.8ms
Speed: 1.2ms preprocess, 6.8ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 car, 1 motorcycle, 7.5ms
Speed: 1.4ms preprocess, 7.5ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 6.7ms
Speed: 1.1ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 8 persons, 1 car, 1 motorcycle, 8.5ms
Speed: 1.2ms preprocess, 8.5ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 6.6ms
Speed: 1.3ms preprocess, 6.6ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 6.9ms
Speed: 1.5ms preprocess, 6.9ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 2 motorcycles, 7.1ms
Speed: 1.3ms preprocess, 7.1ms inference, 1.5ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 6.7ms
Speed: 1.8ms preprocess, 6.7ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 6.9ms
Speed: 1.2ms preprocess, 6.9ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 1 motorcycle, 1 umbrella, 6.6ms
Speed: 1.2ms preprocess, 6.6ms inference, 1.4ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 1 motorcycle, 6.8ms
Speed: 1.7ms preprocess, 6.8ms inference, 1.8ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 7.6ms
Speed: 1.2ms preprocess, 7.6ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 10 persons, 1 bicycle, 1 motorcycle, 2 umbrellas, 7.8ms
Speed: 1.3ms preprocess, 7.8ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 2 motorcycles, 6.7ms
Speed: 1.2ms preprocess, 6.7ms inference, 1.6ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 6.8ms
Speed: 1.2ms preprocess, 6.8ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)

0: 384x640 11 persons, 1 bicycle, 2 motorcycles, 2 umbrellas, 6.7ms
Speed: 1.2ms preprocess, 6.7ms inference, 1.7ms postprocess per image at shape (1, 3, 384, 640)
Processing complete! Output video saved to /content/drive/MyDrive/DL Project/traffic_compliance_system/processed_video.mp4
Detected 11 violations
Creating violations dashboard...
FutureWarning: The default of observed=False is deprecated and will be changed to True in a future version of pandas. Pass
<IPython.core.display.Image object>
Violation dashboard saved to /content/drive/MyDrive/DL Project/traffic_compliance_system/violations_dashboard.png
Detailed report saved to /content/drive/MyDrive/DL Project/traffic_compliance_system/violations_report.html
```

```
detect: weights=['/content/drive/MyDrive/DL Project/model/best_3rider.pt'], source=/content/drive/MyDrive/DL Project/traff:
YOLOv5 🚀 v7.0-416-gfe1d4d99 Python-3.11.12 torch-2.6.0+cu124 CUDA:0 (Tesla T4, 15095MiB)
```

[illegible]

27/35

AA

```
File ~/usr/local/lib/python3.11/dist-packages/matplotlib/cm.py", line 24, in <module>
    from matplotlib._cm_listed import cm as cm_listed
File ~/usr/local/lib/python3.11/dist-packages/matplotlib/_cm_listed.py", line 1800, in <module>
    _twilight_shifted_data = (_twilight_data[len(_twilight_data)//2:] +
                                ^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
```

KeyboardInterrupt  
^C



0:00




```
import os
import cv2
import numpy as np
import matplotlib.pyplot as plt
import pandas as pd
from datetime import datetime
from google.colab import files, drive
import torch
from IPython.display import display, HTML, Image
import pytesseract
from PIL import Image as PILImage
from ultralytics import YOLO
import supervision as sv
from IPython.display import Video

# Mount Google Drive for saving results (optional but recommended)
drive.mount('/content/drive')

# Create project directory
PROJECT_DIR = '/content/drive/MyDrive/DL Project/traffic_compliance_system'
os.makedirs(PROJECT_DIR, exist_ok=True)
os.makedirs(f"{PROJECT_DIR}/detected_violations", exist_ok=True)
os.makedirs(f"{PROJECT_DIR}/processed_frames", exist_ok=True)
```

 Creating new Ultralytics Settings v0.0.6 file   
 View Ultralytics Settings with 'yolo settings' or at '/root/.config/Ultralytics/settings.json'  
 Update Settings with 'yolo settings key=value', i.e. 'yolo settings runs\_dir=path/to/dir'. For help see <https://docs.ultra>  
 Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount("/content/drive", force\_remount=True)

```
!pip install streamlit
!pip install pyngrok
```

 Collecting streamlit

Downloading streamlit-1.45.0-py3-none-any.whl.metadata (8.9 kB)

Requirement already satisfied: altair<6,>=4.0 in /usr/local/lib/python3.11/dist-packages (from streamlit) (5.5.0)

Requirement already satisfied: blinker<2,>=1.5.0 in /usr/local/lib/python3.11/dist-packages (from streamlit) (1.9.0)

Requirement already satisfied: cachetools<6,>=4.0 in /usr/local/lib/python3.11/dist-packages (from streamlit) (5.5.2)

Requirement already satisfied: click<9,>=7.0 in /usr/local/lib/python3.11/dist-packages (from streamlit) (8.1.8)

Requirement already satisfied: numpy<3,>=1.23 in /usr/local/lib/python3.11/dist-packages (from streamlit) (2.0.2)

Requirement already satisfied: packaging<25,>=20 in /usr/local/lib/python3.11/dist-packages (from streamlit) (24.2)

Requirement already satisfied: pandas<3,>=1.4.0 in /usr/local/lib/python3.11/dist-packages (from streamlit) (2.2.2)

Requirement already satisfied: pillow<12,>=7.1.0 in /usr/local/lib/python3.11/dist-packages (from streamlit) (11.2.1)

Requirement already satisfied: protobuf<7,>=3.20 in /usr/local/lib/python3.11/dist-packages (from streamlit) (5.29.4)

Requirement already satisfied: pyarrow>=7.0 in /usr/local/lib/python3.11/dist-packages (from streamlit) (18.1.0)

Requirement already satisfied: requests<3,>=2.27 in /usr/local/lib/python3.11/dist-packages (from streamlit) (2.32.3)

Requirement already satisfied: tenacity<10,>=8.1.0 in /usr/local/lib/python3.11/dist-packages (from streamlit) (9.1.2)

Requirement already satisfied: toml<2,>=0.10.1 in /usr/local/lib/python3.11/dist-packages (from streamlit) (0.10.2)

Requirement already satisfied: typing-extensions<5,>=4.4.0 in /usr/local/lib/python3.11/dist-packages (from streamlit) (4.12.0)

Collecting watchdog<7,>=2.1.5 (from streamlit)

Downloading watchdog-6.0.0-py3-none-manylinux2014\_x86\_64.whl.metadata (44 kB)

**44.3/44.3 kB 2.4 MB/s eta 0:00:00**

Requirement already satisfied: gitpython!=3.1.19,<4,>=3.0.7 in /usr/local/lib/python3.11/dist-packages (from streamlit) (3.1.40)

Collecting pydeck<1,>=0.8.0b4 (from streamlit)

Downloading pydeck-0.9.1-py2.py3-none-any.whl.metadata (4.1 kB)

Requirement already satisfied: tornado<7,>=6.0.3 in /usr/local/lib/python3.11/dist-packages (from streamlit) (6.4.2)

Requirement already satisfied: Jinja2 in /usr/local/lib/python3.11/dist-packages (from altair<6,>=4.0->streamlit) (3.1.6)

Requirement already satisfied: jsonschema>=3.0 in /usr/local/lib/python3.11/dist-packages (from altair<6,>=4.0->streamlit)

Requirement already satisfied: narwhals>=1.14.2 in /usr/local/lib/python3.11/dist-packages (from altair<6,>=4.0->streamlit)

Requirement already satisfied: gitdb<5,>=4.0.1 in /usr/local/lib/python3.11/dist-packages (from gitpython!=3.1.19,<4,>=3.0->streamlit)

Requirement already satisfied: python-dateutil>=2.8.2 in /usr/local/lib/python3.11/dist-packages (from pandas<3,>=1.4.0->streamlit)

Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.11/dist-packages (from pandas<3,>=1.4.0->streamlit)

Requirement already satisfied: tzdata>=2022.7 in /usr/local/lib/python3.11/dist-packages (from pandas<3,>=1.4.0->streamlit)

Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.11/dist-packages (from requests<3,>=2.27->streamlit)

Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.11/dist-packages (from requests<3,>=2.27->streamlit)

Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages (from requests<3,>=2.27->streamlit)

Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-packages (from requests<3,>=2.27->streamlit)

Requirement already satisfied: smmap<6,>=3.0.1 in /usr/local/lib/python3.11/dist-packages (from gitdb<5,>=4.0.1->gitpython)

Requirement already satisfied: MarkupSafe>=2.0 in /usr/local/lib/python3.11/dist-packages (from Jinja2->altair<6,>=4.0->streamlit)

Requirement already satisfied: attrs>=22.2.0 in /usr/local/lib/python3.11/dist-packages (from jsonschema>=3.0->altair<6,>=4.0->streamlit)

Requirement already satisfied: jsonschema-specifications>=2023.03.6 in /usr/local/lib/python3.11/dist-packages (from jsonschema>=3.0->altair<6,>=4.0->streamlit)

Requirement already satisfied: referencing>=0.28.4 in /usr/local/lib/python3.11/dist-packages (from jsonschema>=3.0->altair<6,>=4.0->streamlit)

Requirement already satisfied: rpds-py>=0.7.1 in /usr/local/lib/python3.11/dist-packages (from jsonschema>=3.0->altair<6,>=4.0->streamlit)

Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.11/dist-packages (from python-dateutil>=2.8.2->pandas<3,>=1.4.0->streamlit)

Downloading streamlit-1.45.0-py3-none-any.whl (9.9 MB)

**9.9/9.9 MB 70.8 MB/s eta 0:00:00**

Downloading pydeck-0.9.1-py2.py3-none-any.whl (6.9 MB)

**6.9/6.9 MB 98.8 MB/s eta 0:00:00**

Downloading watchdog-6.0.0-py3-none-manylinux2014\_x86\_64.whl (79 kB)



```

79.1/79.1 kB 8.3 MB/s eta 0:00:00
Installing collected packages: watchdog, pydeck, streamlit
Successfully installed pydeck-0.9.1 streamlit-1.45.0 watchdog-6.0.0
Collecting pyngrok
  Downloading pyngrok-7.2.5-py3-none-any.whl.metadata (8.9 kB)
Requirement already satisfied: PyYAML>=5.1 in /usr/local/lib/python3.11/dist-packages (from pyngrok) (6.0.2)
Downloading pyngrok-7.2.5-py3-none-any.whl (23 kB)
Installing collected packages: pyngrok
Successfully installed pyngrok-7.2.5

```

```
!ngrok config add-authtoken "2w89D5gOXVZpohhkerRzIdrvOd7_5BVJUJBSG53pZet6iN5Ni"
```

Auth token saved to configuration file: /root/.config/ngrok/ngrok.yml

```
from getpass import getpass
```

```
authtoken = getpass("Paste your ngrok authtoken: ")
!ngrok config add-authtoken {authtoken}
```

```

-----
KeyboardInterrupt                                Traceback (most recent call last)
<ipython-input-8-a1d2fc31284b> in <cell line: 0>()
      1 from getpass import getpass
      2
----> 3 authtoken = getpass("Paste your ngrok authtoken: ")
      4 get_ipython().system('ngrok config add-authtoken {authtoken}')

1 frames
/usr/local/lib/python3.11/dist-packages/ipykernel/kernelbase.py in _input_request(self, prompt, ident, parent, password)
    1217         except KeyboardInterrupt:
    1218             # re-raise KeyboardInterrupt, to truncate traceback
-> 1219             raise KeyboardInterrupt("Interrupted by user") from None
    1220         except Exception:
    1221             self.log.warning("Invalid Message:", exc_info=True)

KeyboardInterrupt: Interrupted by user

```

```
%%writefile app.py
```

```

import streamlit as st
import os
from IPython.display import display, Video
import base64
import subprocess
import time

# Set page title and layout
st.set_page_config(page_title="Traffic Compliance Detection System", layout="wide")

# Add header with styling
st.title("Traffic Compliance Detection System")
st.markdown("----")

# Create sidebar for control buttons
with st.sidebar:
    st.header("Controls")
    st.markdown("Upload a video and use the detect buttons to process it.")

# Create file uploader
uploaded_file = st.sidebar.file_uploader("Upload Video", type=["mp4", "avi", "mov"])

# Initialize session state variables if they don't exist
if "video_path" not in st.session_state:
    st.session_state.video_path = None
if "output_path" not in st.session_state:
    st.session_state.output_path = None
if "detection_complete" not in st.session_state:
    st.session_state.detection_complete = False

# Process uploaded file
if uploaded_file is not None:
    # Create directory if it doesn't exist

```

```

save_dir = "/content/Uploaded videos"
os.makedirs(save_dir, exist_ok=True)

# Save uploaded file to the directory
save_path = os.path.join(save_dir, uploaded_file.name)
with open(save_path, "wb") as f:
    f.write(uploaded_file.getbuffer())

# Update session state with video path
st.session_state.video_path = save_path
st.sidebar.success(f"File uploaded successfully: {uploaded_file.name}")

# Display original video
st.subheader("Uploaded Video")
st.video(uploaded_file)

# Create detect buttons
col1, col2 = st.sidebar.columns(2)

with col1:
    detect_button = st.button("Detect", type="primary")

with col2:
    license_button = st.button("License Detection")

# Function to run detection script
def run_detection():
    video_path = st.session_state.video_path

    if video_path:
        with st.spinner("Running main script..."):
            # Run main.py
            subprocess.run(f"python '/content/drive/MyDrive/DL Project/Scripts/main.py' '{video_path}'", shell=True)

        with st.spinner("Running YOLOv5 detection..."):
            # Define class names for detection
            class_names = ['helmet', 'mobile_usage', 'no_helmet', 'triple_ride']

            # Run YOLOv5 detection
            subprocess.run(f"python /content/yolov5/detect.py --weights '/content/drive/MyDrive/DL Project/model/best_3rider.pt'
                           f"--source '/content/drive/MyDrive/DL Project/traffic_compliance_system/processed_video.mp4' "
                           f"--conf 0.3 --save-txt --save-conf --project /content/traffic_compliance_outputs "
                           f"--name filtered_output --exist-ok", shell=True)

        with st.spinner("Running emergency detection..."):
            # Run emergency.py
            subprocess.run("python '/content/drive/MyDrive/DL Project/Scripts/emergency.py'", shell=True)

        with st.spinner("Running seatbelt detection..."):
            # Run seatbelt.py
            subprocess.run("python '/content/drive/MyDrive/DL Project/Scripts/seatbelt.py'", shell=True)

        # Update output path
        st.session_state.output_path = "/content/traffic_compliance_outputs/filtered_output/processed_video(after_seatbelt).mp4"
        st.session_state.detection_complete = True

        return True
    else:
        st.error("Please upload a video first")
        return False

# Handle detect button click
if detect_button:
    if st.session_state.video_path:
        success = run_detection()
        if success:
            st.success("Detection completed successfully!")
    else:
        st.error("Please upload a video first")

# Handle license detection button click
if license_button:
    st.info("License detection functionality is not implemented yet")

# Display processed video if detection is complete
if st.session_state.detection_complete and st.session_state.output_path:
    st.subheader("Processed Video")

```



```

st.video(st.session_state.output_path)

# Add information section
with st.expander("About"):
    st.markdown("""
    ## Traffic Compliance Detection System

    This application detects several traffic violations:
    - Helmet usage violations
    - Mobile phone usage while driving
    - Triple riding on two-wheelers
    - Emergency vehicle detection
    - Seatbelt compliance

    Upload a video and click 'Detect' to process it.
    """)

```

➔ Writing app.py

```

# license and detect both integrated -
%%writefile app.py

import streamlit as st
import os
import subprocess
import time
import json

st.set_page_config(page_title="Traffic Compliance Detection System", layout="wide")

st.title("Traffic Compliance Detection System")
st.markdown("----")

with st.sidebar:
    st.header("Controls")
    st.markdown("Upload a video and use the detect buttons to process it.")

uploaded_file = st.sidebar.file_uploader("Upload Video", type=["mp4", "avi", "mov"])

if "video_path" not in st.session_state:
    st.session_state.video_path = None
if "output_path" not in st.session_state:
    st.session_state.output_path = None
if "detection_complete" not in st.session_state:
    st.session_state.detection_complete = False
if "license_plates" not in st.session_state:
    st.session_state.license_plates = []
if "license_detection_complete" not in st.session_state:
    st.session_state.license_detection_complete = False

if uploaded_file is not None:
    # Create directory if it doesn't exist
    save_dir = "/content/drive/MyDrive/Uploaded videos"
    os.makedirs(save_dir, exist_ok=True)

    # Save
    save_path = os.path.join(save_dir, uploaded_file.name)
    with open(save_path, "wb") as f:
        f.write(uploaded_file.getbuffer())

    st.session_state.video_path = save_path
    st.sidebar.success(f"File uploaded successfully: {uploaded_file.name}")

    st.subheader("Uploaded Video")
    st.video(uploaded_file)

col1, col2 = st.sidebar.columns(2)

with col1:
    detect_button = st.button("Detect", type="primary")

with col2:

```

```

license_button = st.button("License Detection", type="primary")

def run_detection():
    video_path = st.session_state.video_path

    if video_path:
        with st.spinner("Running main script..."):
            # Run main.py
            subprocess.run(f"python '/content/drive/MyDrive/DL Project/Scripts/main.py' '{video_path}'", shell=True)

        with st.spinner("Running YOLOv5 detection..."):

            class_names = ['helmet', 'mobile_usage', 'no_helmet', 'triple_ride']

            subprocess.run(f"python /content/yolov5/detect.py --weights '/content/drive/MyDrive/DL Project/model/best_3rider.pt'
                           f"--source '/content/drive/MyDrive/DL Project/traffic_compliance_system/processed_video.mp4' "
                           f"--conf 0.3 --save-txt --save-conf --project /content/traffic_compliance_outputs "
                           f"--name filtered_output --exist-ok", shell=True)

        with st.spinner("Running emergency detection..."):
            # Runing emergency.py
            subprocess.run(f"python '/content/drive/MyDrive/DL Project/Scripts/emergency.py'", shell=True)

        with st.spinner("Running seatbelt detection..."):
            # Runing seatbelt.py
            subprocess.run(f"python '/content/drive/MyDrive/DL Project/Scripts/seatbelt.py'", shell=True)

        st.session_state.output_path = "/content/traffic_compliance_outputs/filtered_output/processed_video(after_seatbelt).mp4"
        st.session_state.detection_complete = True

        return True
    else:
        st.error("Please upload a video first")
        return False

def run_license_detection():
    video_path = st.session_state.video_path

    if video_path:
        with st.spinner("Running license plate detection..."):
            subprocess.run(f"python '/content/drive/MyDrive/License-Plate-Extraction/main.py' '{video_path}'", shell=True)

            json_path = "/content/drive/MyDrive/License-Plate-Extraction/json/LicensePlateData.json"

            try:
                with open(json_path, 'r') as f:
                    data = json.load(f)

                unique_license_plates = set()

                if data:
                    for entry in data:
                        plates = entry.get("License Plate", [])
                        for plate in plates:
                            if len(plate) == 10 :
                                unique_license_plates.add(plate)

                st.session_state.license_plates = list(unique_license_plates)
                st.session_state.license_detection_complete = True
                return True
            else:
                st.error("No entries found in the JSON file.")
                return False
        except Exception as e:
            st.error(f"Error processing license plate data: {str(e)}")
            return False
    else:
        st.error("Please upload a video first")
        return False

if detect_button:
    if st.session_state.video_path:
        success = run_detection()
        if success:

```

```

        st.success("Detection completed successfully!")
    else:
        st.error("Please upload a video first")

if license_button:
    if st.session_state.video_path:
        success = run_license_detection()
        if success:
            st.success("License plate detection completed successfully!")
    else:
        st.error("Please upload a video first")

if st.session_state.detection_complete and st.session_state.output_path:
    st.subheader("Processed Video")
    st.video(st.session_state.output_path)

if st.session_state.license_detection_complete and st.session_state.license_plates:
    st.subheader("Detected License Plates")

    license_container = st.container()
    with license_container:
        st.markdown(" License Plates ")

        for plate in st.session_state.license_plates:
            st.markdown(f"""
            <div style="
                background-color: #ffffff;
                color: #000000;
                padding: 10px;
                border-radius: 5px;
                margin-bottom: 10px;
                font-size: 18px;
                font-family: monospace;
                border-left: 4px solid #4CAF50;
            ">
                {plate}
            </div>
            """, unsafe_allow_html=True)

if st.session_state.license_plates:
    import pandas as pd
    import io

    df = pd.DataFrame(st.session_state.license_plates, columns=["License Plate"])
    csv = df.to_csv(index=False).encode('utf-8')

```