

[31]



```
!pip install -q ultralytics opencv-python matplotlib pillow requests

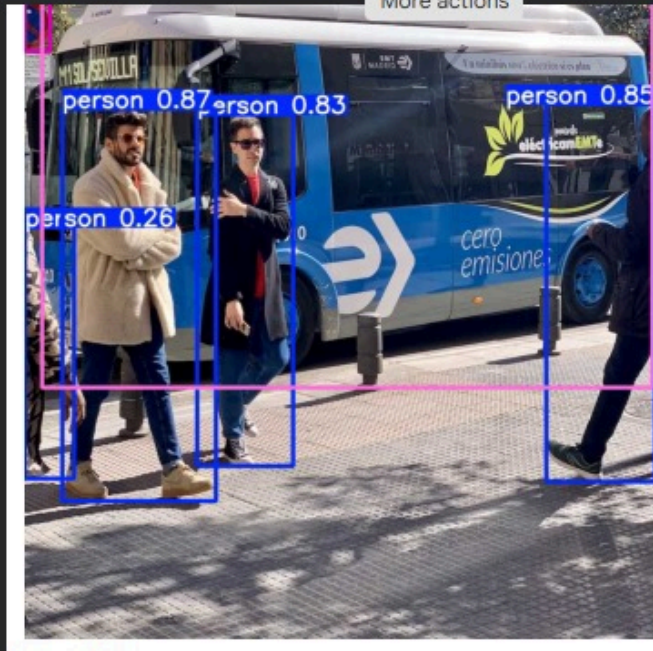
import os, cv2, torch, requests
import matplotlib.pyplot as plt
from PIL import Image, ImageDraw
from ultralytics import YOLO

# -----
# Load YOLOv8 pretrained model
# -----
device = "cuda" if torch.cuda.is_available() else "cpu"
print("Device:", device)

model = YOLO("yolov8n.pt") # 'n' = nano, fast and light
model.to(device)

# -----
# Prepare test image
# -----
url = "https://github.com/ultralytics/assets/releases/download/v0.0.0/bus.jpg"
img_path = "bus.jpg"

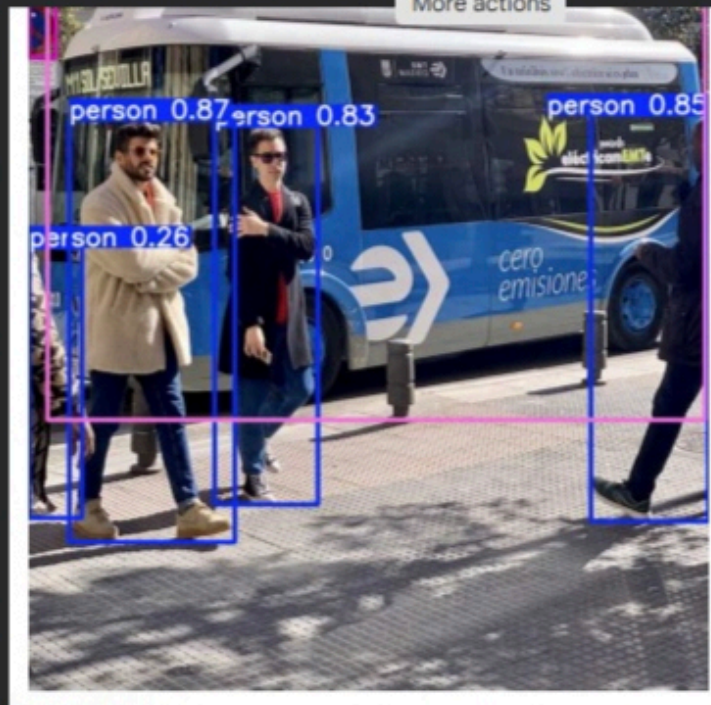
try:
    # Try to download sample image
    if not os.path.exists(img_path):
        r = requests.get(url, timeout=10)
        if r.status_code == 200:
            with open(img_path, "wb") as f:
                f.write(r.content)
            print("Downloaded sample image ✅")
        else:
            raise Exception("Failed to download")
except Exception:
    # Create fallback synthetic image if download fails
    print("⚠️ Could not download image – creating synthetic sample instead.")
    img = Image.new("RGB", (640, 480), (180, 180, 200))
    draw = ImageDraw.Draw(img)
```



Detections:

- bus (confidence: 0.87) at [22.87, 231.28, 805.0, 756.84]
- person (confidence: 0.87) at [48.55, 398.55, 245.35, 902.7]
- person (confidence: 0.85) at [669.47, 392.19, 809.72, 877.04]
- person (confidence: 0.83) at [221.52, 405.8, 344.97, 857.54]
- person (confidence: 0.26) at [0.0, 550.53, 63.01, 873.44]
- stop sign (confidence: 0.26) at [0.06, 254.46, 32.56, 324.87]

✅ Done – YOLOv8 detection complete.



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