DSDE-Homework_3_2_Object_detection_VOCDetection_yolov8_basic

ทำ Object Detection ด้วย YOLOV8
Input data เป็น Pascal VOC Detection Dataset
และใช้ ultralytics library

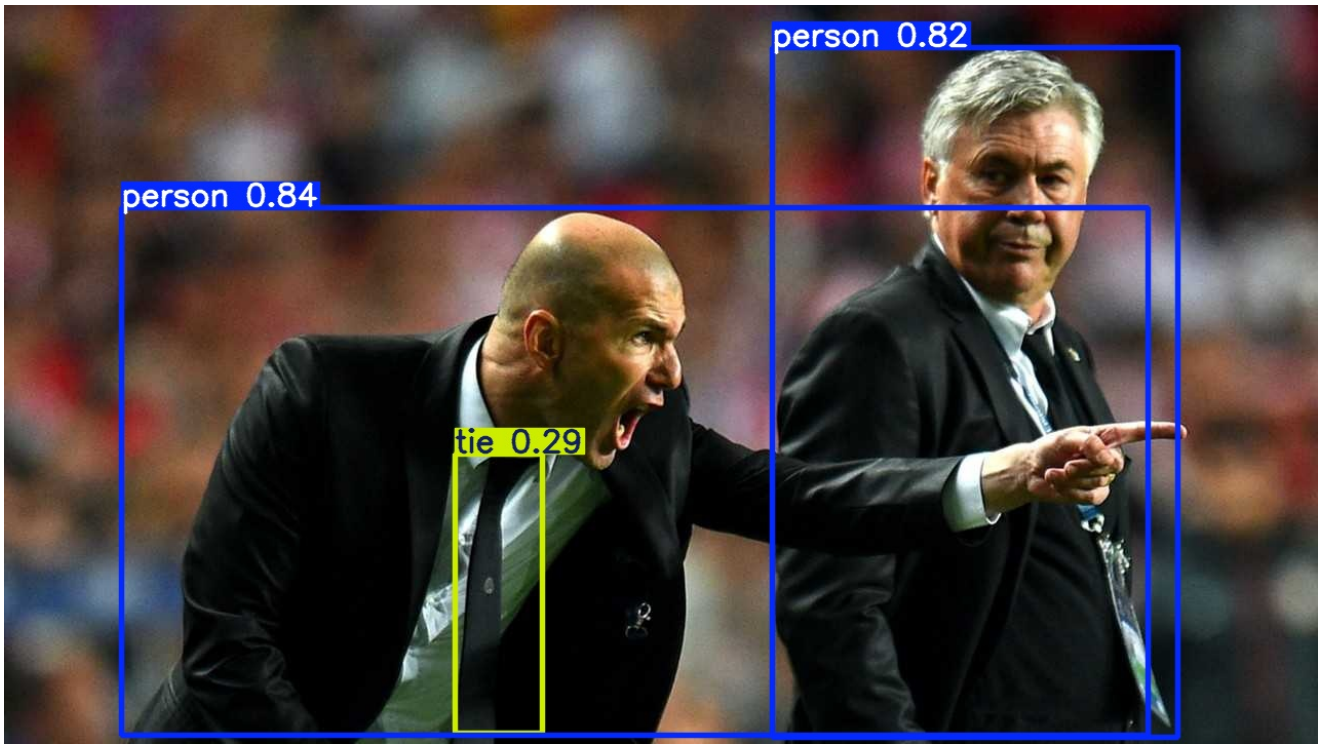
Setup Ultralytics

```
# Check for installed dependencies and available hardware
import ultralytics
ultralytics.checks()
```

ใช้ YOLOv8 ใน cli

```
# Run inference on an image with YOLOv8n
# set up device=0 refer to set cuda:0 (GPU)
!yolo predict model=yolov8n.pt
source='https://ultralytics.com/images/zidane.jpg' device=0
```

ผลลัพธ์ จะอยู่ใน runs/detect/predict



ใช้ YOLOv8 ใน Python

```python
from ultralytics import YOLO



# Load a model

# model = YOLO('yolov8n.yaml') # build a new model from scratch

model = YOLO('yolov8n.pt') # load a pretrained model (recommended for training)

model.to('cuda:0') # set up the model to GPU

# Use the model

results = model.train(data='VOC.yaml', epochs=3) # train the model

results = model.val() # evaluate model performance on the validation set
```

ผลลัพธ์