

yolov8



<https://docs.ultralytics.com/>



```
# 环境配置
# https://pypi.tuna.tsinghua.edu.cn/simple/

# 检查安装
pip list

# 卸载
pip uninstall <package-Name>

# 安装opencv
pip install python-opencv -i https://pypi.tuna.tsinghua.edu.cn/simple/

# 安装opencv 贡献包
pip install opencv-contrib-python -i https://pypi.tuna.tsinghua.edu.cn/simple/

# 安装pytorch
# https://pytorch.org/get-started/locally/
pip install torch torchvision torchaudio -i https://pypi.tuna.tsinghua.edu.cn/simple/

# 安装yolov8
# https://docs.ultralytics.com/quickstart/
pip install ultralytics -i https://pypi.tuna.tsinghua.edu.cn/simple/
```



```
# 运行
yolo TASK MODE ARGS
```

```
# TASK [ detect : [ ] , [ segment [ ] , [ classify [ ] , [ pose [ ] ]  
# MODE [ train: [ ] , [ val [ ] , [ predict [ ] / [ ] , [ export: [ ] , [ track: [ ] ]
```

```
# [ yolov8n.pt [ ]  
yolo detect predict model="./yolo/yolov8n.pt" source="./images/1.jpg"
```



```
# [ yolov8n-seg.pt [ ]  
yolo segment predict model="./yolo/yolov8n-seg.pt" source="./images/1.jpg"
```





```
# coco128
yolo detect train data=../yolo/coco128.yaml model=../yolo/yolov8n.pt epochs=100 imgsz=640
```

```
# coco128.yaml
# https://github.com/ultralytics/ultralytics/tree/main/ultralytics/cfg/datasets
# coco128

path: ../datasets/coco128 # dataset root dir
train: images/train2017 # train images (relative to 'path') 128 images
val: images/train2017 # val images (relative to 'path') 128 images
test: # test images (optional)

# Classes
names:
  0: person
  1: bicycle

download: https://ultralytics.com/assets/coco128.zip
```

python

```
from ultralytics import YOLO

model = YOLO('../yolo/yolov8n.pt') # load a pretrained model (recommended for training)
results = model.train(data='../images/coco128.yaml', epochs=100, imgsz=640)
```