

Week 7 Learning Activities

The code

```
# Import necessary libraries
import cv2
from ultralytics import YOLO
import matplotlib.pyplot as plt

model = YOLO('yolov8n.pt')
image_path = '/content/drive/MyDrive/Colab Notebooks/birds/Test/0063.jpg'
image = cv2.imread(image_path)

# Perform object detection
results = model(image)

# Visualize the results by plotting bounding boxes and labels
annotated_image = results[0].plot()

# Display the image using matplotlib
plt.figure(figsize=(10,10))
plt.imshow(cv2.cvtColor(annotated_image, cv2.COLOR_BGR2RGB))
plt.axis('off')
plt.show()

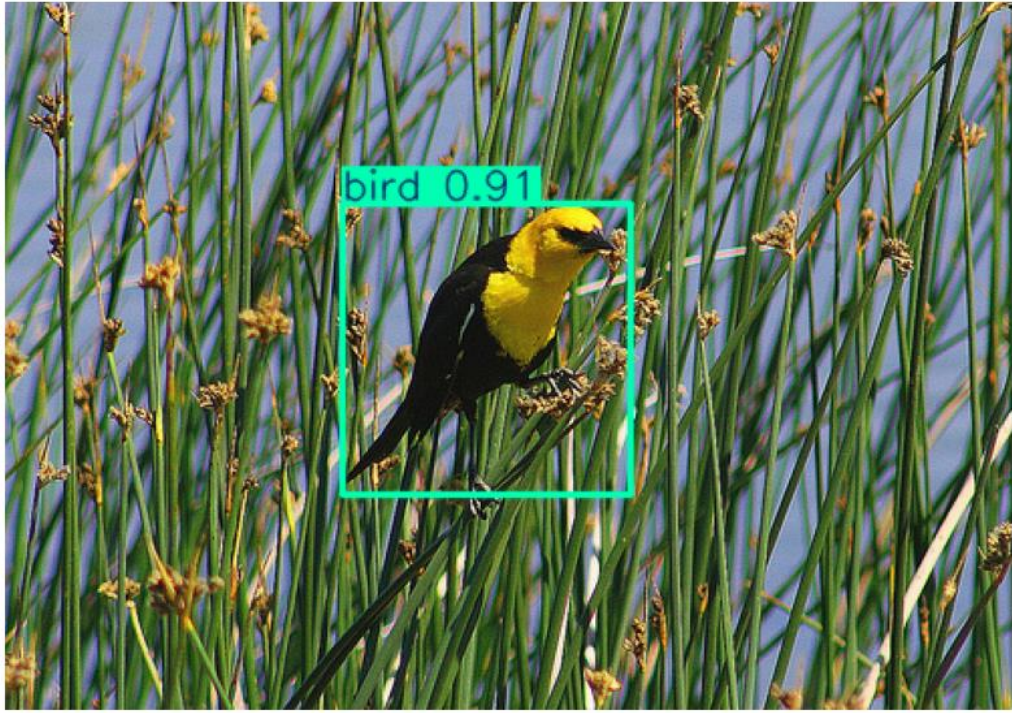
# Optionally, save the image with bounding boxes to disk
cv2.imwrite('detected_objects_image.jpg', annotated_image)
```

The result

```
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.ultralytics.com/  
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, 21.4MB/s]
```

```
0: 480x640 1 bird, 368.6ms
```

```
Speed: 23.6ms preprocess, 368.6ms inference, 37.6ms postprocess per image at shape (1, 3, 480, 640)
```



```
True
```