

▼ Detection Summary Engine

Vivek's Computer Vision based detection engine

The detection engine uses a pre-trained object detection model, yolov10, processes every frame of a short video, outputs a JSON file with

- Class labels
- Bounding box co-ordinates
- Confidence scores

counts total objects per class, identifies the frame with maximum class diversity, visualizes object frequency with a bar chart, and finally saves annotated frames and outputs a compiled output video.

Pre-requisites:- Rename the short video to 'input_video.mp4' in the current directory, and create two folders: 'output_video' and 'output_images' in the directory you run your code from

Installing the necessary packages

```
!pip install opencv-python  
!pip install ultralytics  
!pip install matplotlib
```

```
→ Requirement already satisfied: opencv-python in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: numpy<2.3.0,>=2 in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: ultralytics in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: numpy>=1.23.0 in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: matplotlib>=3.3.0 in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: opencv-python>=4.6.0 in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: pillow>=7.1.2 in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: pyyaml>=5.3.1 in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: requests>=2.23.0 in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: scipy>=1.4.1 in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: torch>=1.8.0 in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: torchvision>=0.9.0 in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: tqdm>=4.64.0 in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: psutil in /usr/local/lib/python3.11/dist-packages (from ultralytics>=2.0.0 in /usr/local/lib/python3.11/dist-packages)  
Requirement already satisfied: py-cpuinfo in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: pandas>=1.1.4 in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: ultralytics-thop>=2.0.0 in /usr/local/lib/python3.11/dist-packages  
Requirement already satisfied: contourpy>=1.0.1 in /usr/local/lib/python3.11/dist-packages
```

```
Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: fonttools>=4.22.0 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: kiwisolver>=1.3.1 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: packaging>=20.0 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: pyparsing>=2.3.1 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: python-dateutil>=2.7 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: pytz>=2020.1 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: tzdata>=2022.7 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: charset-normalizer<4,>=2 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: idna<4,>=2.5 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: urllib3<3,>=1.21.1 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: certifi>=2017.4.17 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: filelock in /usr/local/lib/python3.11/dist-packages (from requests)
Requirement already satisfied: typing-extensions>=4.10.0 in /usr/local/lib/python3.11/dist-packages (from requests)
Requirement already satisfied: networkx in /usr/local/lib/python3.11/dist-packages (from requests)
Requirement already satisfied: jinja2 in /usr/local/lib/python3.11/dist-packages (from requests)
Requirement already satisfied: fsspec in /usr/local/lib/python3.11/dist-packages (from requests)
Requirement already satisfied: nvidia-cuda-nvrtc-cu12==12.4.127 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: nvidia-cuda-runtime-cu12==12.4.127 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: nvidia-cuda-cupti-cu12==12.4.127 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: nvidia-cudnn-cu12==9.1.0.70 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: nvidia-cublas-cu12==12.4.5.8 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: nvidia-cufft-cu12==11.2.1.3 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: nvidia-curand-cu12==10.3.5.147 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: nvidia-cusolver-cu12==11.6.1.9 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: nvidia-cusparse-cu12==12.3.1.170 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: nvidia-cusparseelt-cu12==0.6.2 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: nvidia-nccl-cu12==2.21.5 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: nvidia-nvtx-cu12==12.4.127 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: nvidia-nvjitlink-cu12==12.4.127 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: triton==3.2.0 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: sympy==1.13.1 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: mpmath<1.4,>=1.1.0 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.11/dist-packages (from requests)
Requirement already satisfied: MarkupSafe>=2.0 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: matplotlib in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: contourpy>=1.0.1 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: cycler>=0.10 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: fonttools>=4.22.0 in /usr/local/lib/python3.11/dist-packages
Requirement already satisfied: kiwisolver>=1.3.1 in /usr/local/lib/python3.11/dist-packages
```

Importing the libraries

```
from ultralytics import YOLO
import cv2
import json
import matplotlib.pyplot as plt
from google.colab.patches import cv2_imshow
```

Loading the yolov10 model, the video, and defining integers and lists

```
model = YOLO('yolov10n.pt')

# loading video
video_path = '/content/Detection_Summary_Engine/input_video.mp4'
cap = cv2.VideoCapture(video_path)

# Definitions
frame_skip = 5                                # integer defining number of frames to skip while doing
frame_index=0                                     # integer defining the number of the frame every loop
scale_percent = 50                               # percentage the video will be resized to
all_detections = []                             # stores detected labels, box-coordinates, conf. score
diversity_per_frame = []                         # stores number of objects detected per frame
freq = {}                                         # stores number of times an object is detected per frame
```

Main Loop:

```
ret = True
while ret:
    ret, frame = cap.read()

    if ret:
        results = model.track(frame, persist=True)                      # detects objects
        frame_ = results[0].plot()                                       # plots the detections

        height, width, _ = frame_.shape                                    # resizing the image
        new_width = int(width * scale_percent / 100)
        new_height = int(height * scale_percent / 100)
        dim = (new_width, new_height)
        resized = cv2.resize(frame_, dim, interpolation=cv2.INTER_AREA)

        cv2.imshow( resized)                                         # used instead of cv2.imshow('frame', resized)
        if cv2.waitKey(25) & 0xFF == ord('q'): # outputs image in window 'frame', waits for
            break

        if frame_index % frame_skip == 0:                                # executes every frame skip
            frame_detections =[]                                     # stores detections
            classes_seen =[]                                      # stores number of classes seen

            for r in results:                                       # loop stores objects
                for box in r.bboxes:
                    cls_id = int(box.cls)
                    label = model.model.names[cls_id]
                    conf = float(box.conf)
                    x1, y1, x2, y2 = map(int, box.xyxy[0])

                    if (conf>0.5):                                     # if confidence is greater than 50%
                        frame_detections.append({
                            "label": label,
                            "confidence": round(conf, 4),
```

```
        "bbox": [x1, y1, x2, y2]
    })
    classes_seen.append(label)

    frame_json = {                                         # updates frame detections
        "frame_index": frame_index,
        "detections": frame_detections
    }
    all_detections.append(frame_json)
    diversity_per_frame.append((frame_index, len(classes_seen)))

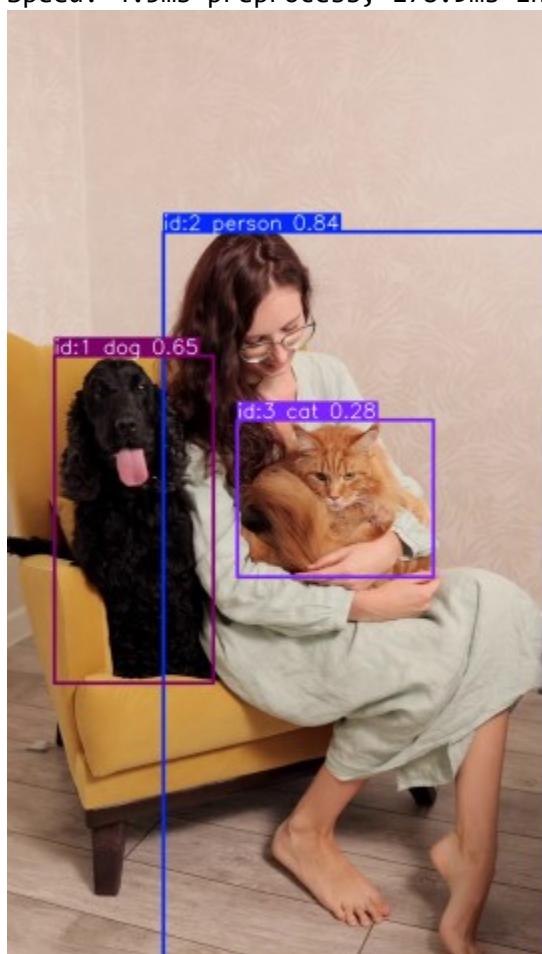
    path = "/content/Detection_Summary_Engine/output_images/frame_" + str(frame_index)
    path = str(path)
    cv2.imwrite(path, resized)                           # saves image

    for item in classes_seen:                         # updates number of seen items
        if item in freq:
            freq[item] += 1
        else:
            freq[item] = 1

    frame_index += 1                                    # increments frame index
```

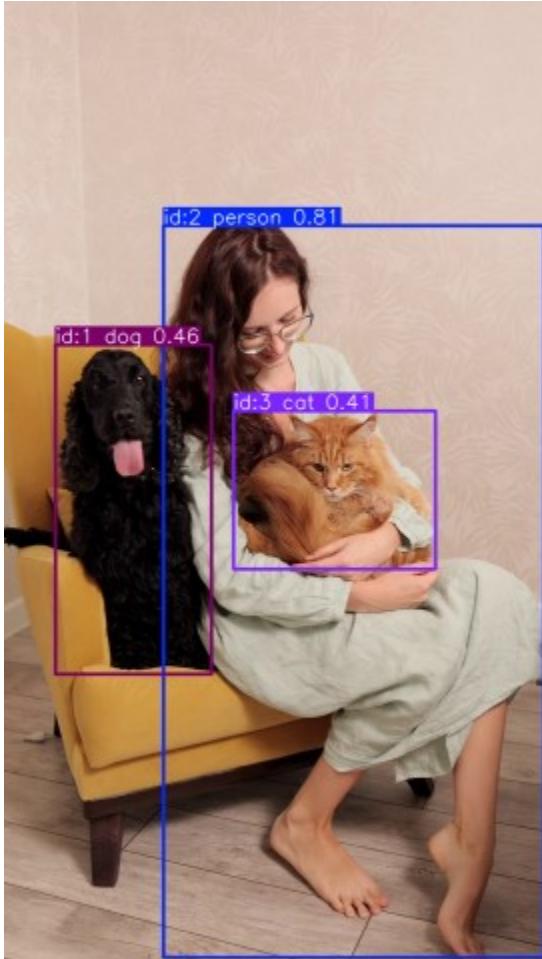
0: 640x384 1 person, 1 cat, 1 dog, 178.9ms

Speed: 4.5ms preprocess, 178.9ms inference, 0.4ms postprocess per image at shape (1,



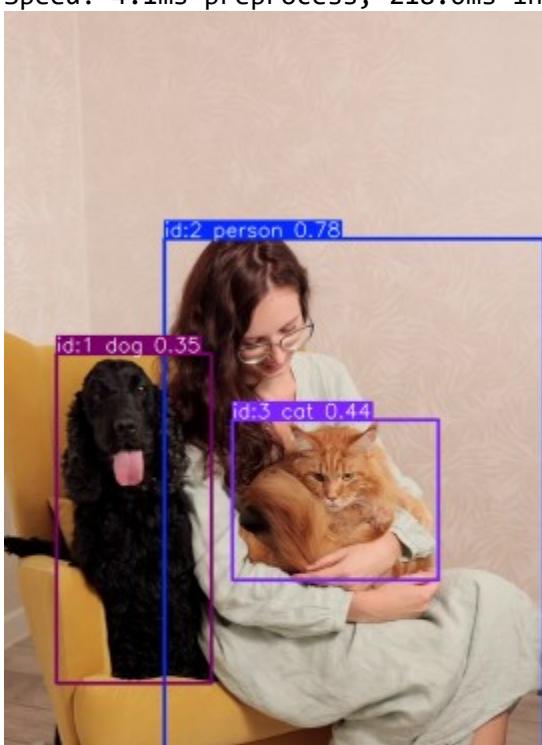
0: 640x384 1 person, 1 cat, 1 dog, 195.8ms

Speed: 3.7ms preprocess, 195.8ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 218.0ms

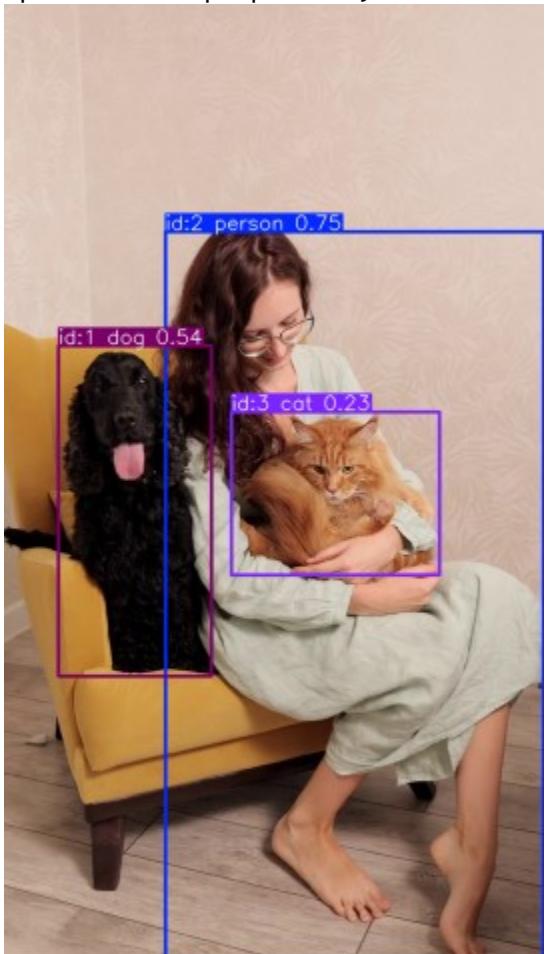
Speed: 4.1ms preprocess, 218.0ms inference, 0.5ms postprocess per image at shape (1,





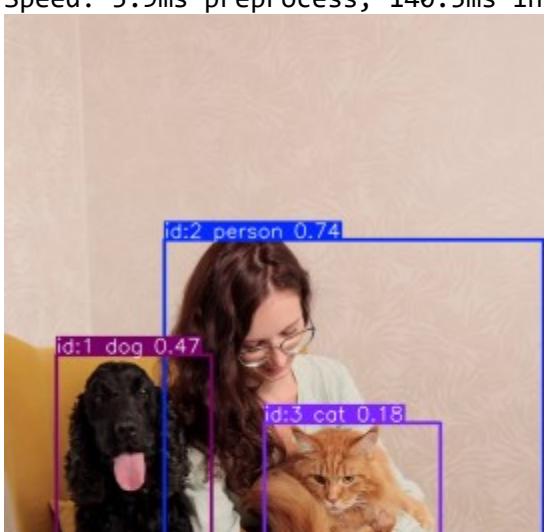
0: 640x384 1 person, 1 cat, 1 dog, 158.9ms

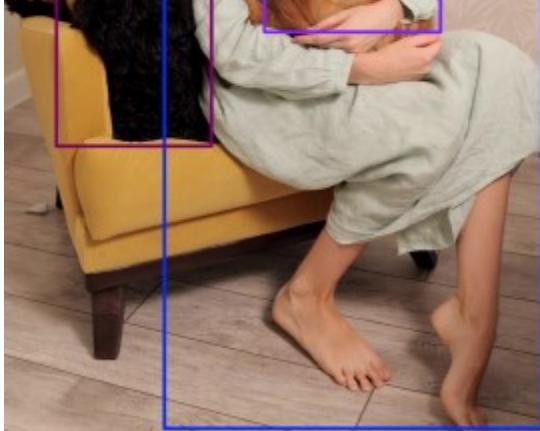
Speed: 4.2ms preprocess, 158.9ms inference, 0.3ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 140.5ms

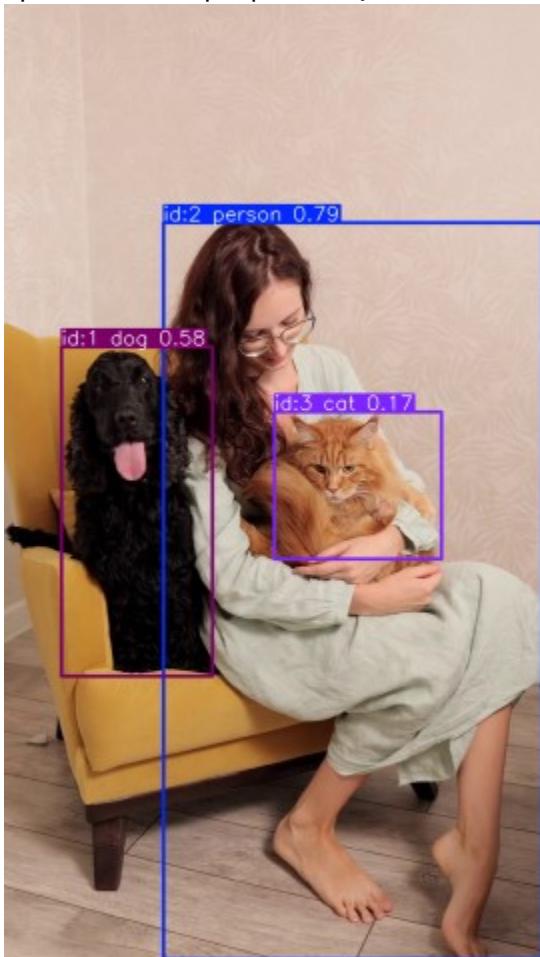
Speed: 5.9ms preprocess, 140.5ms inference, 0.4ms postprocess per image at shape (1,





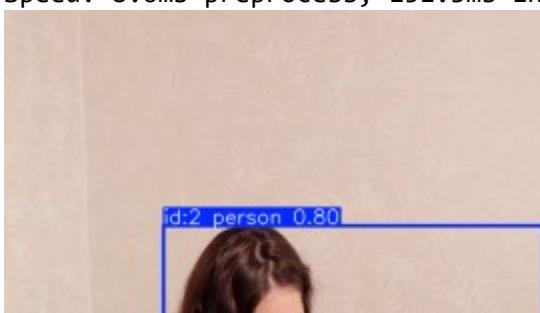
0: 640x384 1 person, 1 cat, 1 dog, 167.0ms

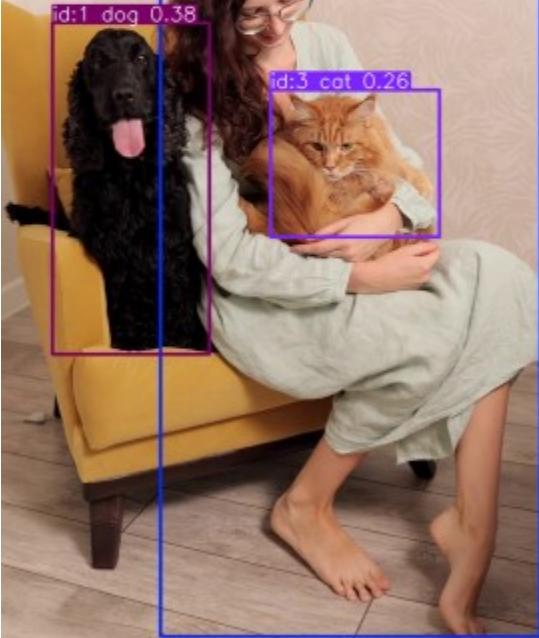
Speed: 5.8ms preprocess, 167.0ms inference, 0.3ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 151.3ms

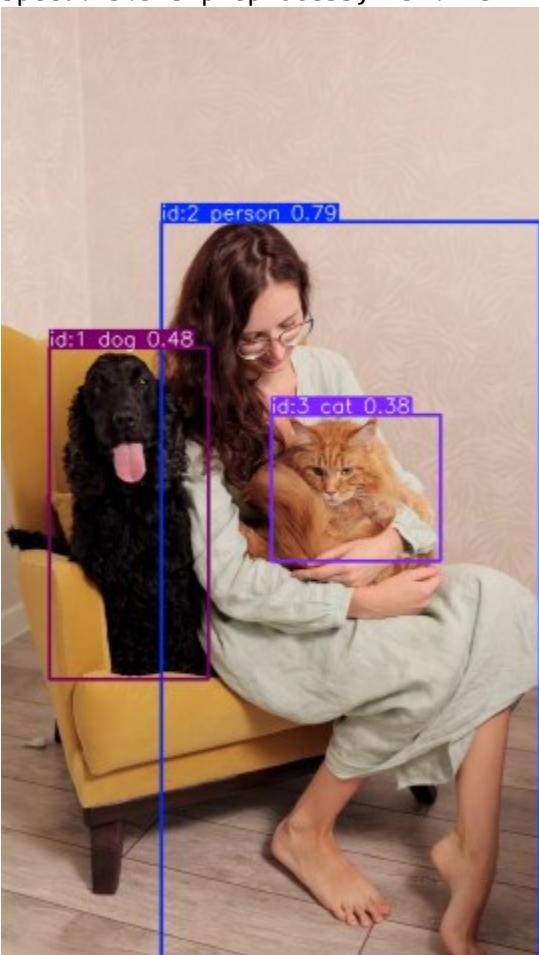
Speed: 8.6ms preprocess, 151.3ms inference, 0.4ms postprocess per image at shape (1,





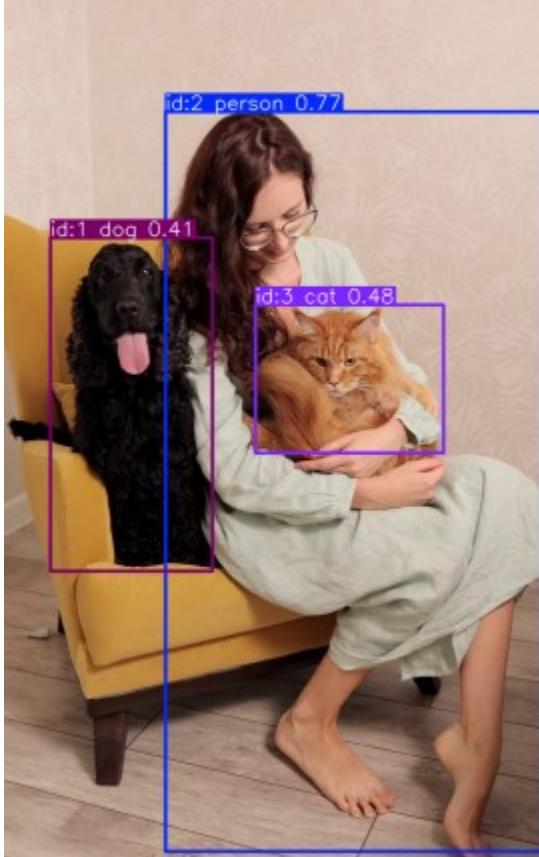
0: 640x384 1 person, 1 cat, 1 dog, 159.1ms

Speed: 5.3ms preprocess, 159.1ms inference, 0.3ms postprocess per image at shape (1,



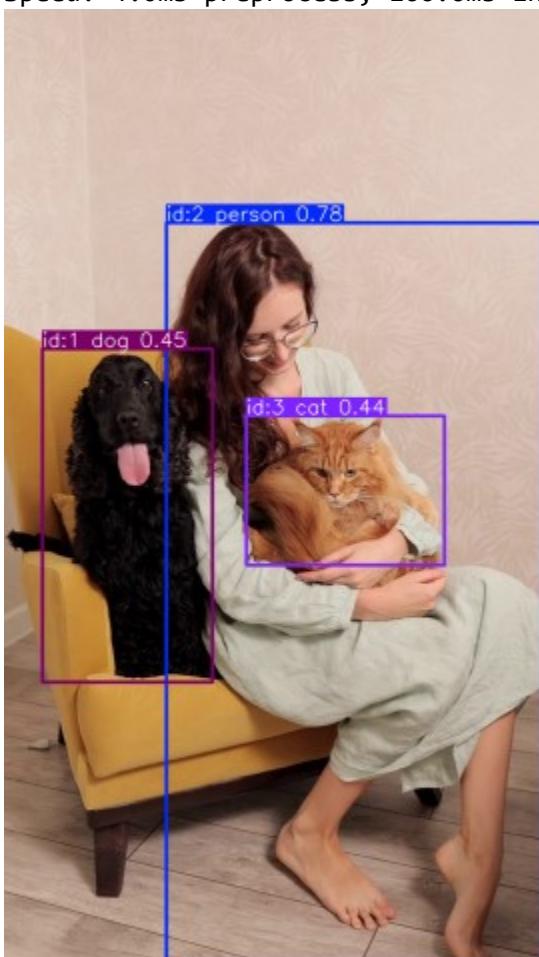
0: 640x384 1 person, 1 cat, 1 dog, 162.8ms

Speed: 6.0ms preprocess, 162.8ms inference, 0.5ms postprocess per image at shape (1,

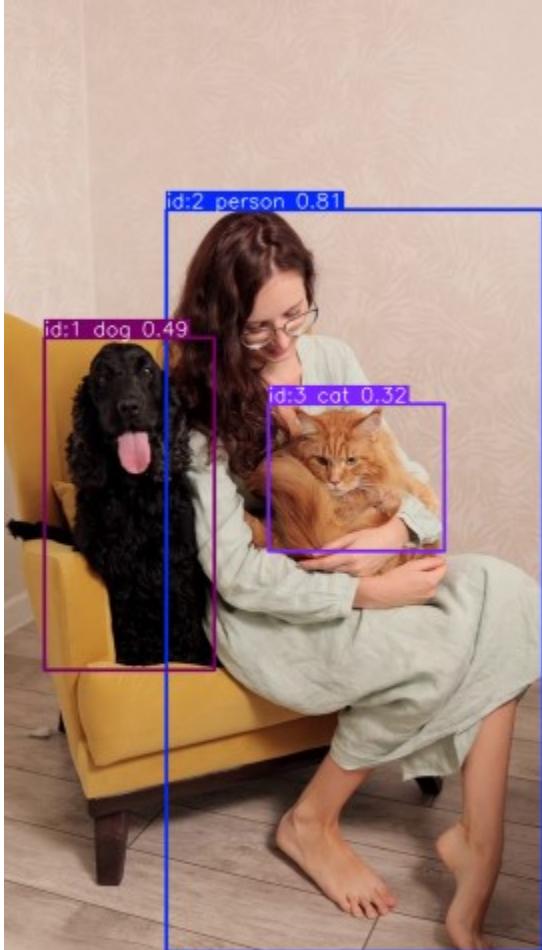


0: 640x384 1 person, 1 cat, 1 dog, 166.6ms

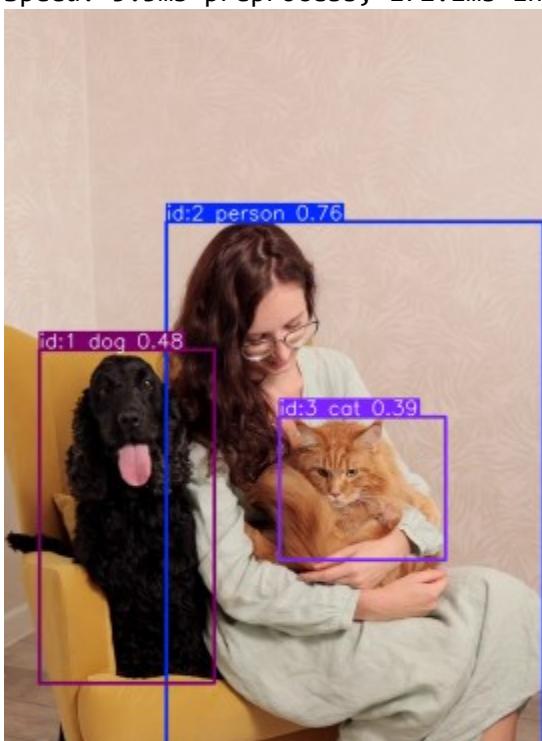
Speed: 4.0ms preprocess, 166.6ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 172.4ms
Speed: 5.2ms preprocess, 172.4ms inference, 0.3ms postprocess per image at shape (1,



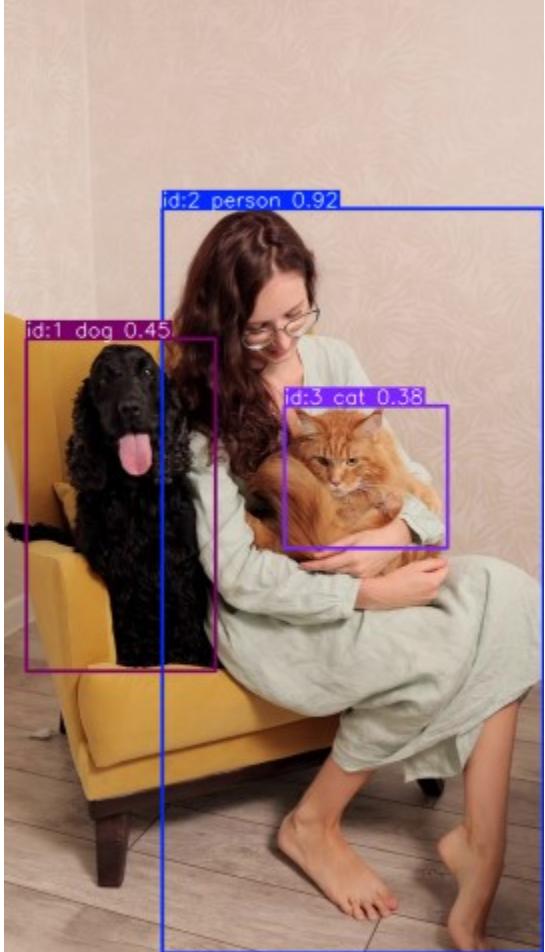
0: 640x384 1 person, 1 cat, 1 dog, 172.1ms
Speed: 5.3ms preprocess, 172.1ms inference, 0.3ms postprocess per image at shape (1,





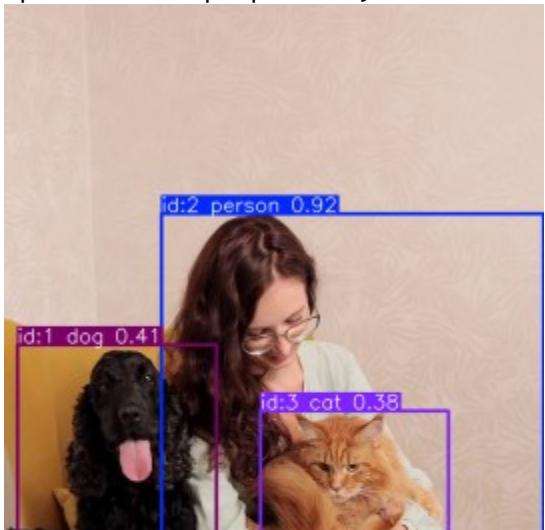
0: 640x384 1 person, 1 cat, 1 dog, 183.3ms

Speed: 3.8ms preprocess, 183.3ms inference, 0.3ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 180.4ms

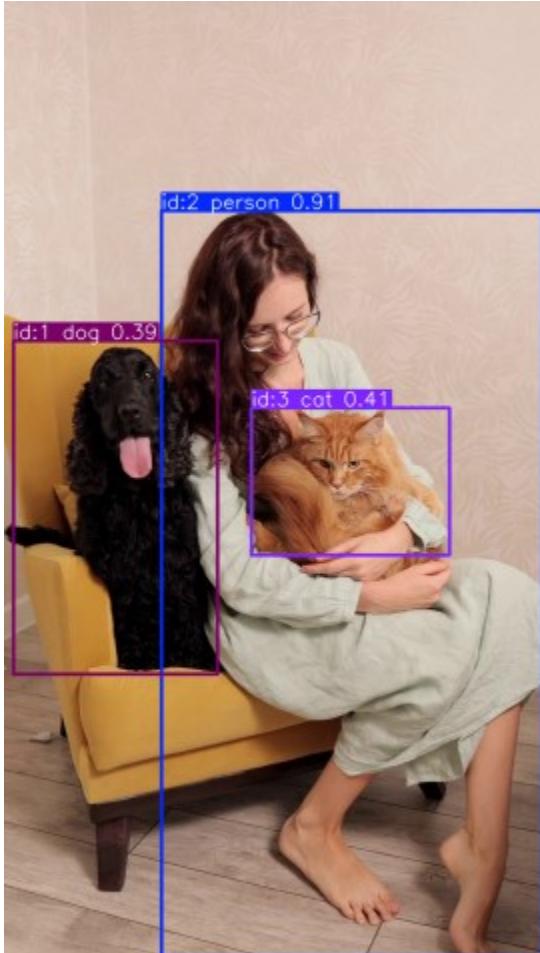
Speed: 5.6ms preprocess, 180.4ms inference, 0.4ms postprocess per image at shape (1,





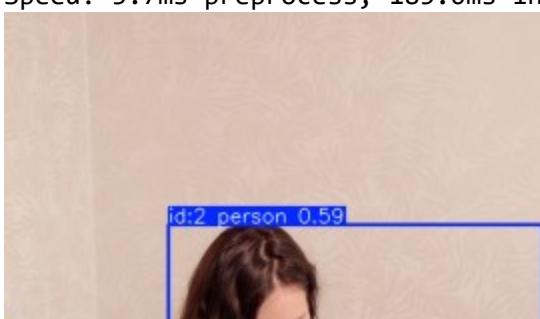
0: 640x384 1 person, 1 cat, 1 dog, 184.3ms

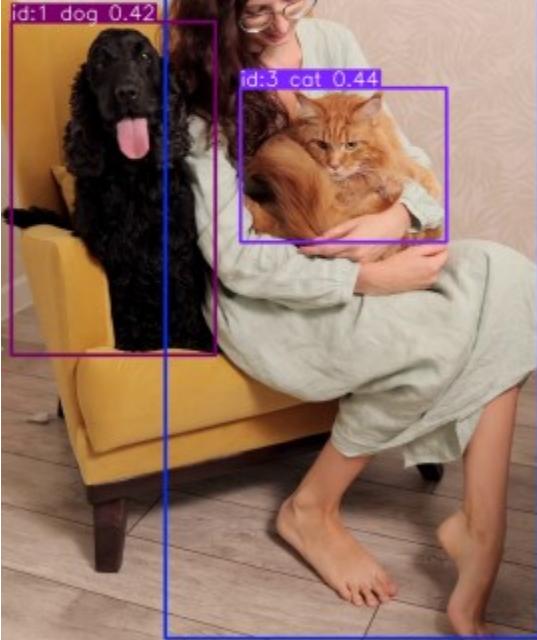
Speed: 5.3ms preprocess, 184.3ms inference, 0.4ms postprocess per image at shape (1,



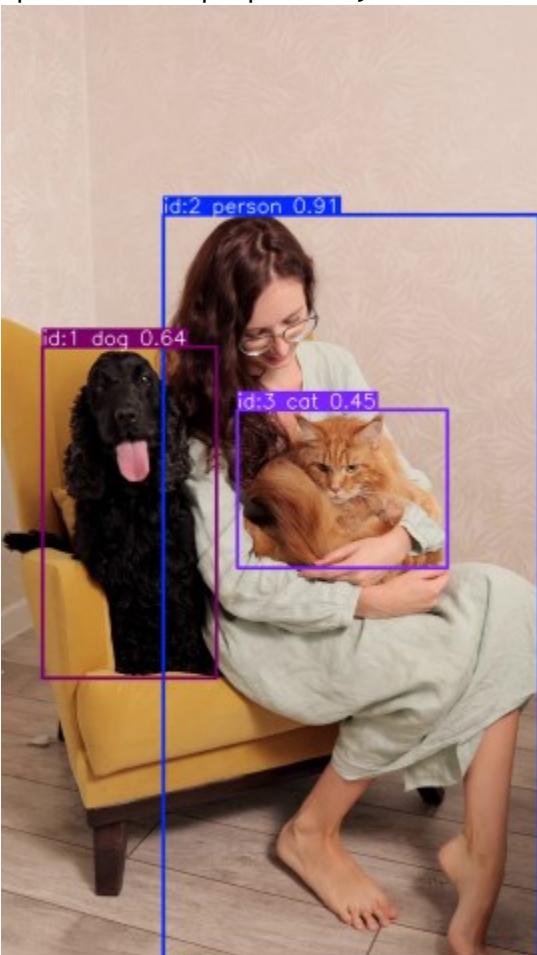
0: 640x384 1 person, 1 cat, 1 dog, 185.0ms

Speed: 5.7ms preprocess, 185.0ms inference, 0.4ms postprocess per image at shape (1,



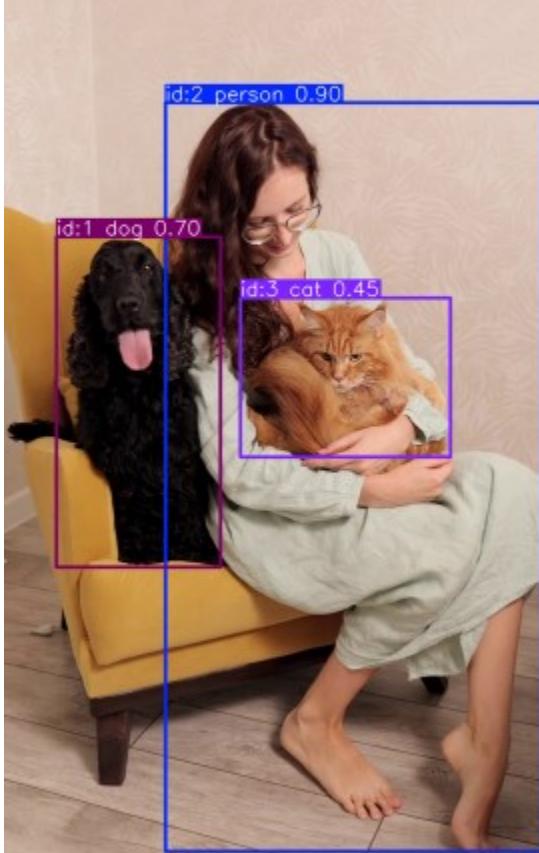


0: 640x384 1 person, 1 cat, 1 dog, 179.7ms
Speed: 5.2ms preprocess, 179.7ms inference, 0.7ms postprocess per image at shape (1,



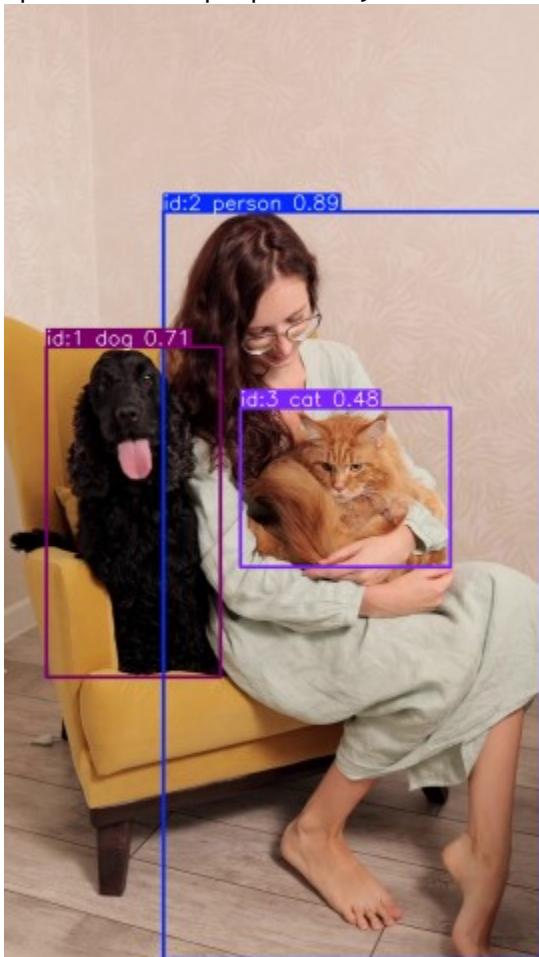
0: 640x384 1 person, 1 cat, 1 dog, 190.7ms
Speed: 4.9ms preprocess, 190.7ms inference, 0.4ms postprocess per image at shape (1,



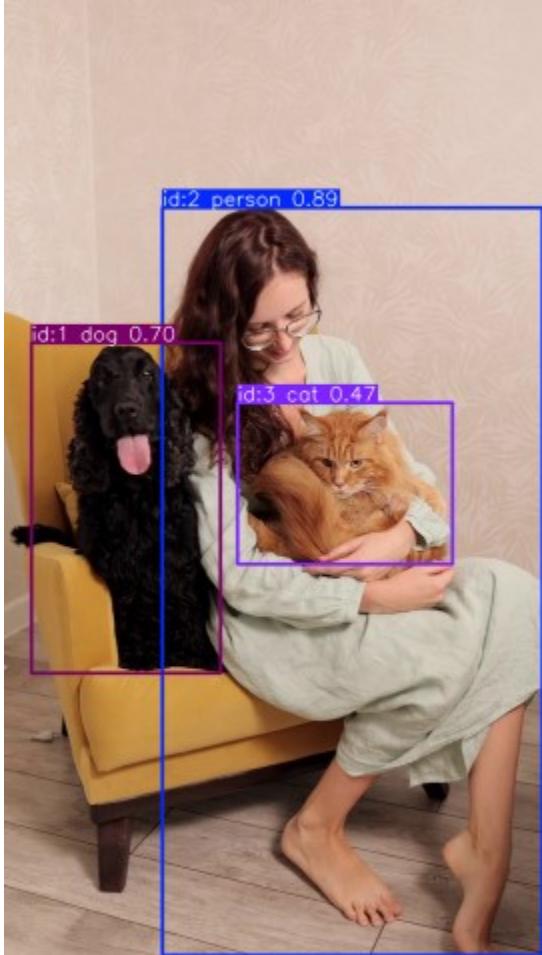


0: 640x384 1 person, 1 cat, 1 dog, 186.6ms

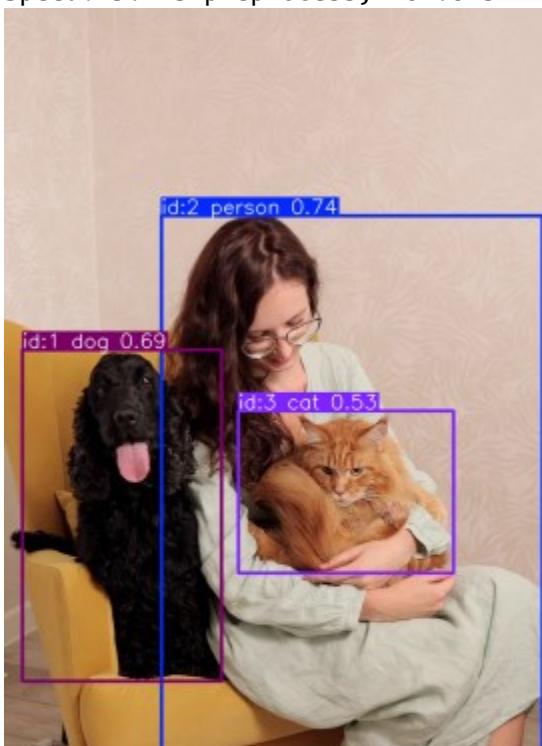
Speed: 5.4ms preprocess, 186.6ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 173.5ms
Speed: 5.1ms preprocess, 173.5ms inference, 0.4ms postprocess per image at shape (1,



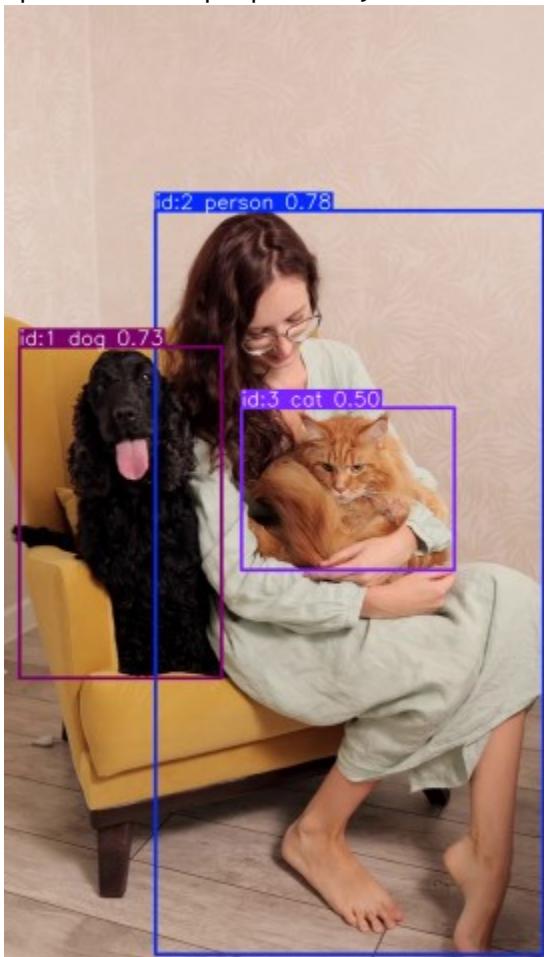
0: 640x384 1 person, 1 cat, 1 dog, 181.8ms
Speed: 5.4ms preprocess, 181.8ms inference, 0.4ms postprocess per image at shape (1,





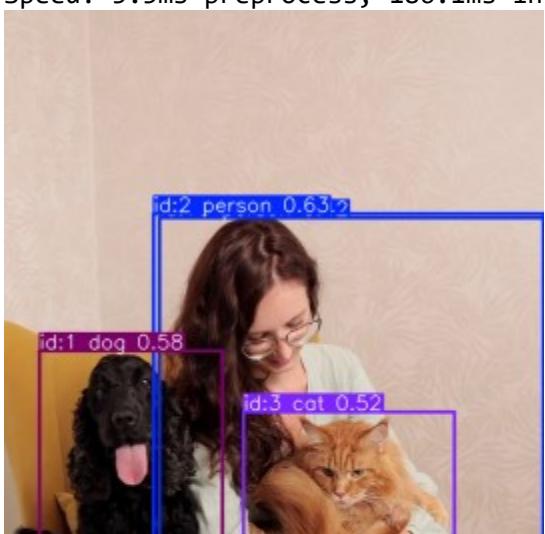
0: 640x384 1 person, 1 cat, 1 dog, 210.9ms

Speed: 5.3ms preprocess, 210.9ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 186.1ms

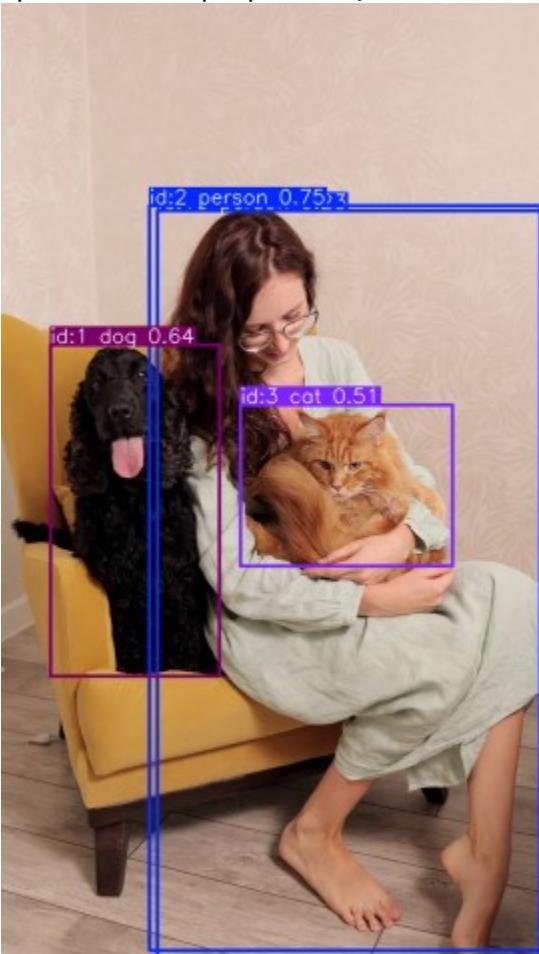
Speed: 5.5ms preprocess, 186.1ms inference, 0.4ms postprocess per image at shape (1,





0: 640x384 2 persons, 1 cat, 1 dog, 178.4ms

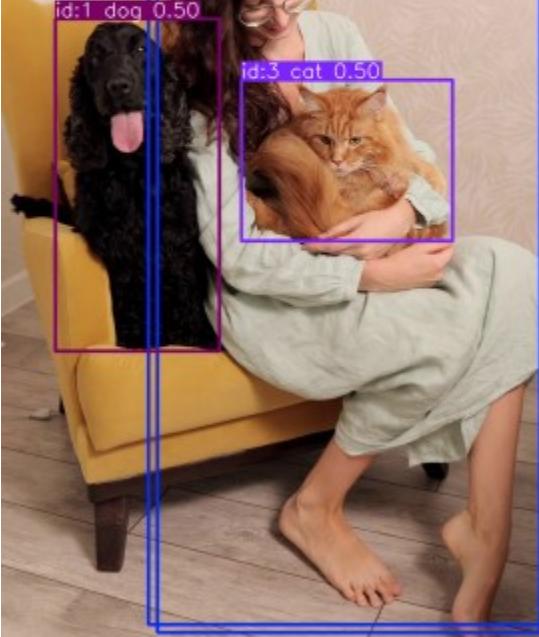
Speed: 5.3ms preprocess, 178.4ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 180.0ms

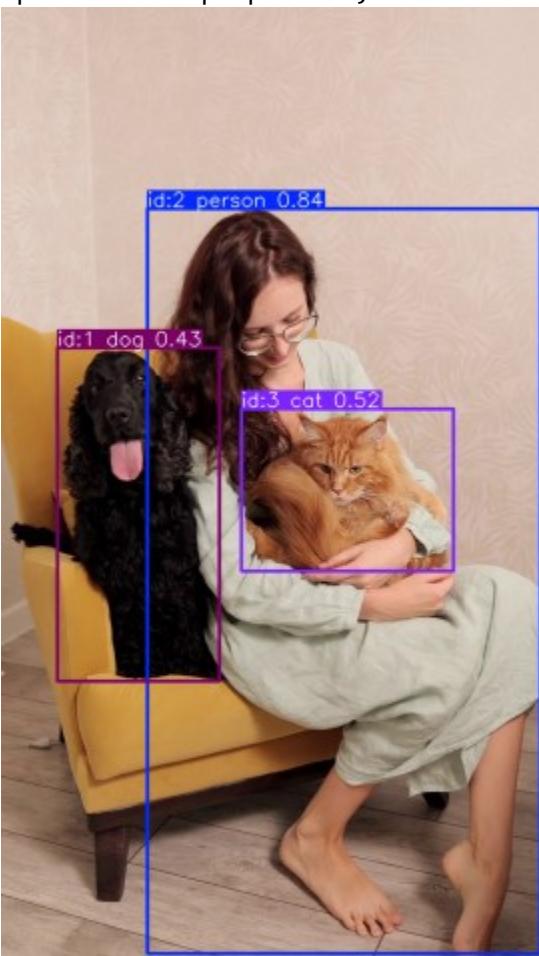
Speed: 5.3ms preprocess, 180.0ms inference, 0.4ms postprocess per image at shape (1,





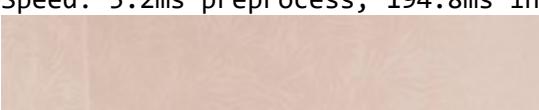
0: 640x384 1 person, 1 cat, 1 dog, 221.3ms

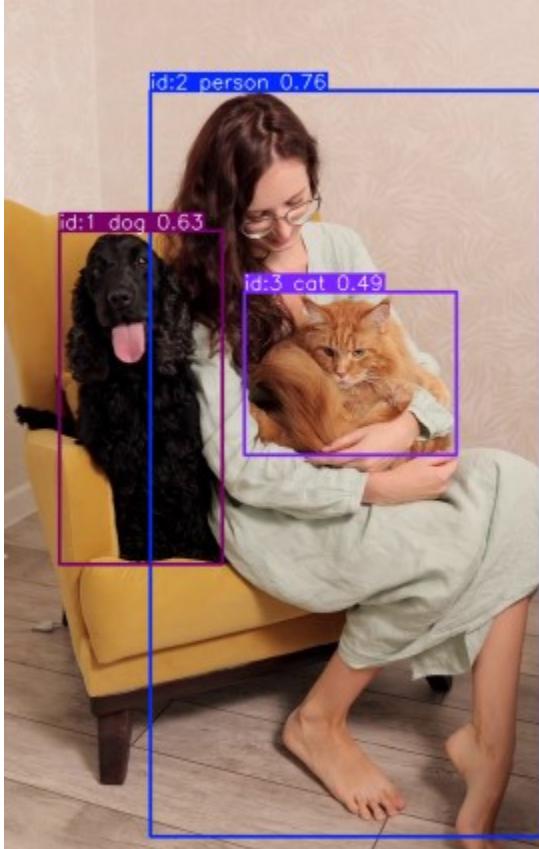
Speed: 5.0ms preprocess, 221.3ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 194.8ms

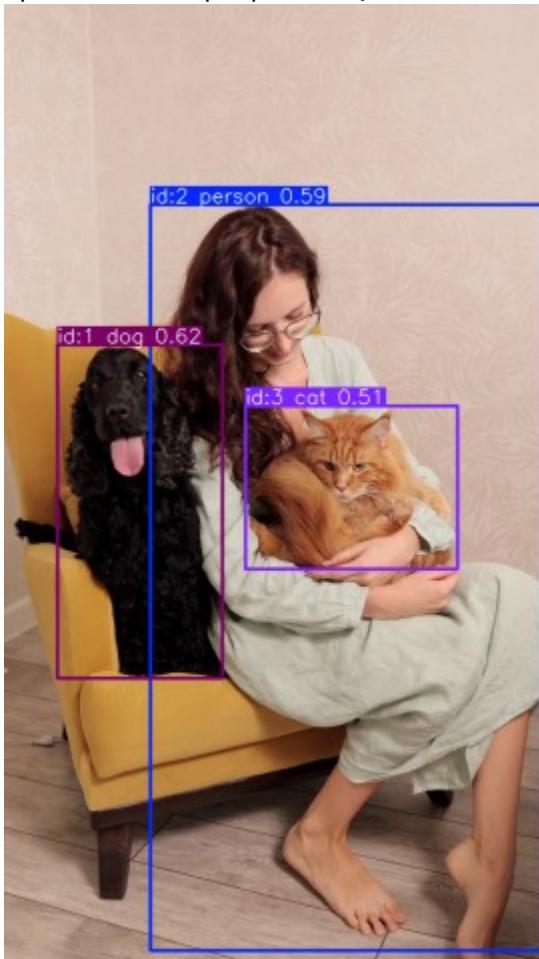
Speed: 5.2ms preprocess, 194.8ms inference, 0.4ms postprocess per image at shape (1,





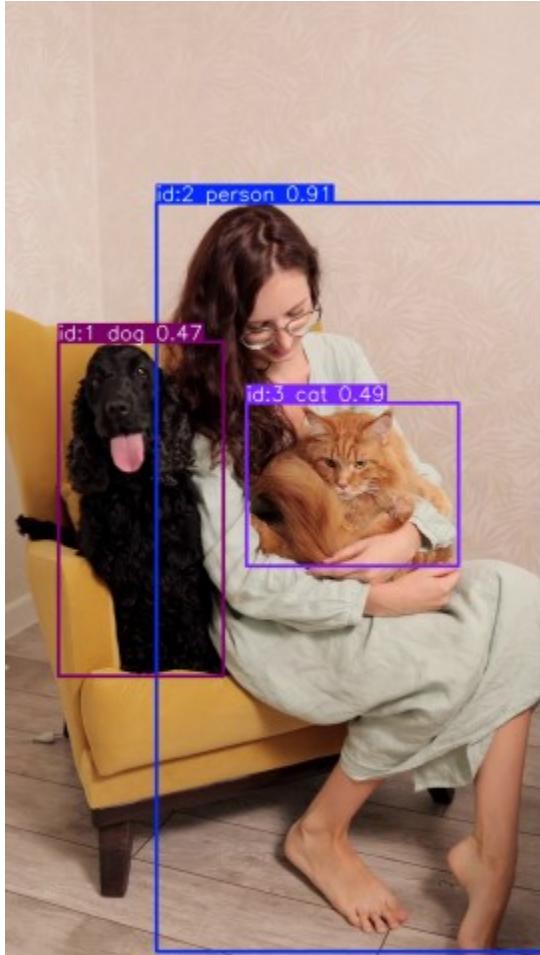
0: 640x384 1 person, 1 cat, 1 dog, 187.7ms

Speed: 6.4ms preprocess, 187.7ms inference, 0.4ms postprocess per image at shape (1,



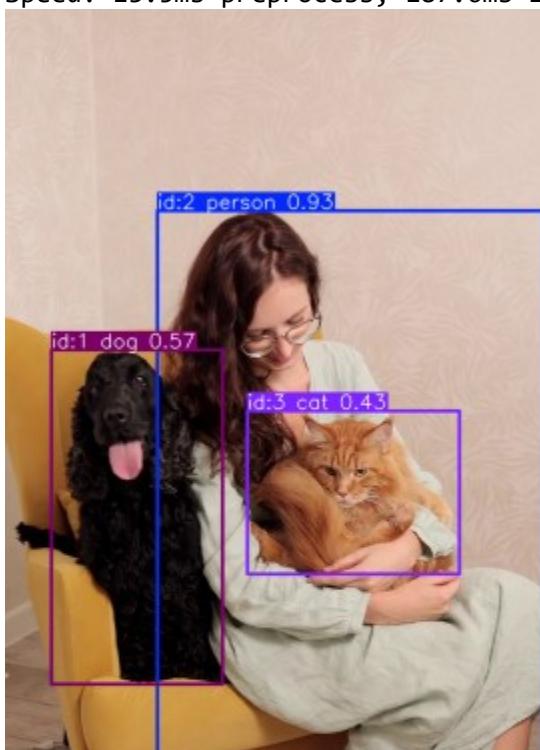
0: 640x384 1 person, 1 cat, 1 dog, 196.1ms

Speed: 5.5ms preprocess, 196.1ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 187.6ms

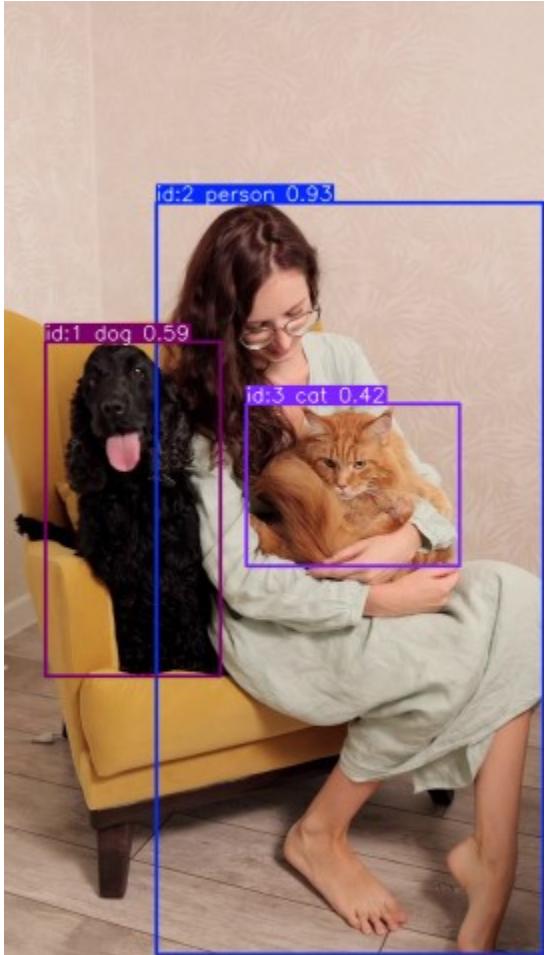
Speed: 13.5ms preprocess, 187.6ms inference, 0.4ms postprocess per image at shape (1,





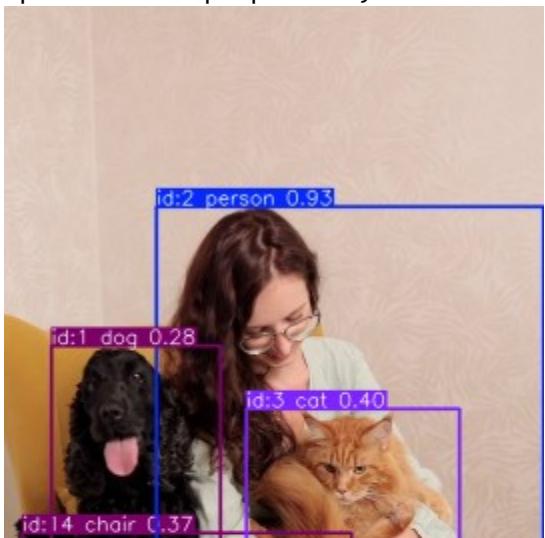
0: 640x384 1 person, 1 cat, 1 dog, 177.8ms

Speed: 5.6ms preprocess, 177.8ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 177.2ms

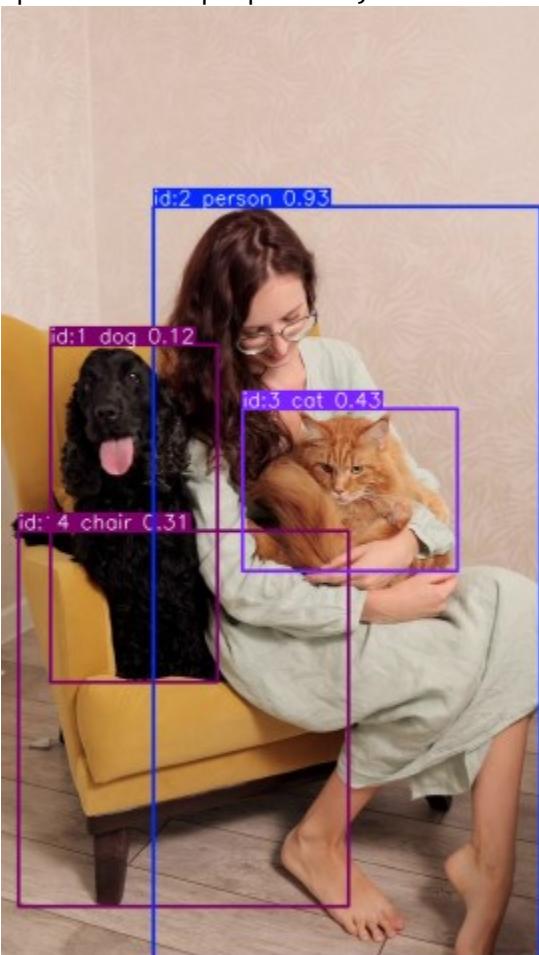
Speed: 5.1ms preprocess, 177.2ms inference, 0.4ms postprocess per image at shape (1,





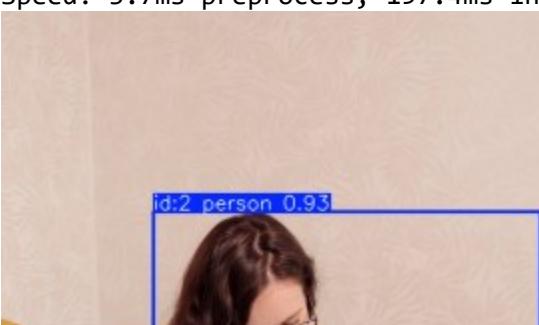
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 173.0ms

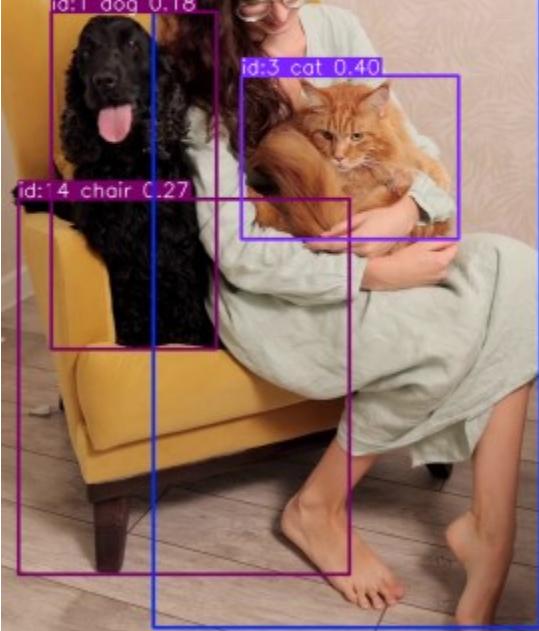
Speed: 5.7ms preprocess, 173.0ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 197.4ms

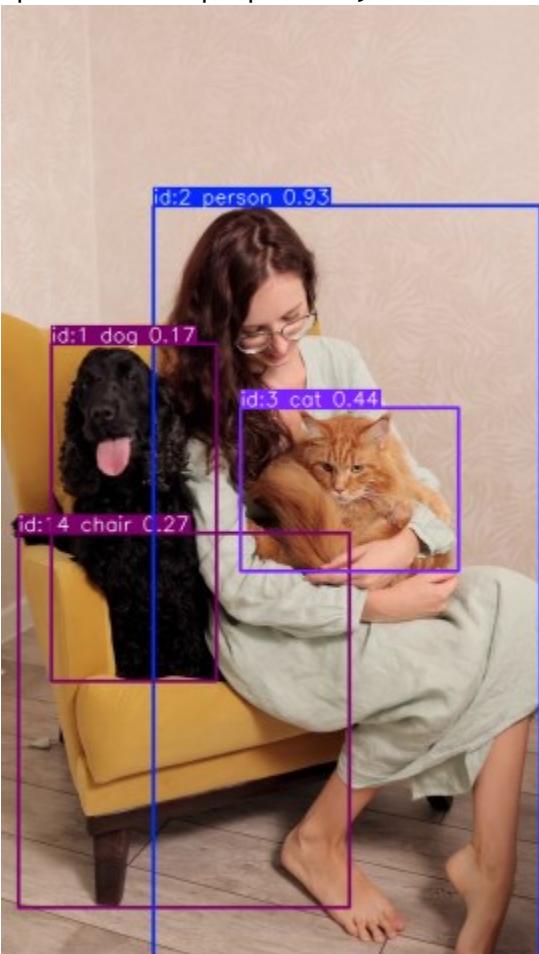
Speed: 3.7ms preprocess, 197.4ms inference, 0.4ms postprocess per image at shape (1,





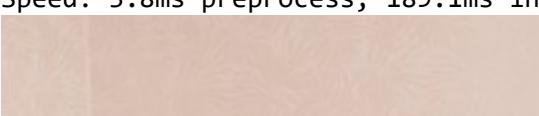
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 185.7ms

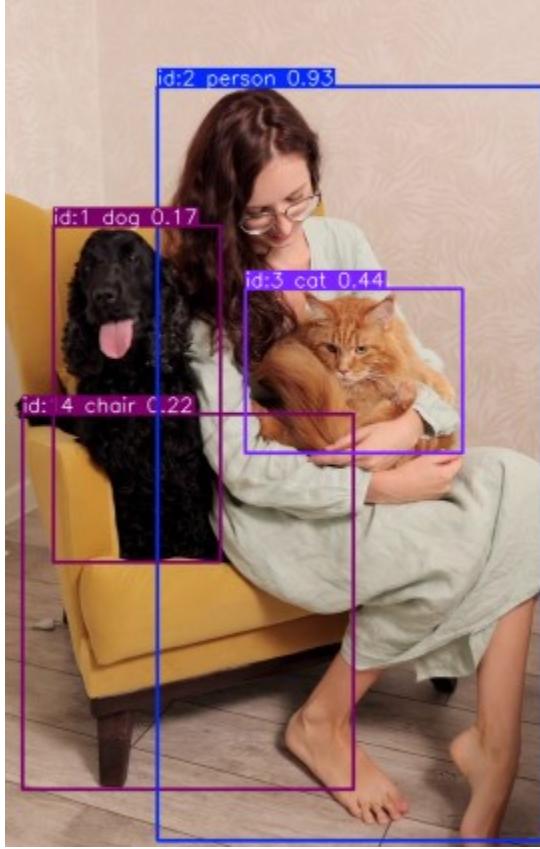
Speed: 7.1ms preprocess, 185.7ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 189.1ms

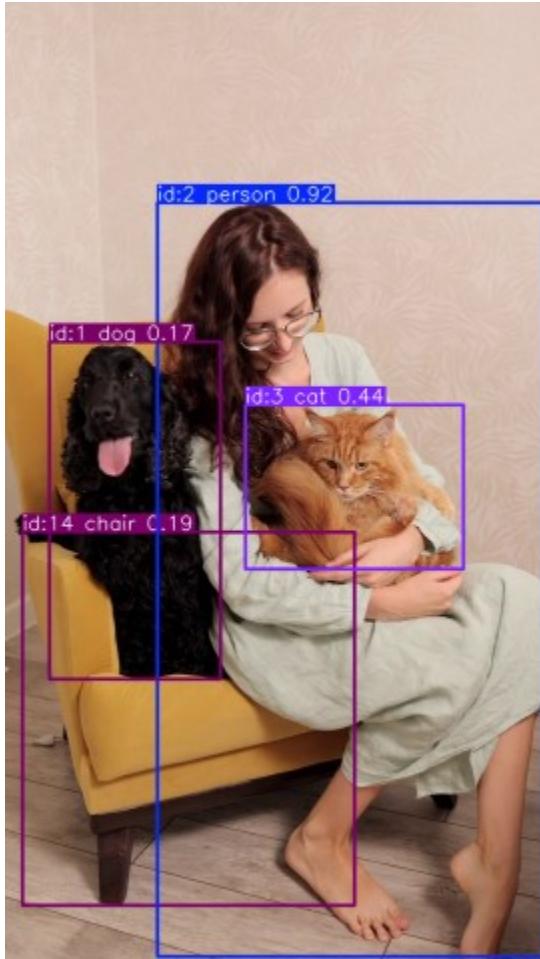
Speed: 3.8ms preprocess, 189.1ms inference, 0.5ms postprocess per image at shape (1,





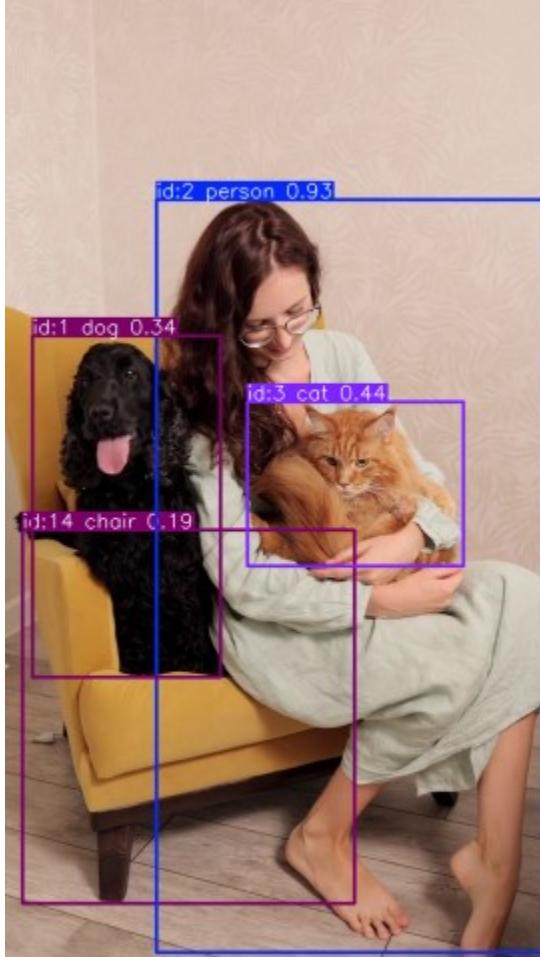
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 175.4ms

Speed: 3.9ms preprocess, 175.4ms inference, 0.4ms postprocess per image at shape (1,



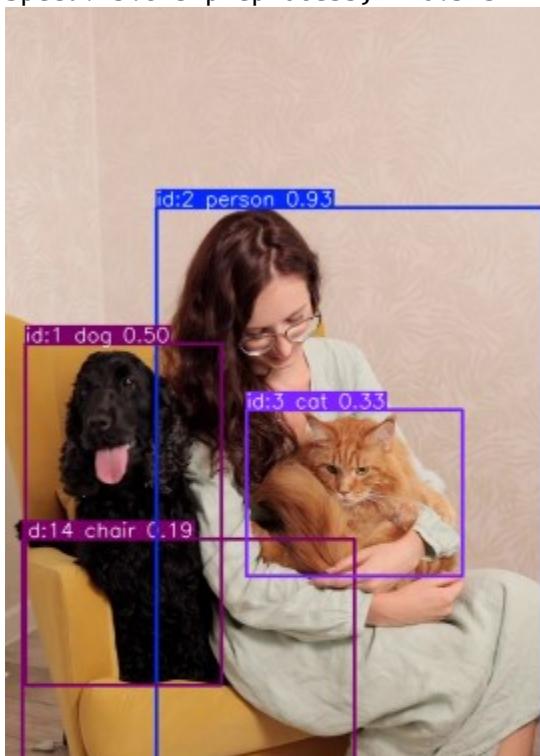
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 195.3ms

Speed: 3.6ms preprocess, 195.3ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 176.5ms

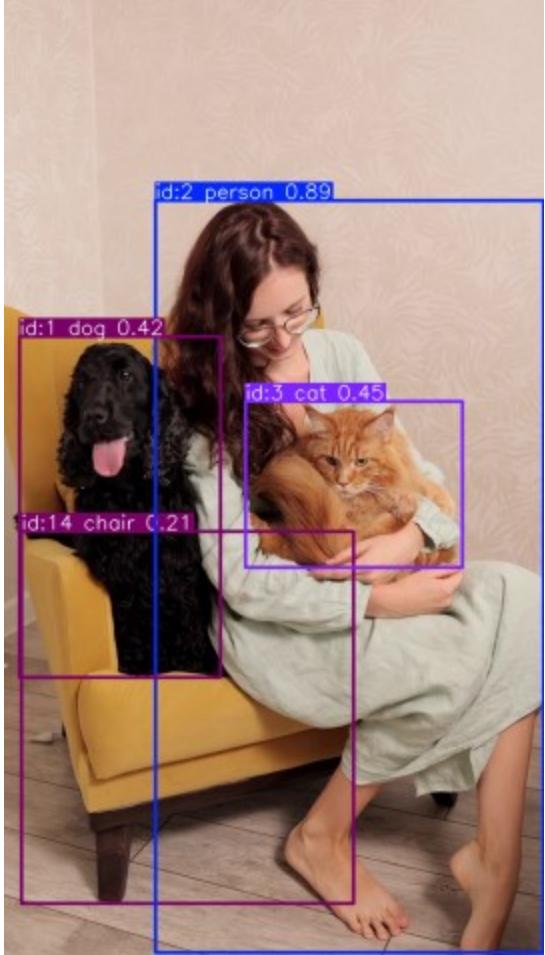
Speed: 3.8ms preprocess, 176.5ms inference, 0.6ms postprocess per image at shape (1,





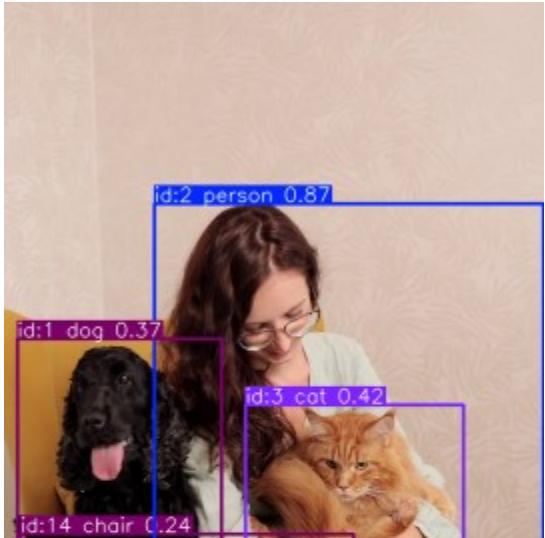
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 184.8ms

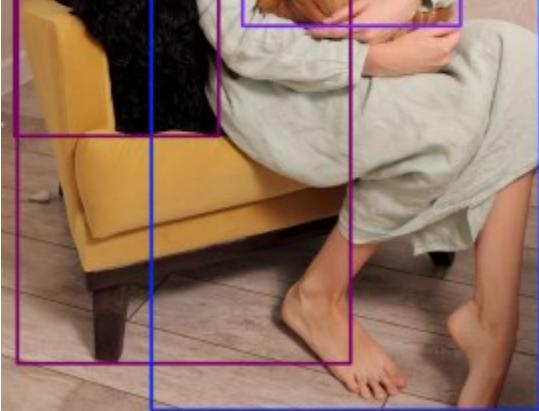
Speed: 5.3ms preprocess, 184.8ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 183.5ms

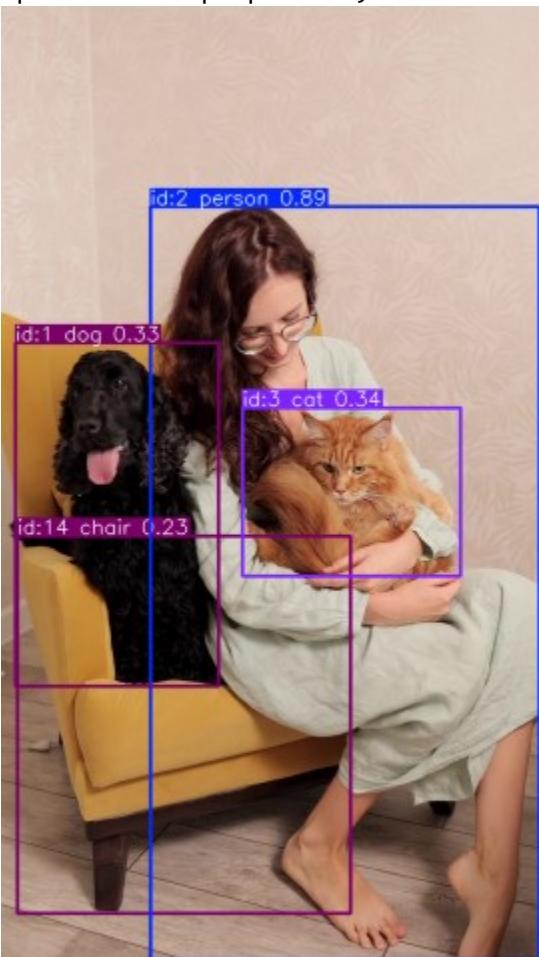
Speed: 3.9ms preprocess, 183.5ms inference, 0.4ms postprocess per image at shape (1,





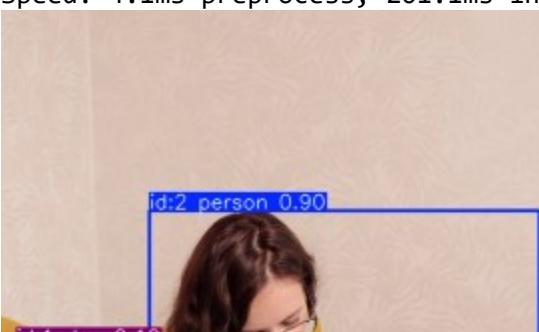
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 208.1ms

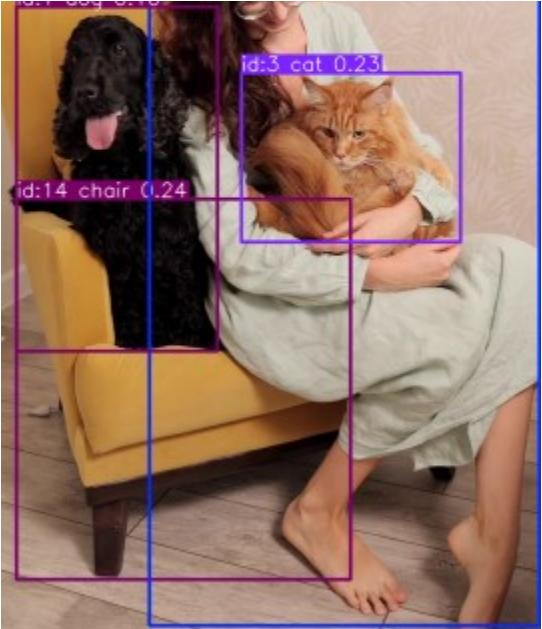
Speed: 5.2ms preprocess, 208.1ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 201.1ms

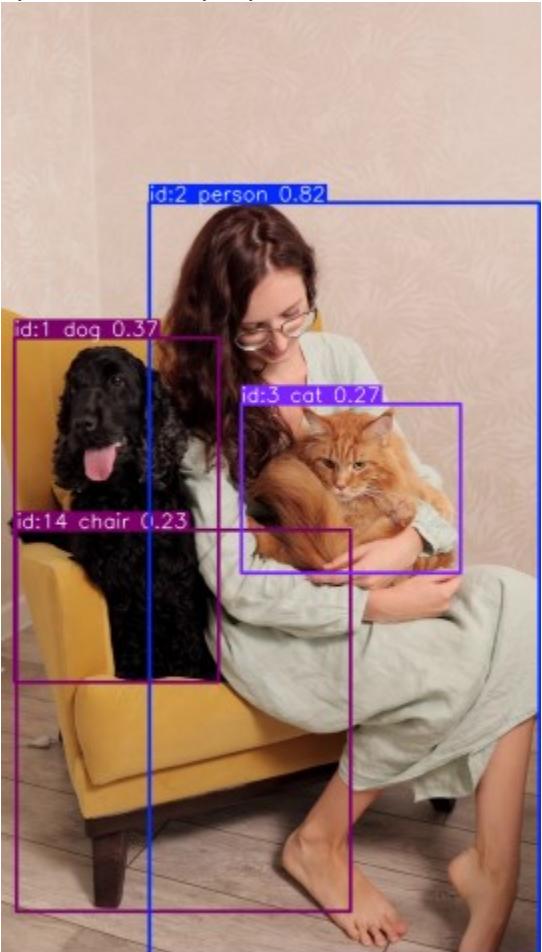
Speed: 4.1ms preprocess, 201.1ms inference, 0.6ms postprocess per image at shape (1,





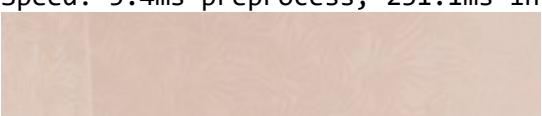
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 195.6ms

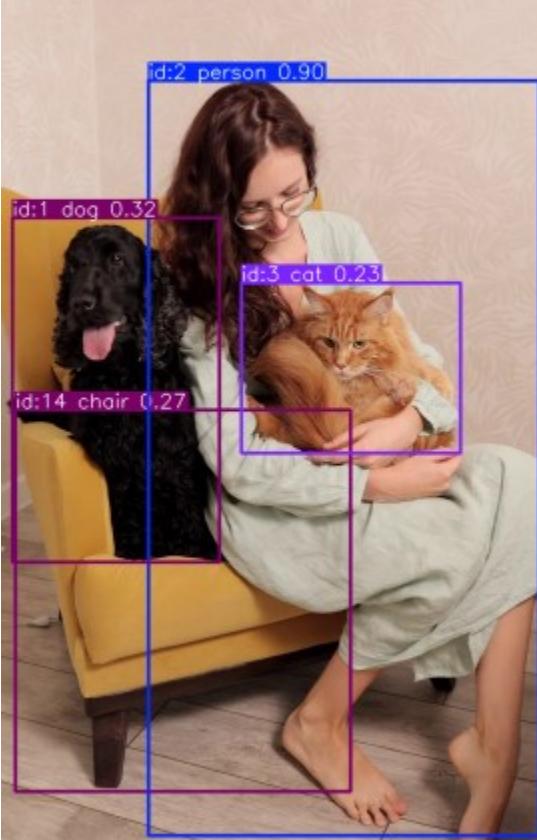
Speed: 3.7ms preprocess, 195.6ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 231.1ms

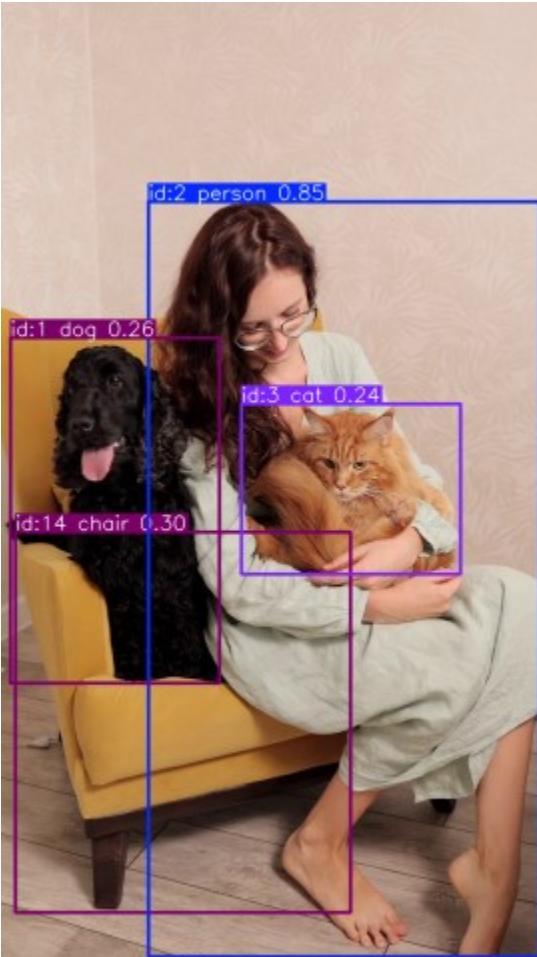
Speed: 5.4ms preprocess, 231.1ms inference, 0.4ms postprocess per image at shape (1,



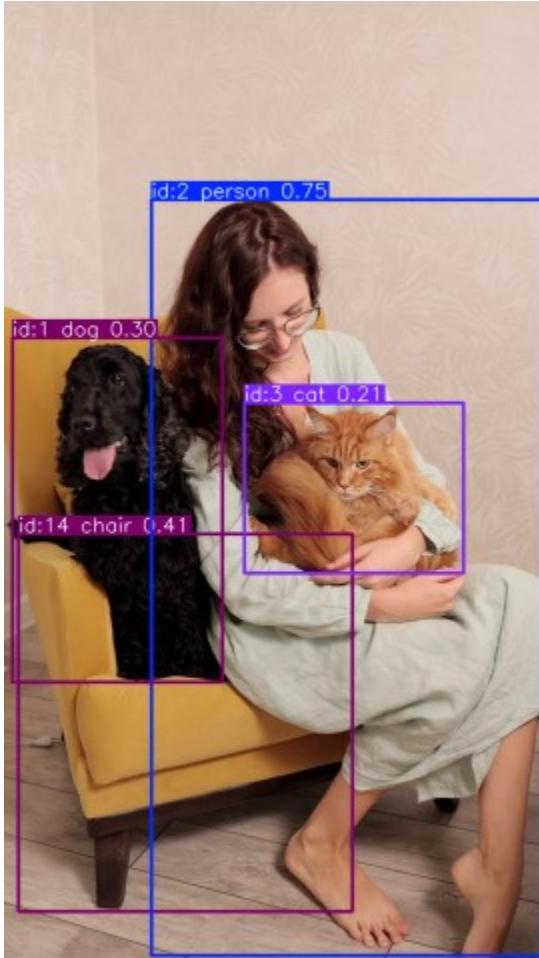


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 216.6ms

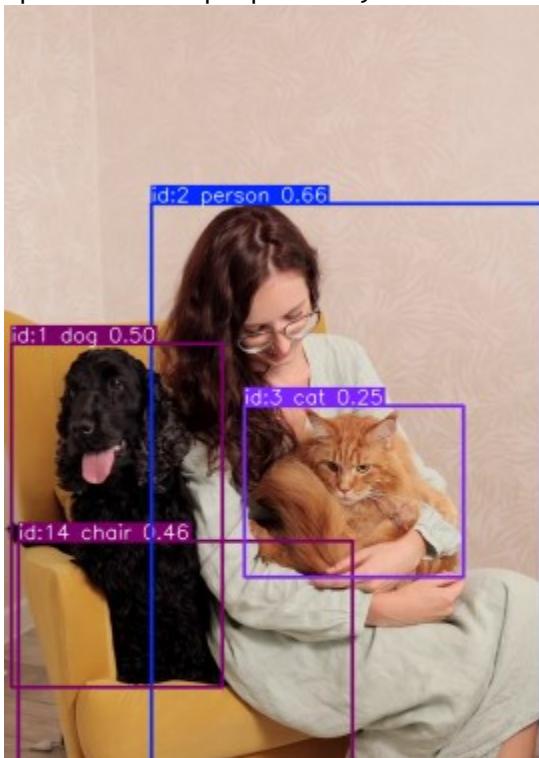
Speed: 8.3ms preprocess, 216.6ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 182.6ms
Speed: 10.1ms preprocess, 182.6ms inference, 0.4ms postprocess per image at shape (1,

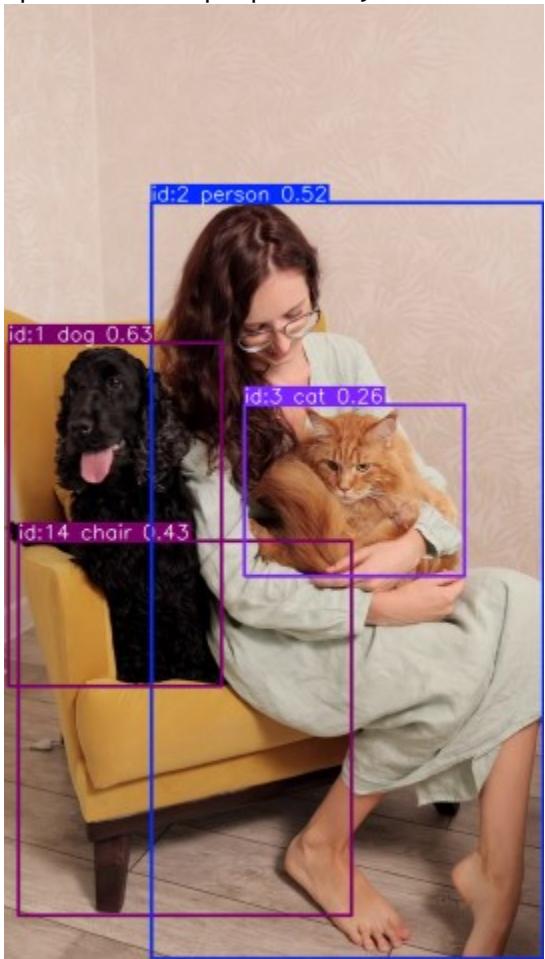


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 242.2ms
Speed: 9.0ms preprocess, 242.2ms inference, 0.4ms postprocess per image at shape (1,

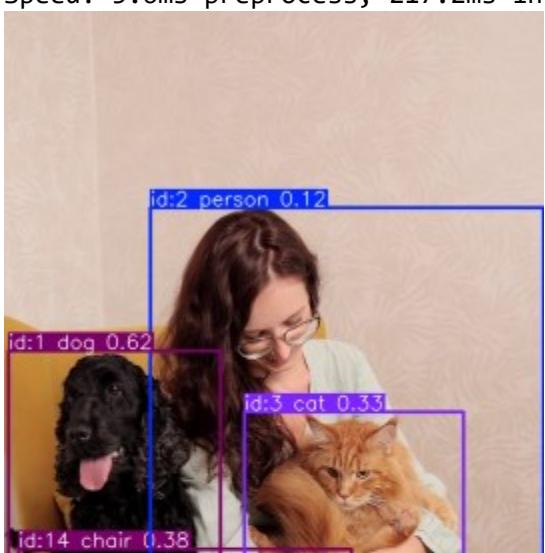


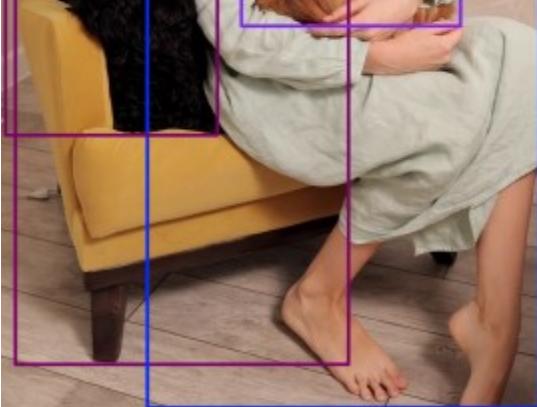


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 203.5ms
Speed: 5.2ms preprocess, 203.5ms inference, 0.4ms postprocess per image at shape (1,



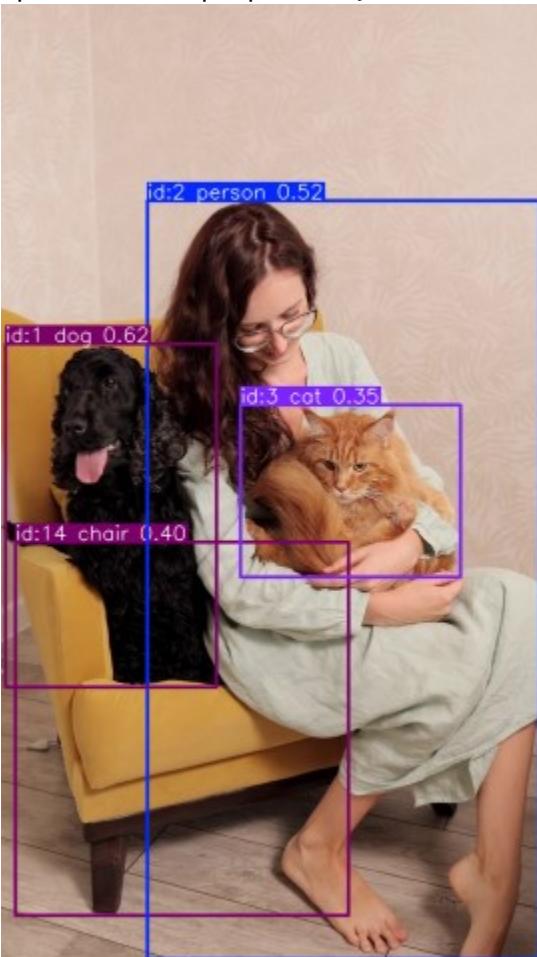
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 217.2ms
Speed: 5.6ms preprocess, 217.2ms inference, 0.4ms postprocess per image at shape (1,





0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 199.0ms

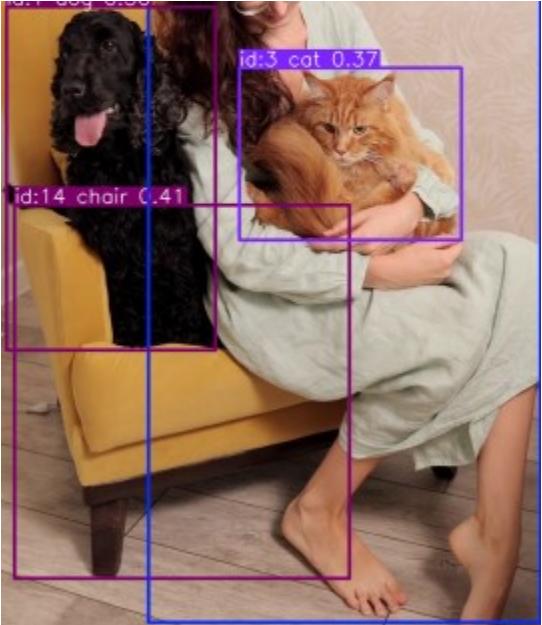
Speed: 5.6ms preprocess, 199.0ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 226.1ms

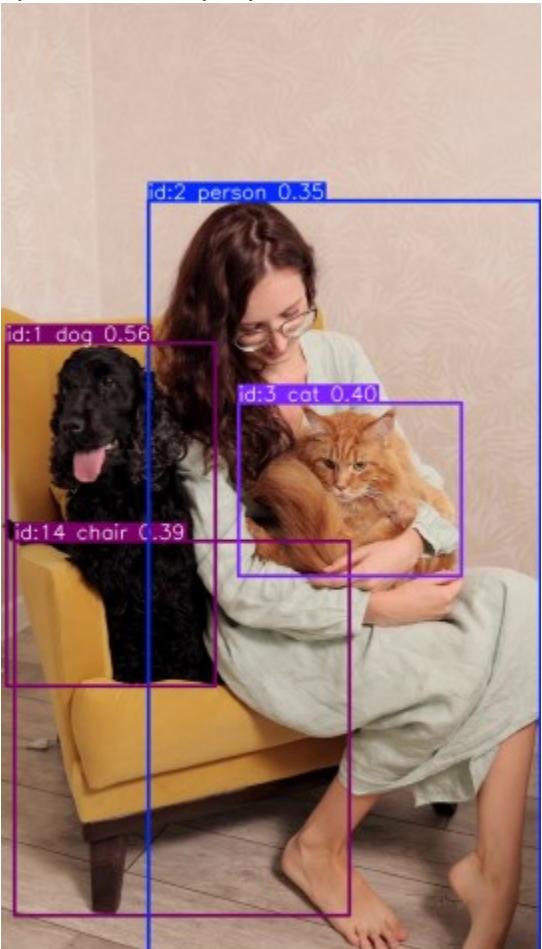
Speed: 9.0ms preprocess, 226.1ms inference, 0.5ms postprocess per image at shape (1,





0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 217.6ms

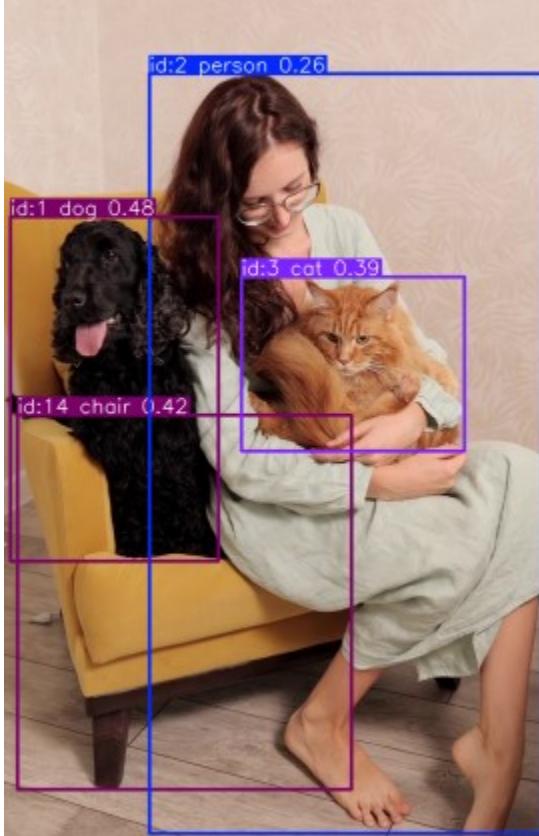
Speed: 7.2ms preprocess, 217.6ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 265.8ms

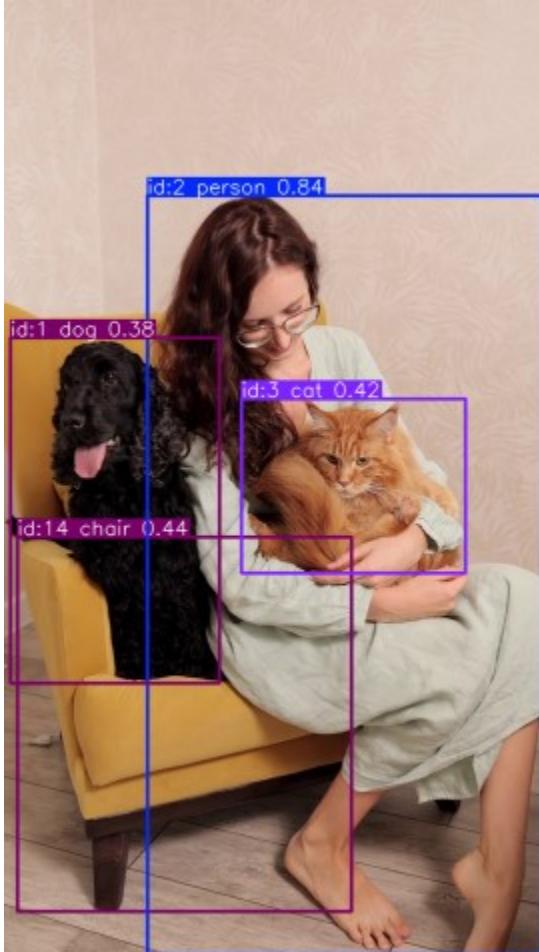
Speed: 5.4ms preprocess, 265.8ms inference, 0.4ms postprocess per image at shape (1,



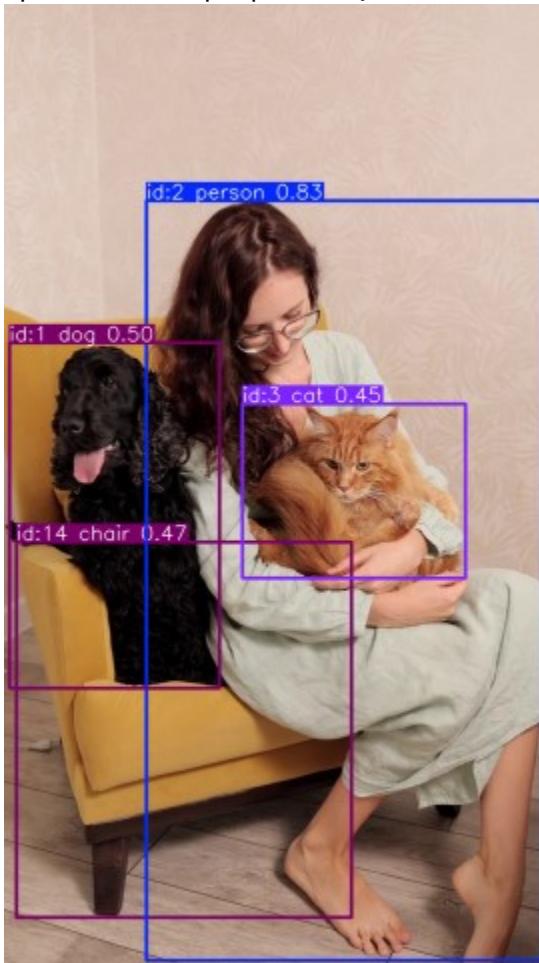


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 230.2ms

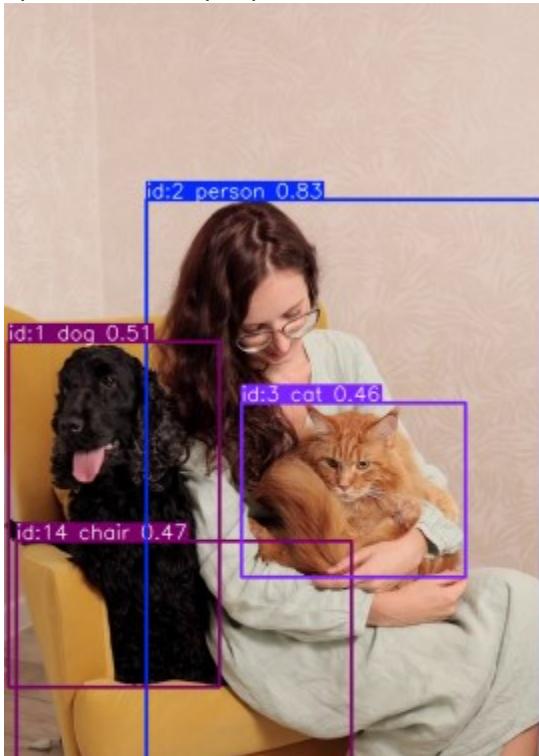
Speed: 4.9ms preprocess, 230.2ms inference, 0.6ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 229.6ms
Speed: 7.4ms preprocess, 229.6ms inference, 0.4ms postprocess per image at shape (1,



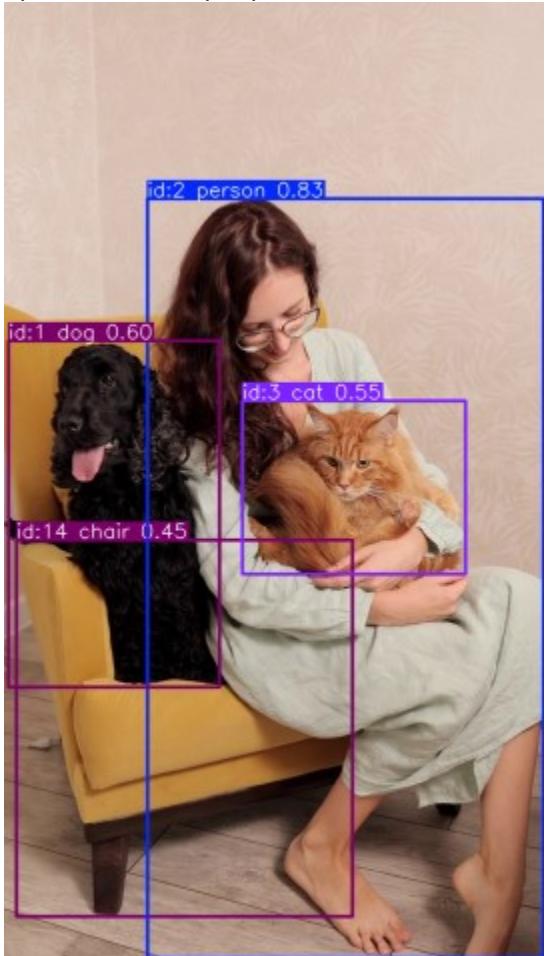
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 203.1ms
Speed: 5.2ms preprocess, 203.1ms inference, 0.4ms postprocess per image at shape (1,





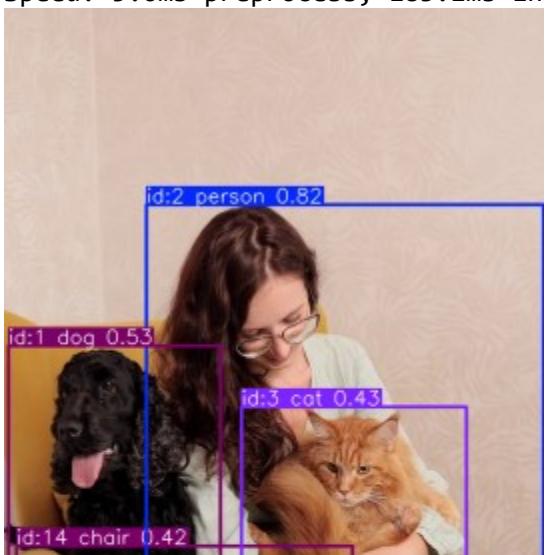
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 192.6ms

Speed: 5.5ms preprocess, 192.6ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 183.1ms

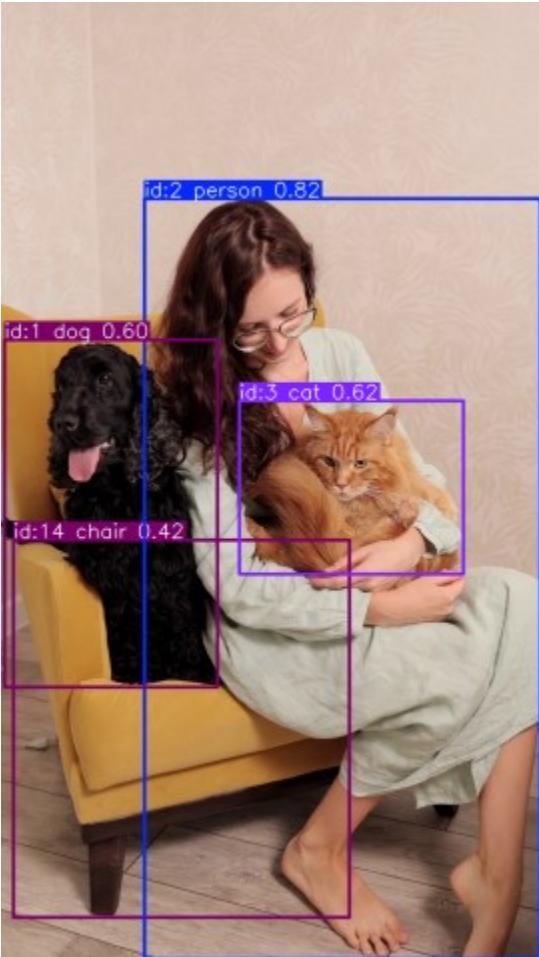
Speed: 5.6ms preprocess, 183.1ms inference, 0.5ms postprocess per image at shape (1,





0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 185.4ms

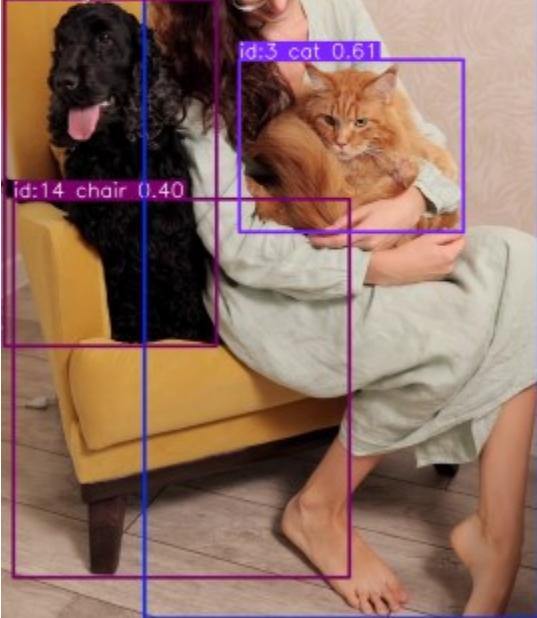
Speed: 5.3ms preprocess, 185.4ms inference, 0.6ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 186.9ms

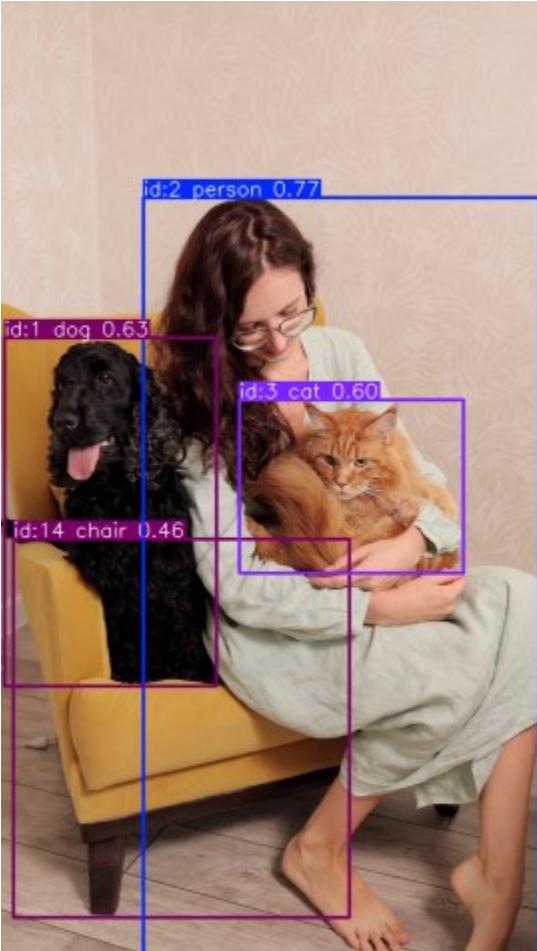
Speed: 5.6ms preprocess, 186.9ms inference, 0.6ms postprocess per image at shape (1,





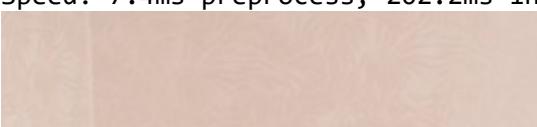
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 183.1ms

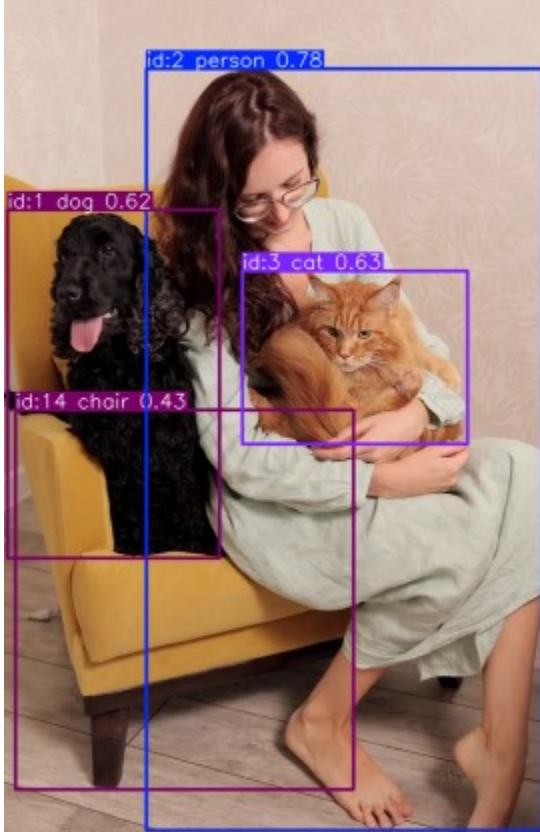
Speed: 7.2ms preprocess, 183.1ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 202.2ms

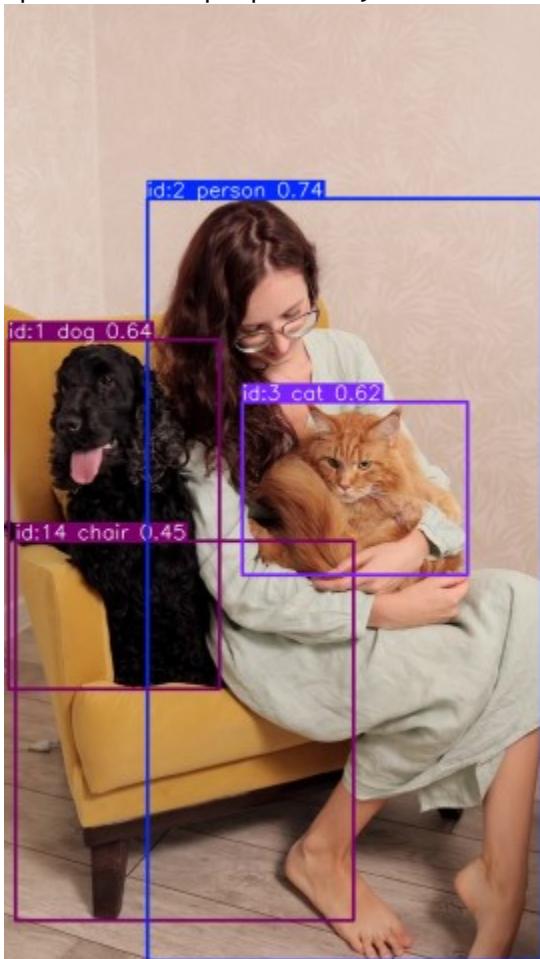
Speed: 7.4ms preprocess, 202.2ms inference, 0.4ms postprocess per image at shape (1,





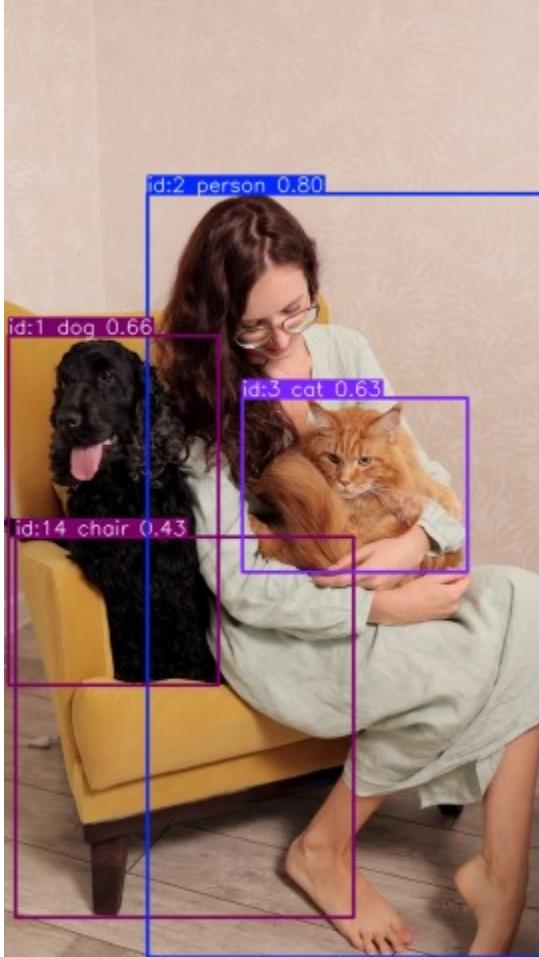
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 186.0ms

Speed: 5.3ms preprocess, 186.0ms inference, 0.4ms postprocess per image at shape (1,



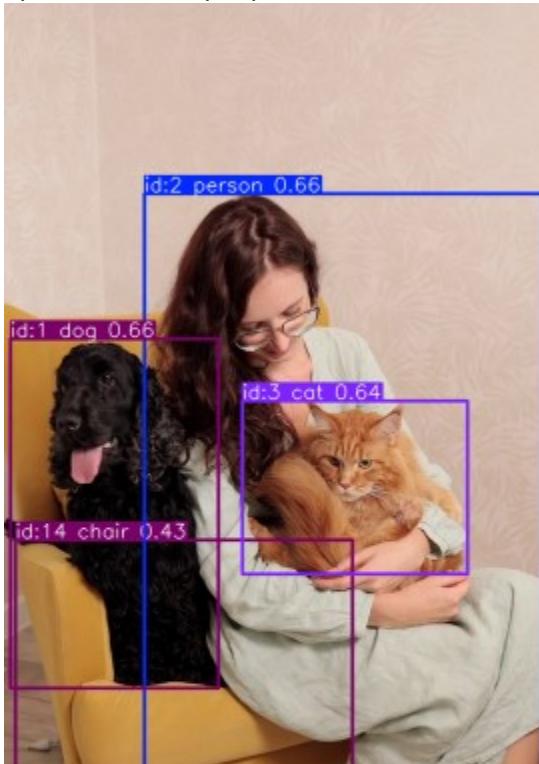
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 180.6ms

Speed: 5.6ms preprocess, 180.6ms inference, 0.4ms postprocess per image at shape (1,



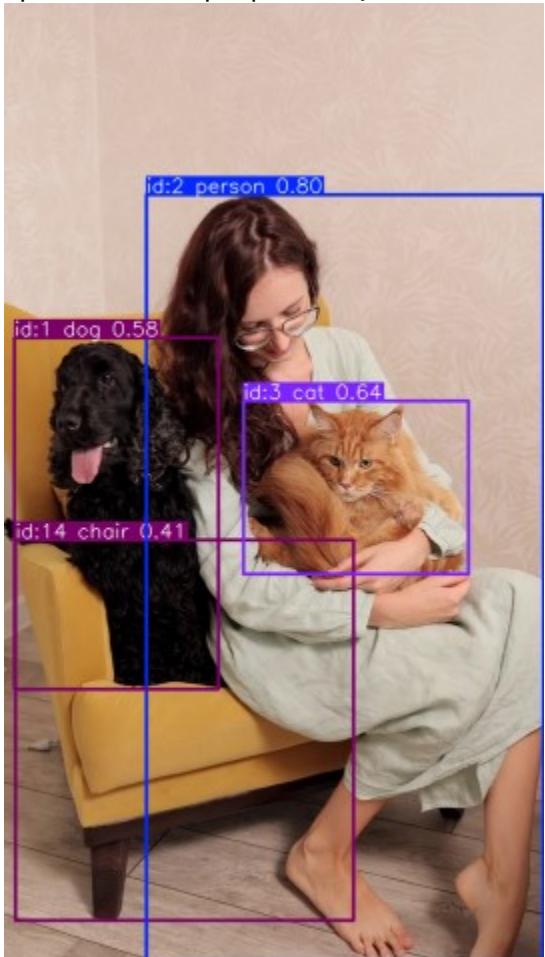
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 184.3ms

Speed: 5.4ms preprocess, 184.3ms inference, 0.4ms postprocess per image at shape (1,

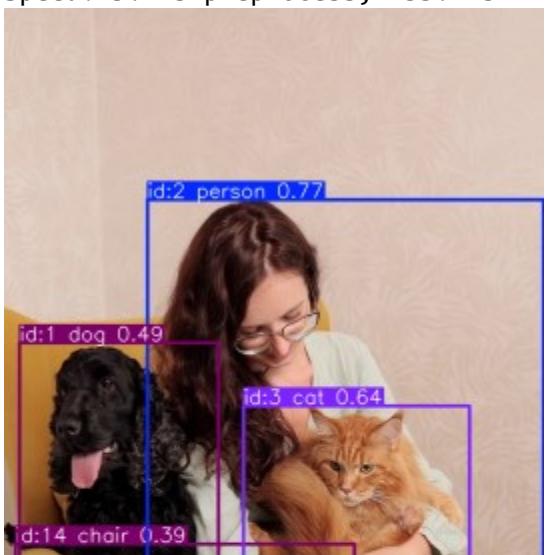




0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 194.8ms
Speed: 5.4ms preprocess, 194.8ms inference, 0.6ms postprocess per image at shape (1,



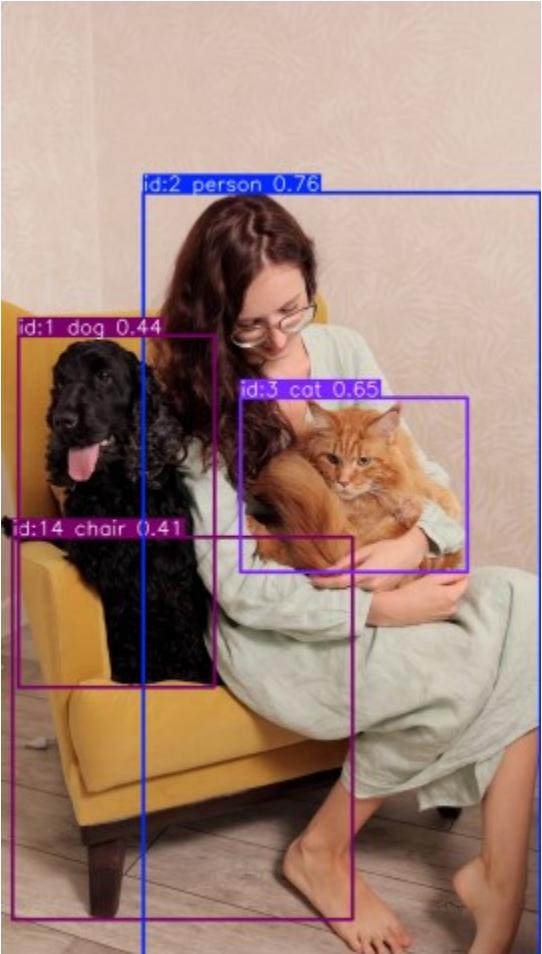
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 233.1ms
Speed: 5.2ms preprocess, 233.1ms inference, 0.4ms postprocess per image at shape (1,





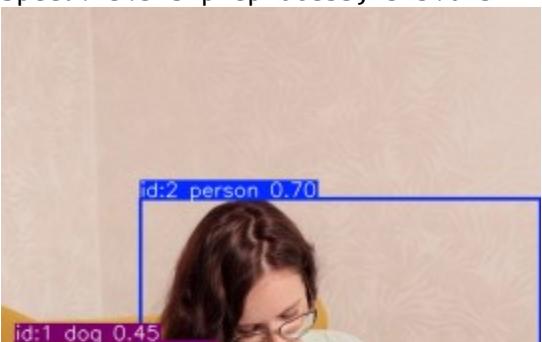
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 417.1ms

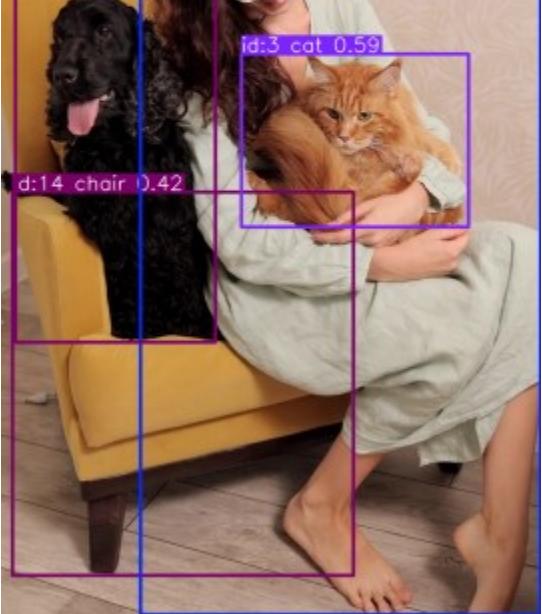
Speed: 20.2ms preprocess, 417.1ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 375.0ms

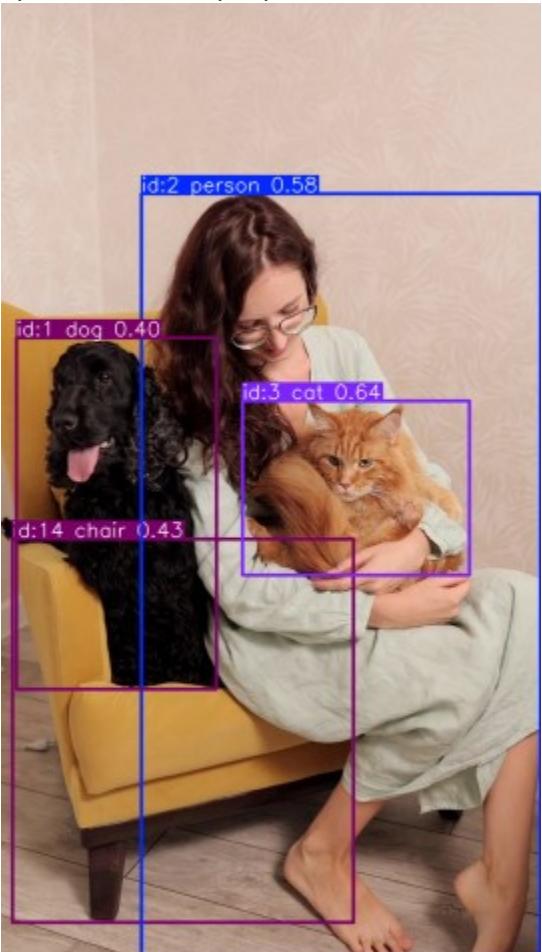
Speed: 3.3ms preprocess, 375.0ms inference, 0.4ms postprocess per image at shape (1,





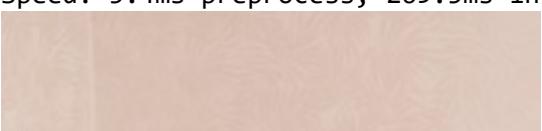
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 283.0ms

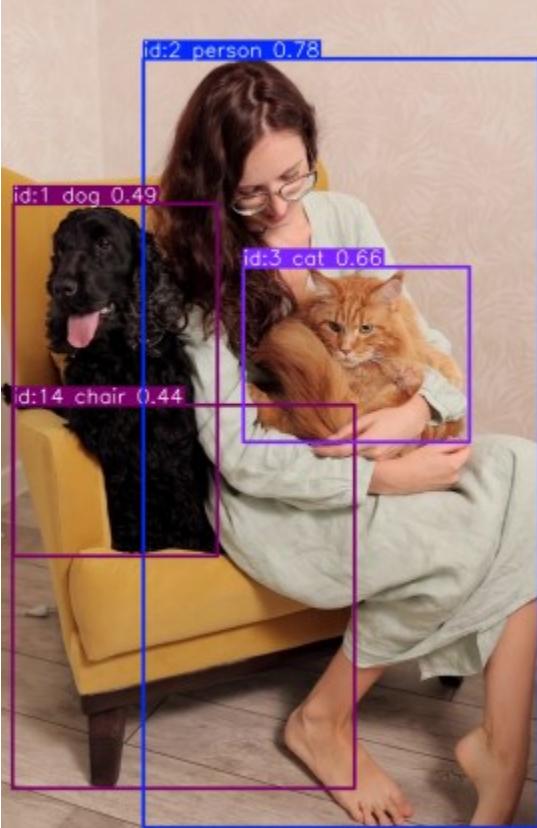
Speed: 35.9ms preprocess, 283.0ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 269.5ms

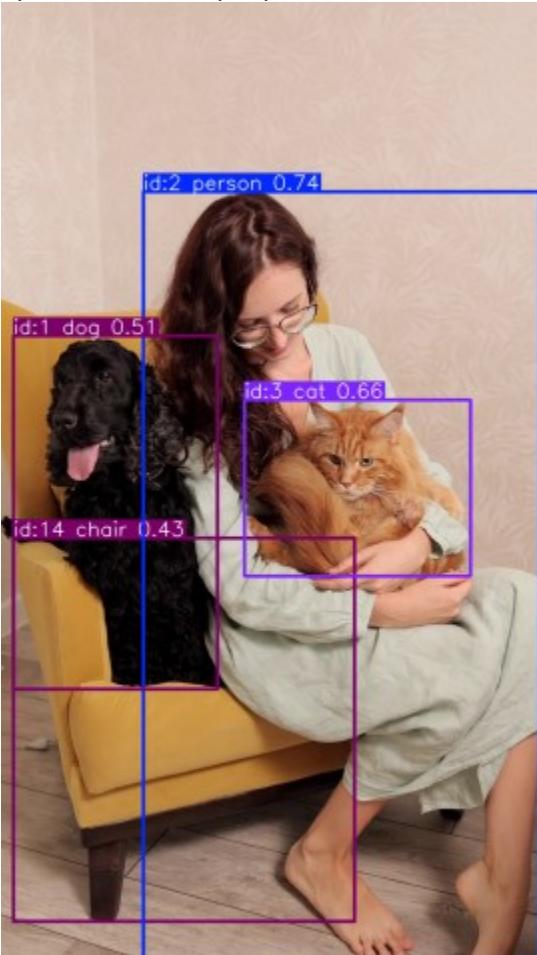
Speed: 5.4ms preprocess, 269.5ms inference, 0.4ms postprocess per image at shape (1,



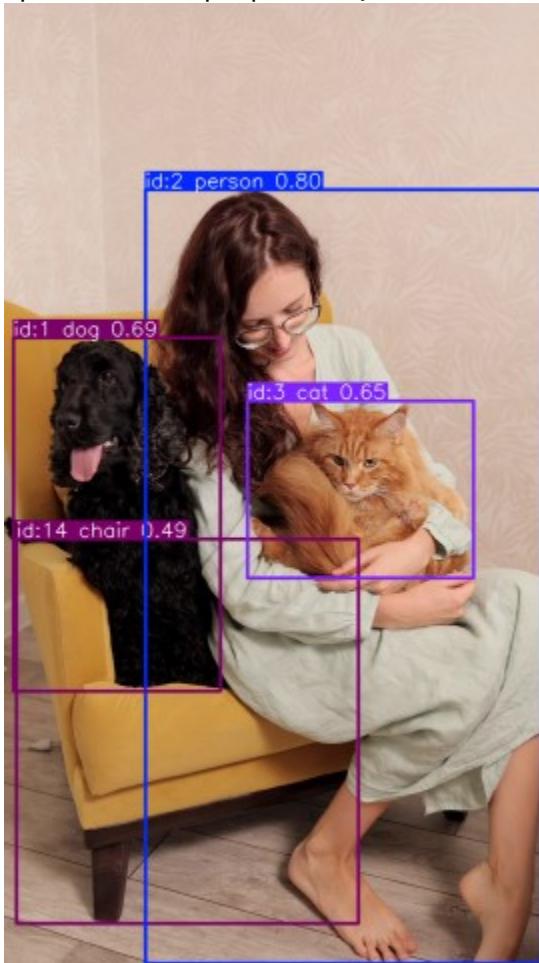


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 336.1ms

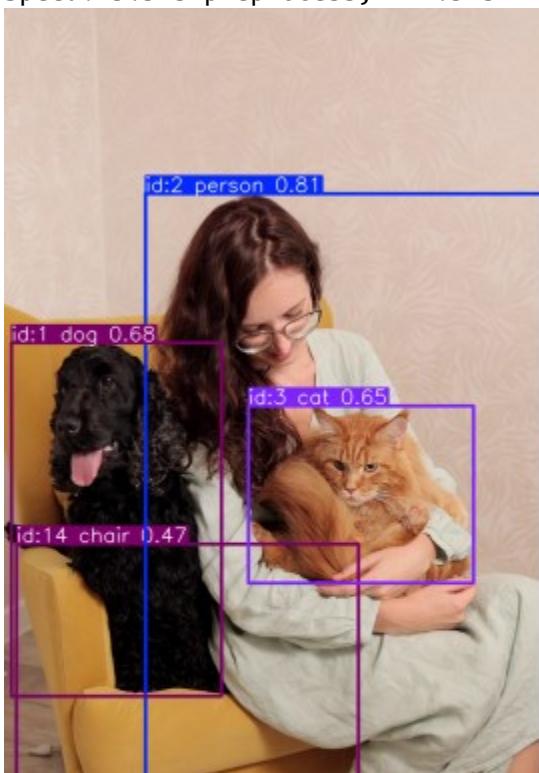
Speed: 13.2ms preprocess, 336.1ms inference, 0.5ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 188.2ms
Speed: 9.5ms preprocess, 188.2ms inference, 0.4ms postprocess per image at shape (1,

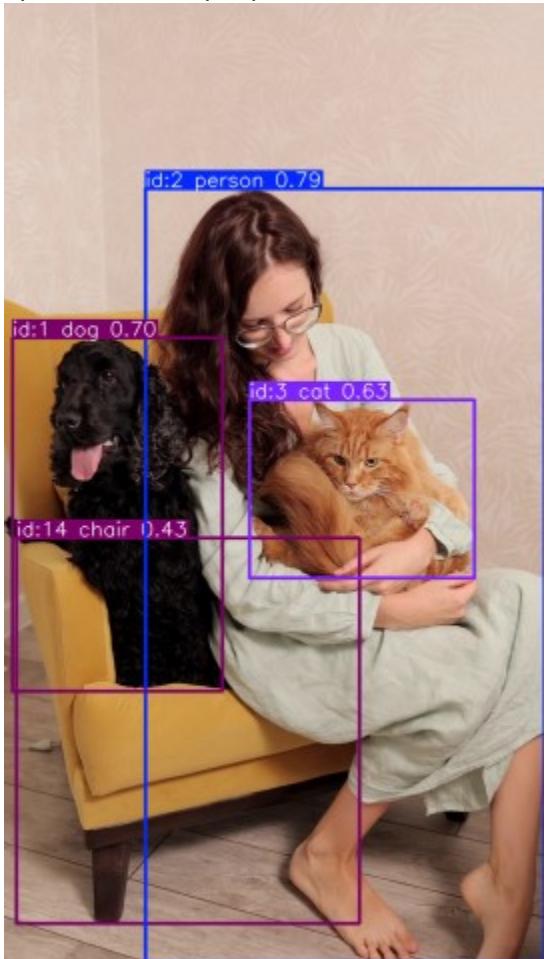


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 192.5ms
Speed: 5.5ms preprocess, 192.5ms inference, 0.4ms postprocess per image at shape (1,

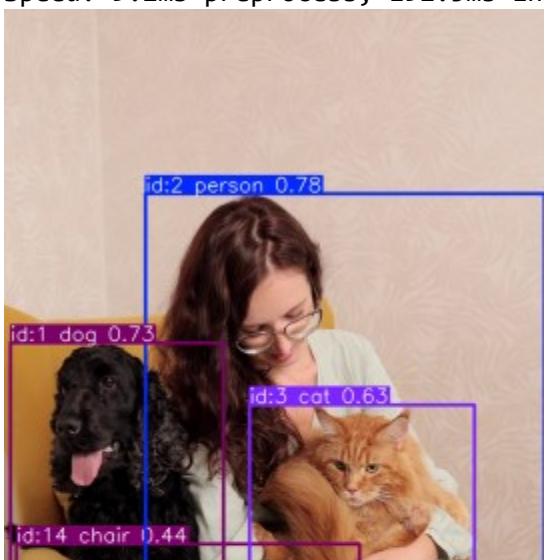


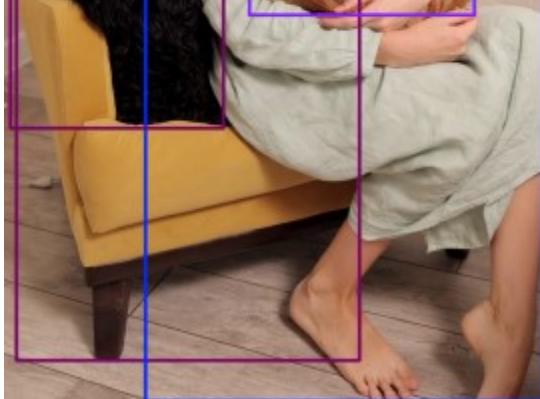


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 185.8ms
Speed: 5.5ms preprocess, 185.8ms inference, 0.4ms postprocess per image at shape (1,



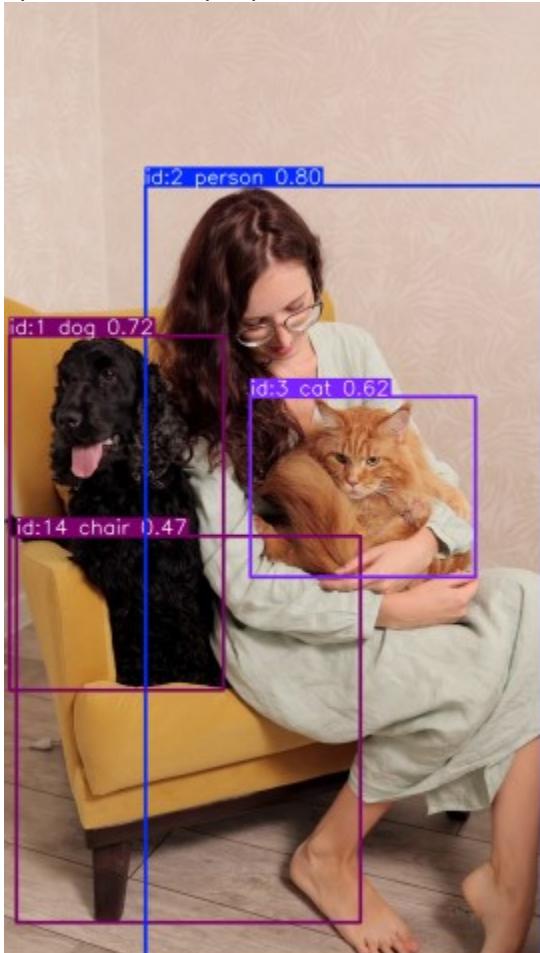
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 192.5ms
Speed: 9.2ms preprocess, 192.5ms inference, 0.4ms postprocess per image at shape (1,





0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 187.6ms

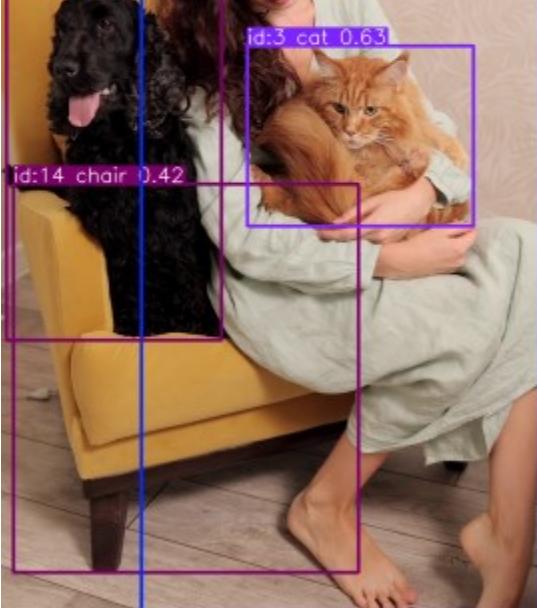
Speed: 5.5ms preprocess, 187.6ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 191.8ms

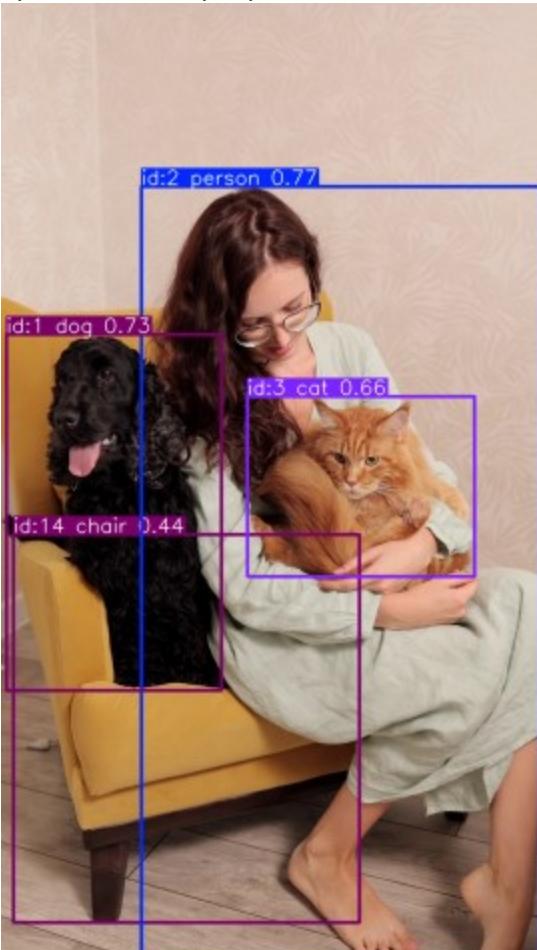
Speed: 5.5ms preprocess, 191.8ms inference, 0.4ms postprocess per image at shape (1,





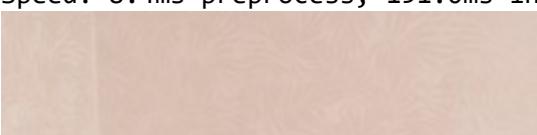
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 187.0ms

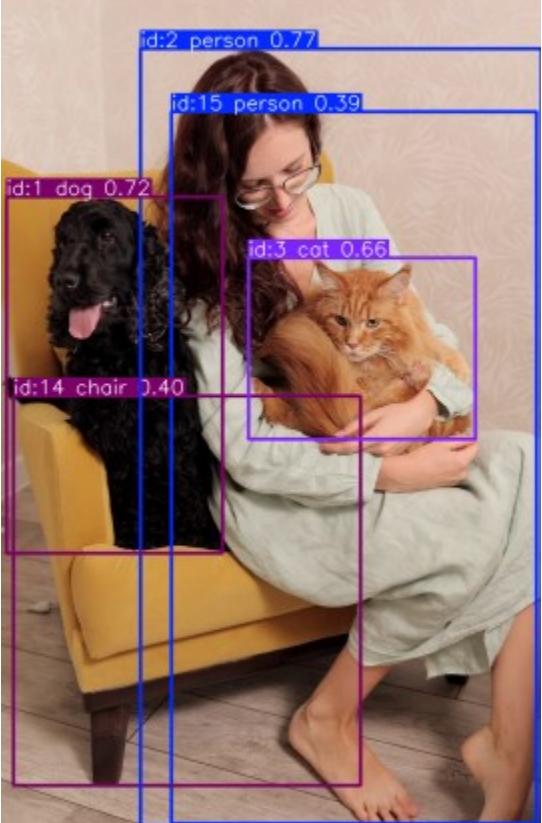
Speed: 5.4ms preprocess, 187.0ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 191.0ms

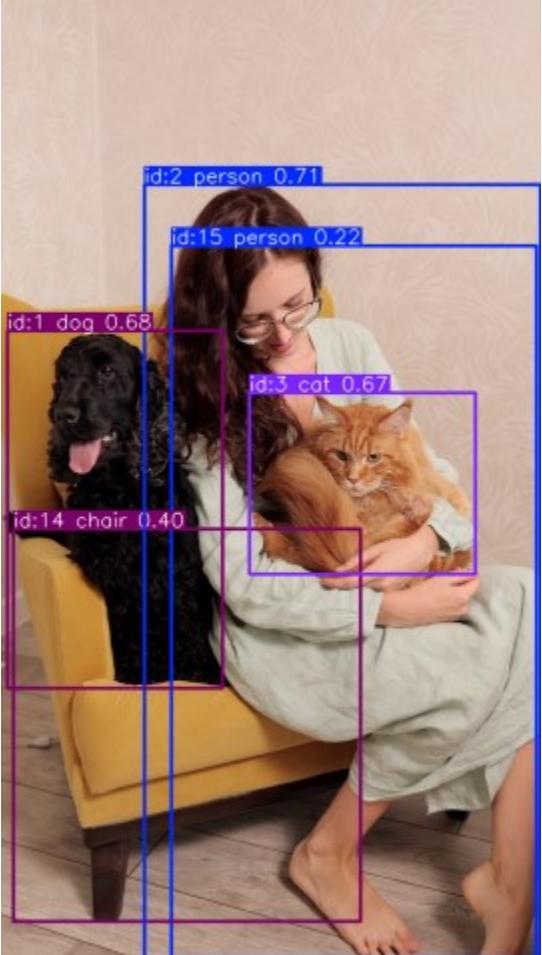
Speed: 8.4ms preprocess, 191.0ms inference, 0.5ms postprocess per image at shape (1,



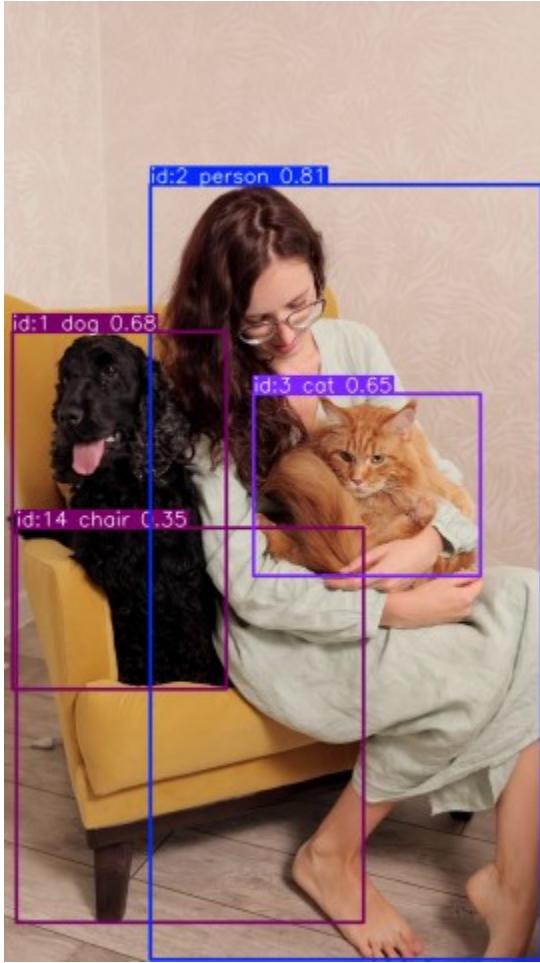


0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 178.1ms

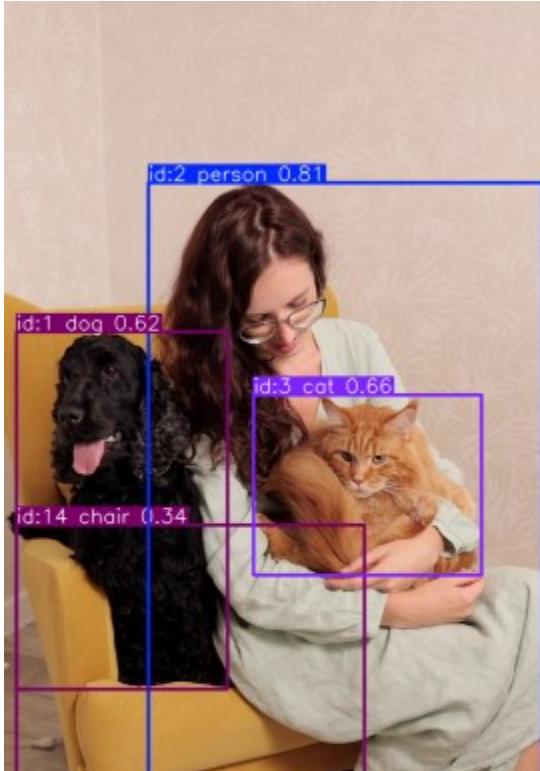
Speed: 5.5ms preprocess, 178.1ms inference, 0.6ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 200.7ms
Speed: 5.3ms preprocess, 200.7ms inference, 0.4ms postprocess per image at shape (1,

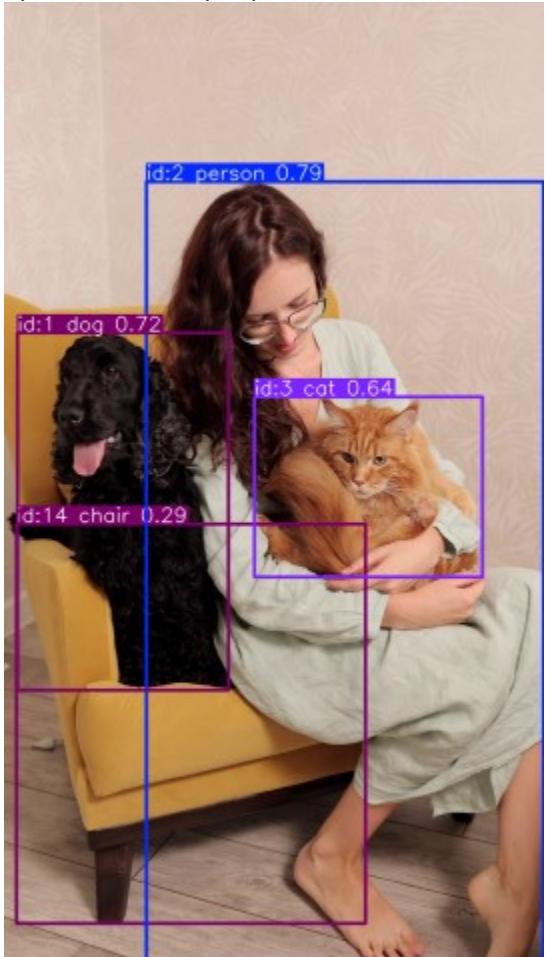


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 185.1ms
Speed: 5.5ms preprocess, 185.1ms inference, 0.4ms postprocess per image at shape (1,

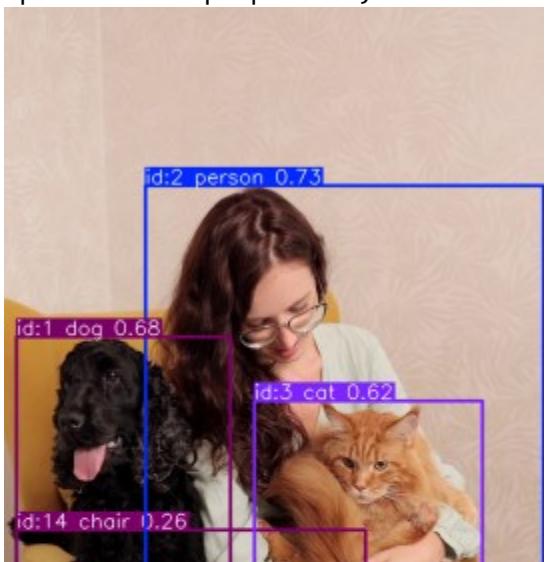




0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 189.5ms
Speed: 8.4ms preprocess, 189.5ms inference, 0.4ms postprocess per image at shape (1,



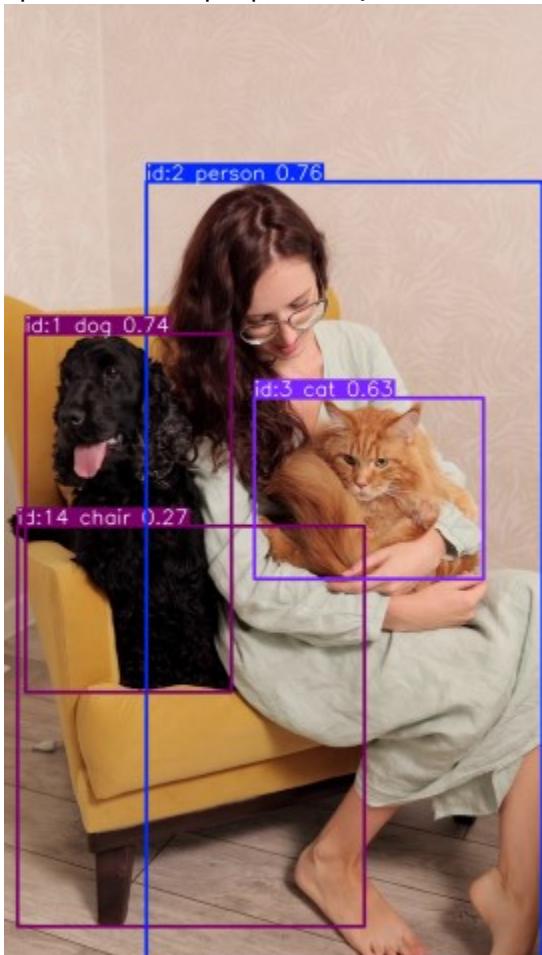
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 210.0ms
Speed: 5.5ms preprocess, 210.0ms inference, 0.4ms postprocess per image at shape (1,





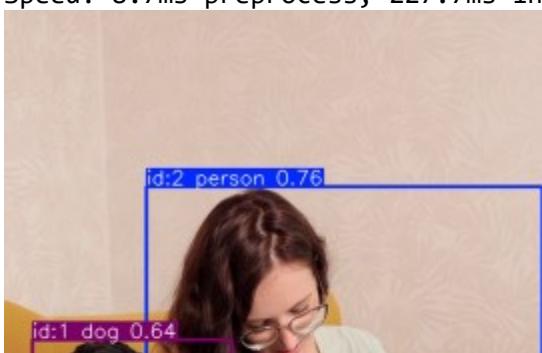
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 241.7ms

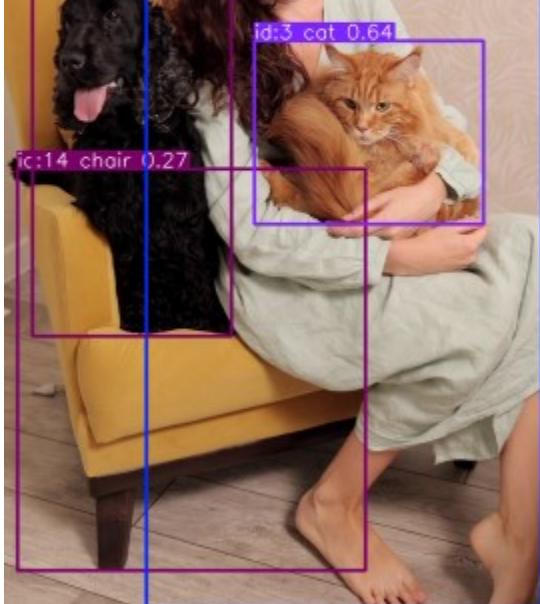
Speed: 5.4ms preprocess, 241.7ms inference, 0.4ms postprocess per image at shape (1,



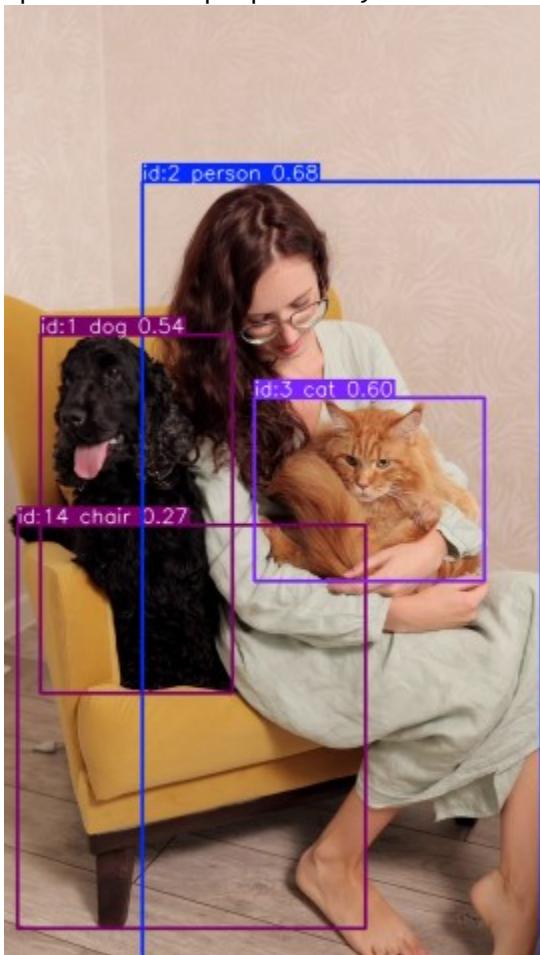
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 227.7ms

Speed: 8.7ms preprocess, 227.7ms inference, 0.4ms postprocess per image at shape (1,

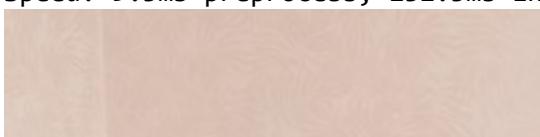


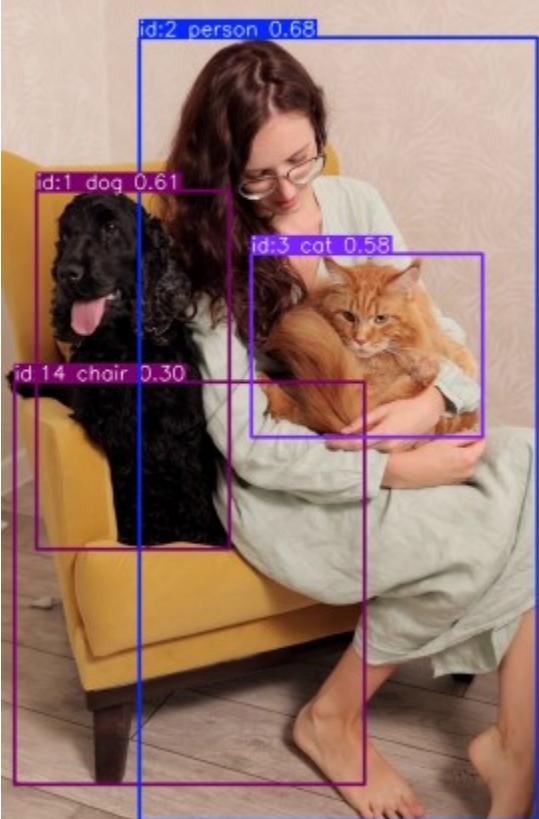


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 200.1ms
Speed: 8.1ms preprocess, 200.1ms inference, 0.4ms postprocess per image at shape (1,



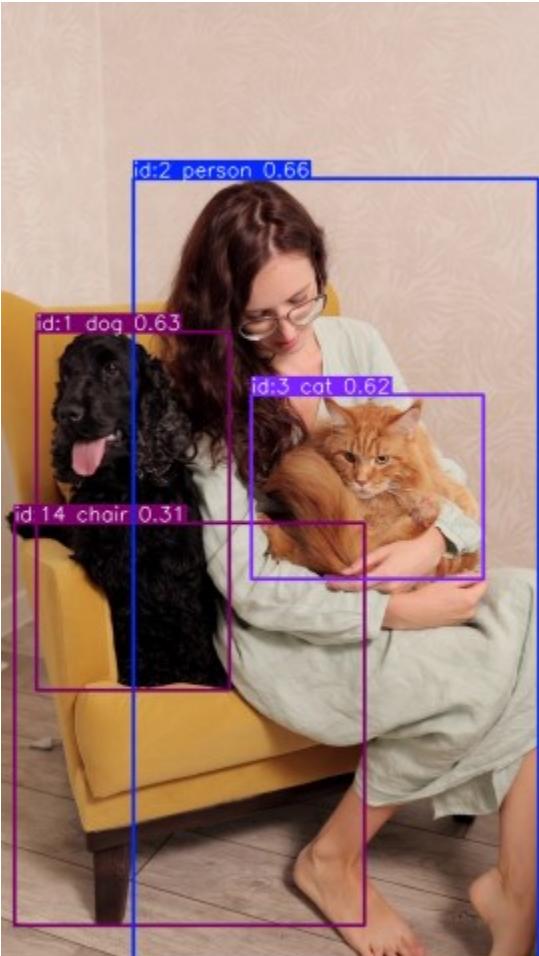
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 232.3ms
Speed: 9.3ms preprocess, 232.3ms inference, 0.4ms postprocess per image at shape (1,



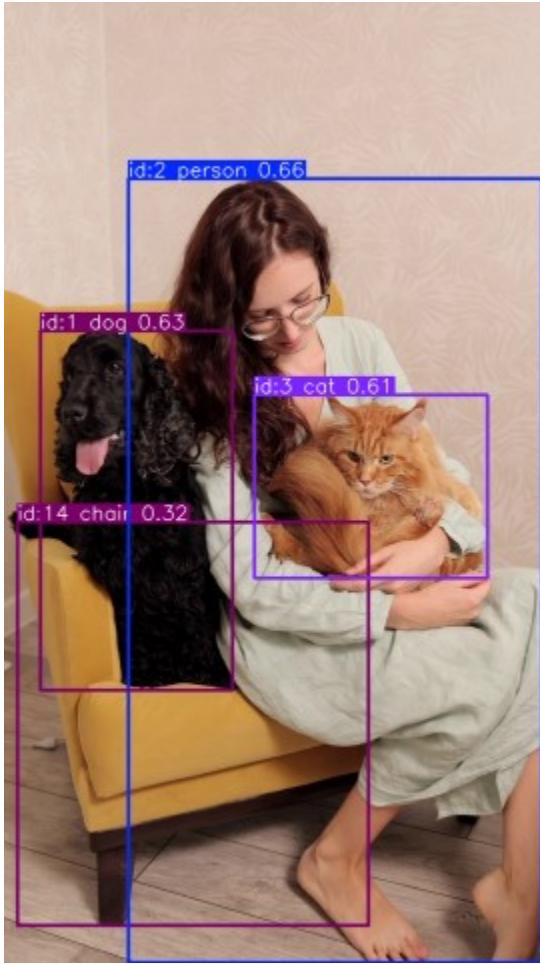


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 189.4ms

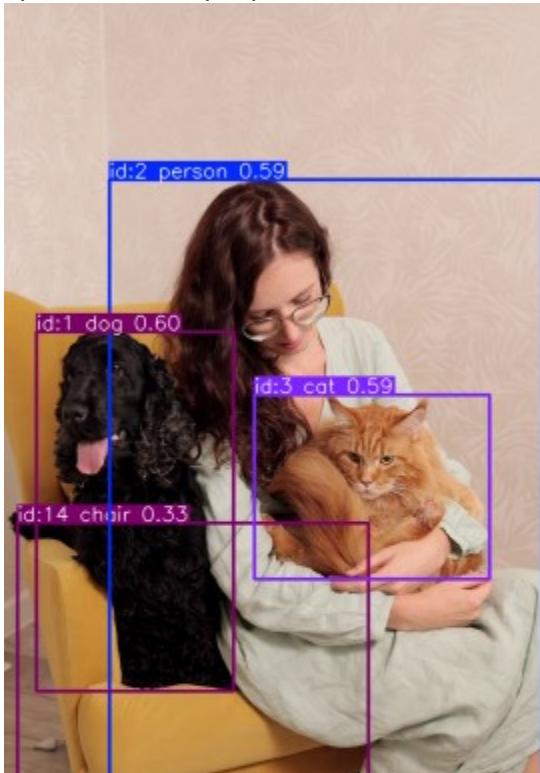
Speed: 3.6ms preprocess, 189.4ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 184.2ms
Speed: 6.7ms preprocess, 184.2ms inference, 0.5ms postprocess per image at shape (1,

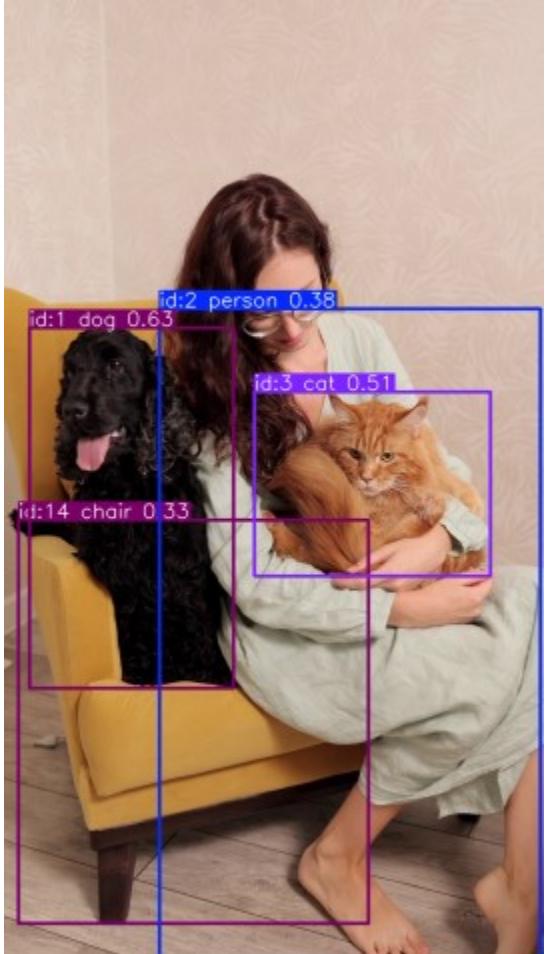


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 206.1ms
Speed: 5.3ms preprocess, 206.1ms inference, 0.5ms postprocess per image at shape (1,

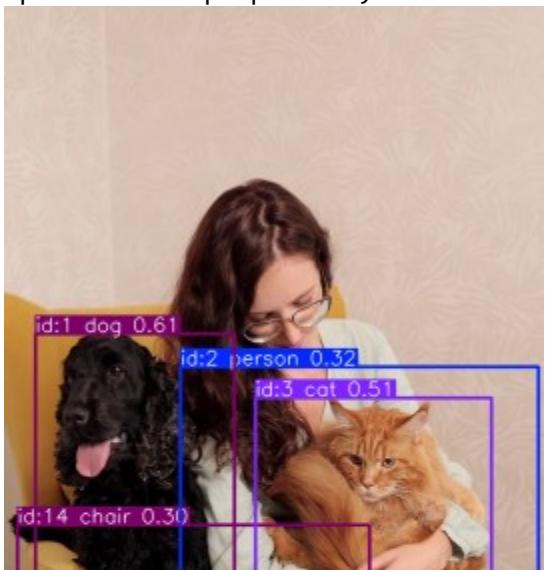




0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 216.8ms
Speed: 5.4ms preprocess, 216.8ms inference, 0.4ms postprocess per image at shape (1,

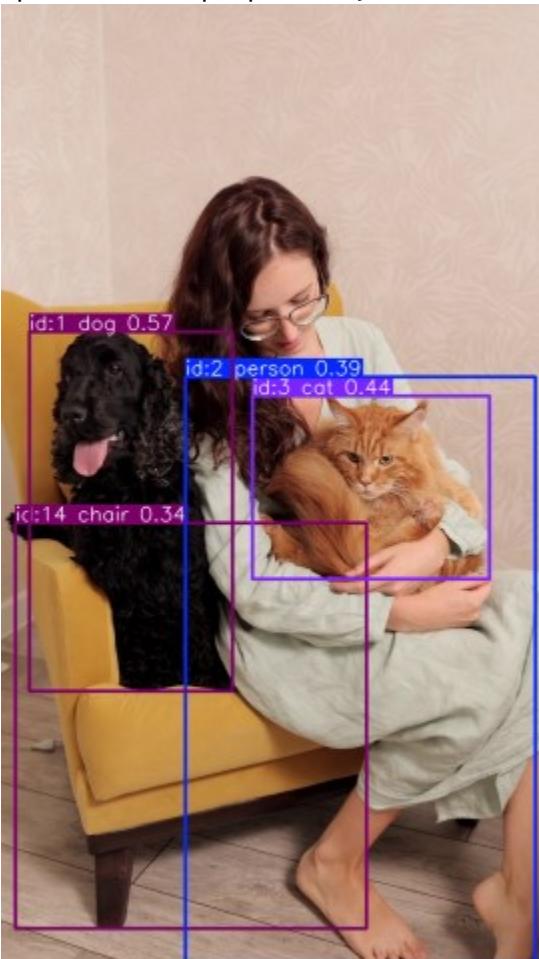


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 206.7ms
Speed: 5.5ms preprocess, 206.7ms inference, 3.4ms postprocess per image at shape (1,

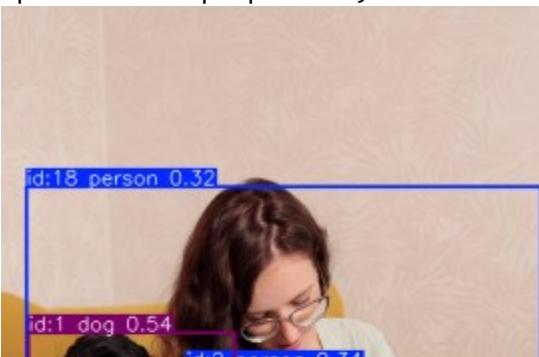


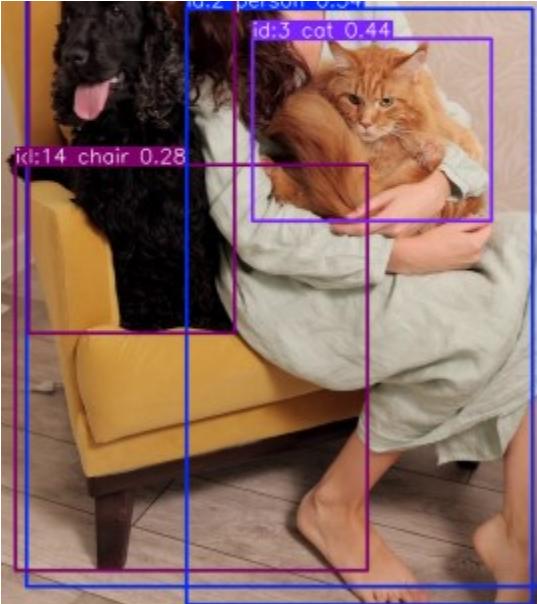


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 189.0ms
Speed: 5.5ms preprocess, 189.0ms inference, 0.4ms postprocess per image at shape (1,



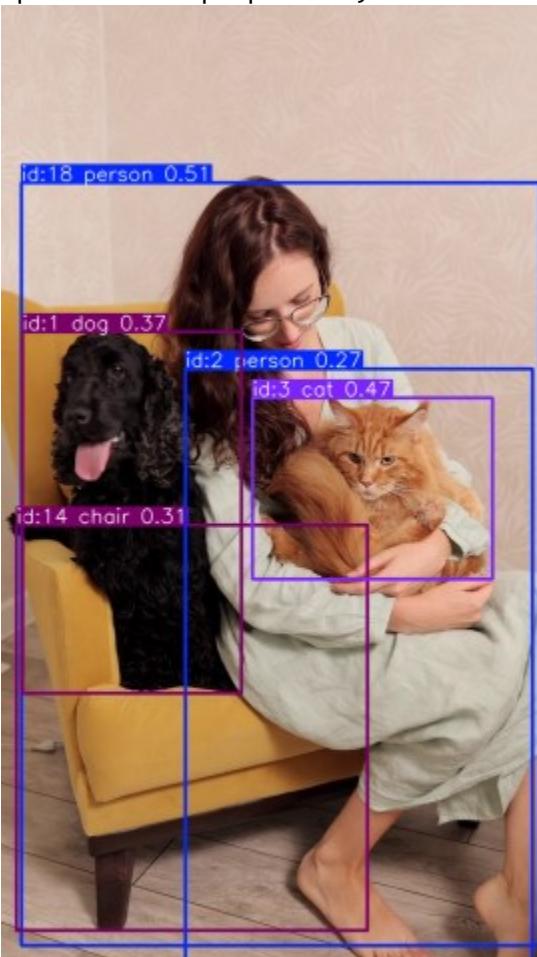
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 235.3ms
Speed: 5.2ms preprocess, 235.3ms inference, 0.4ms postprocess per image at shape (1,





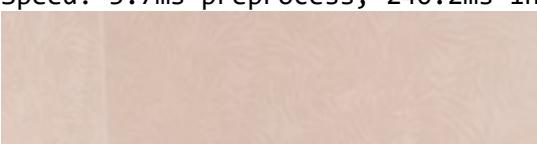
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 231.0ms

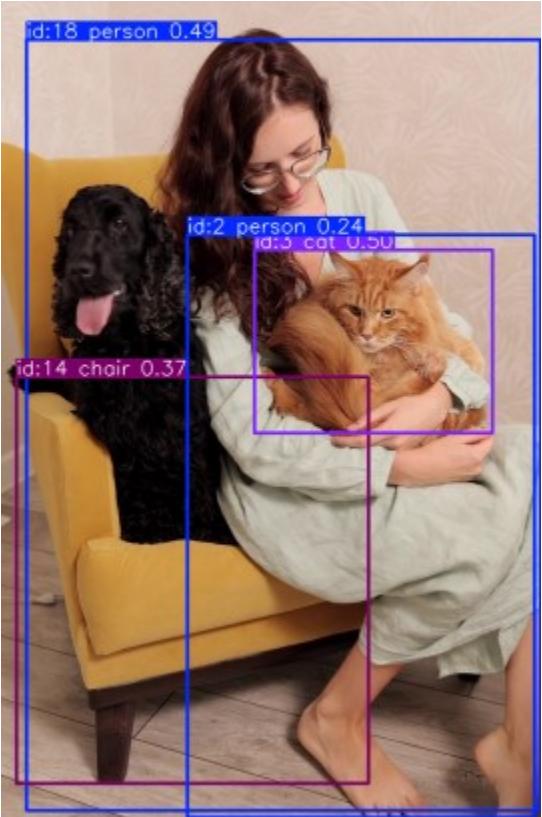
Speed: 3.7ms preprocess, 231.0ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 chair, 240.2ms

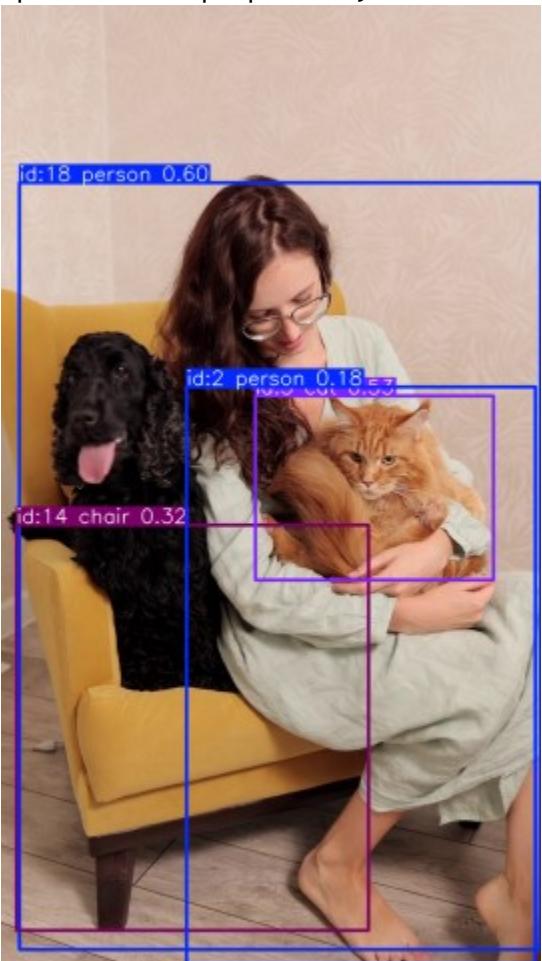
Speed: 3.7ms preprocess, 240.2ms inference, 0.4ms postprocess per image at shape (1,



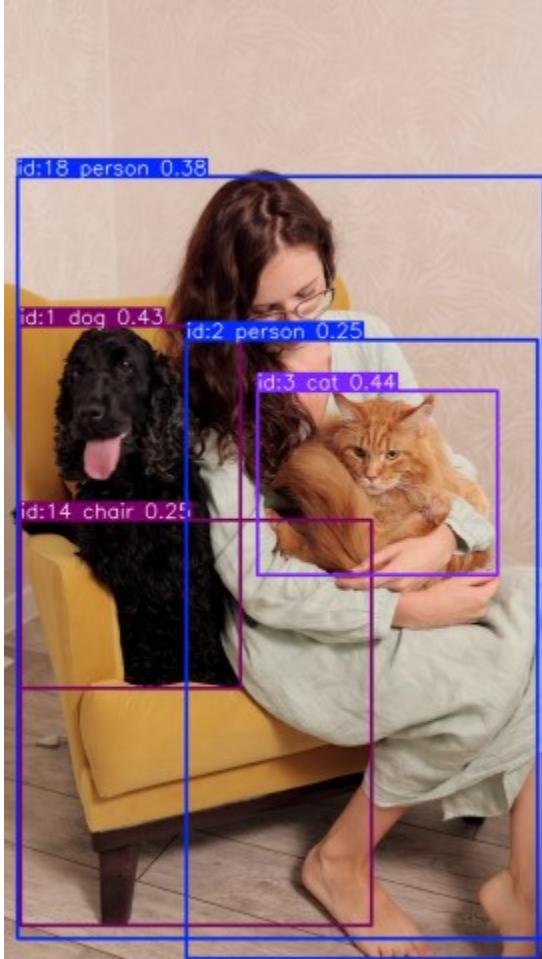


0: 640x384 2 persons, 1 cat, 1 chair, 230.6ms

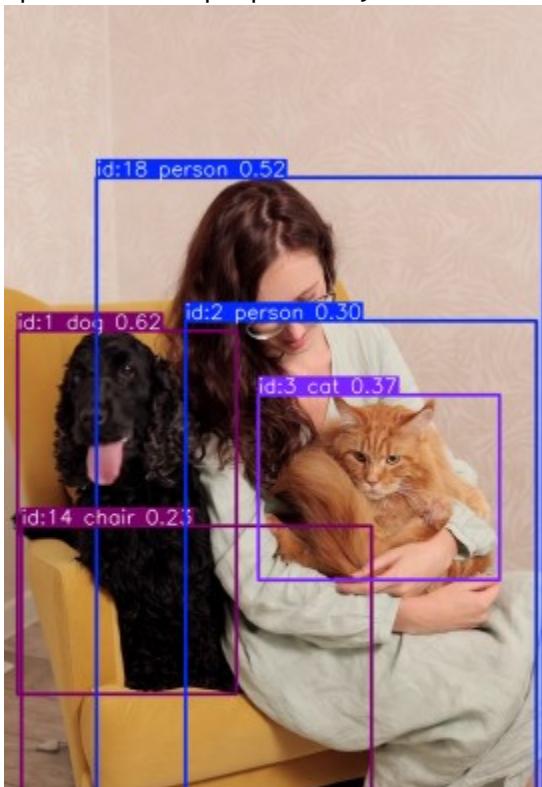
Speed: 5.3ms preprocess, 230.6ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 230.9ms
Speed: 5.5ms preprocess, 230.9ms inference, 0.5ms postprocess per image at shape (1,



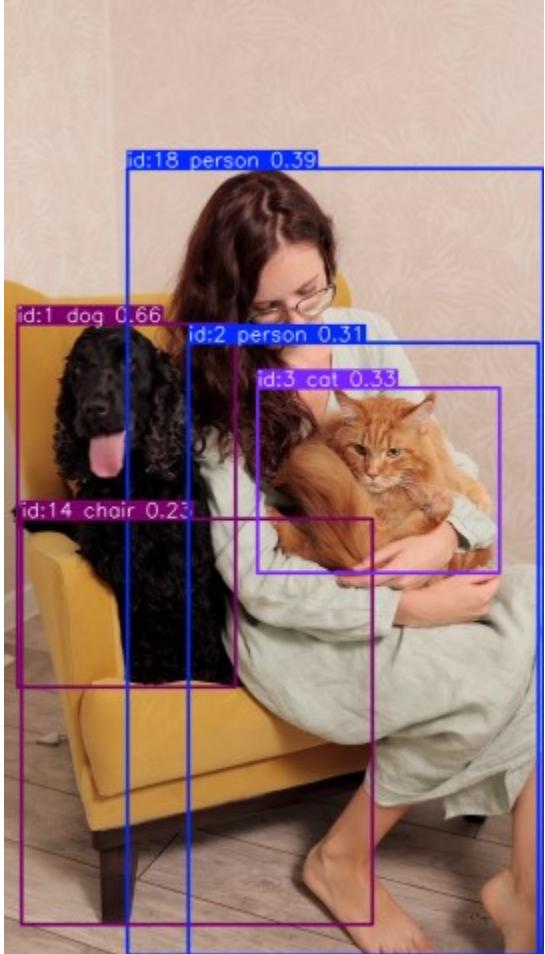
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 209.3ms
Speed: 5.4ms preprocess, 209.3ms inference, 1.1ms postprocess per image at shape (1,





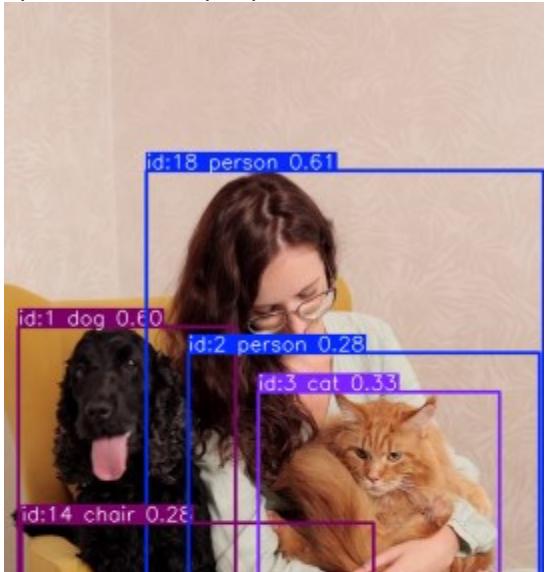
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 215.0ms

Speed: 7.2ms preprocess, 215.0ms inference, 0.5ms postprocess per image at shape (1,



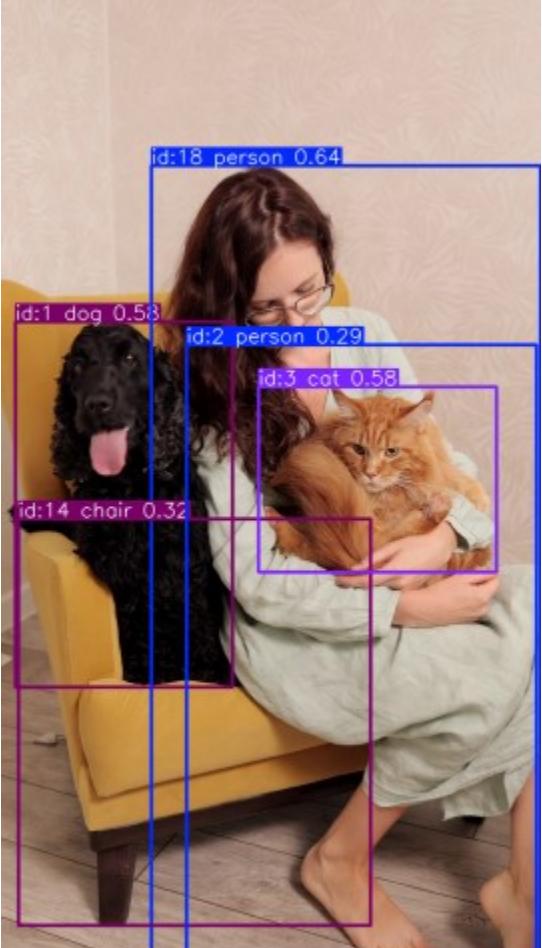
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 207.6ms

Speed: 5.9ms preprocess, 207.6ms inference, 0.4ms postprocess per image at shape (1,

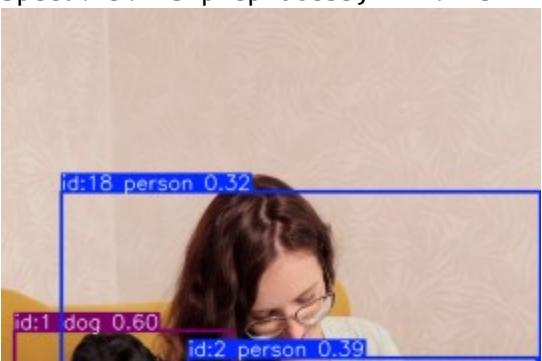


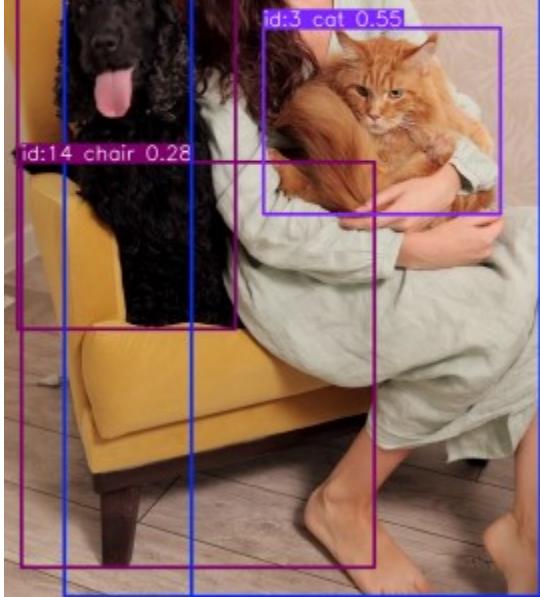


0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 180.6ms
Speed: 5.3ms preprocess, 180.6ms inference, 0.4ms postprocess per image at shape (1,



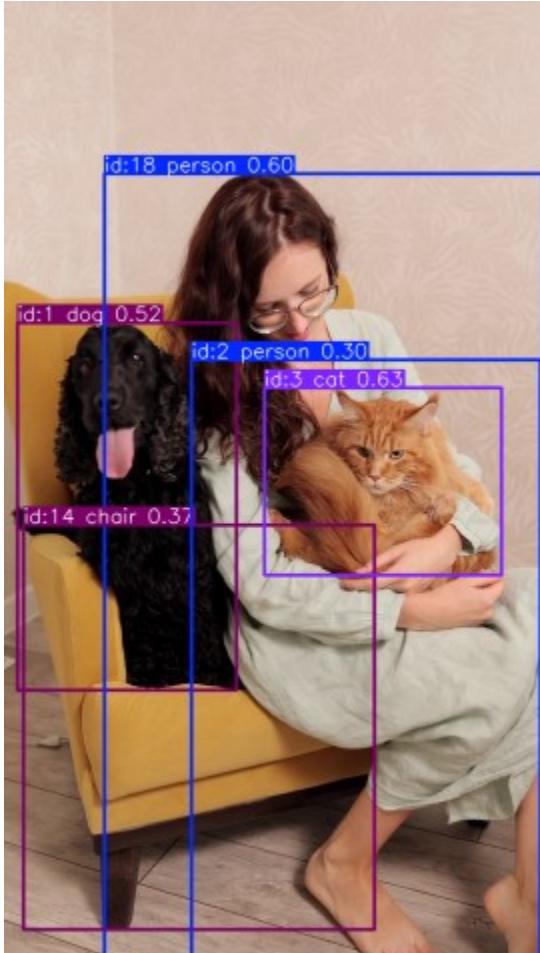
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 192.1ms
Speed: 5.1ms preprocess, 192.1ms inference, 0.5ms postprocess per image at shape (1,





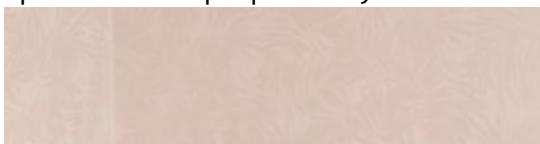
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 180.3ms

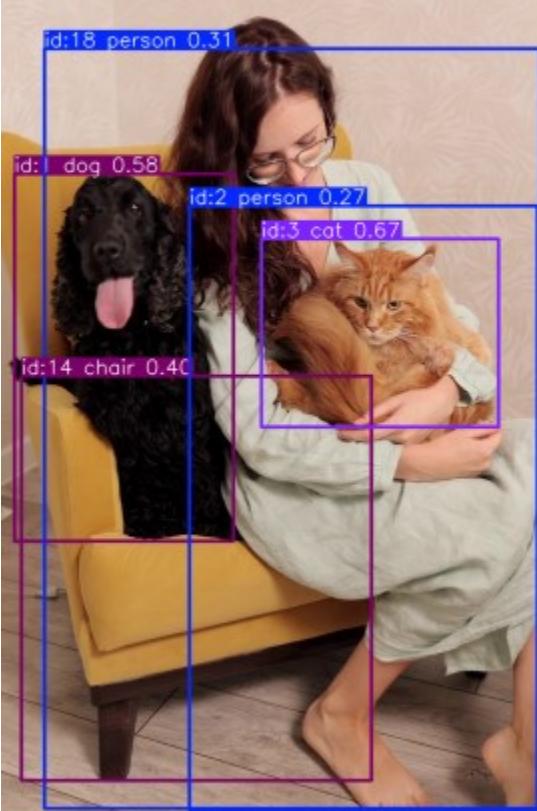
Speed: 5.2ms preprocess, 180.3ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 191.6ms

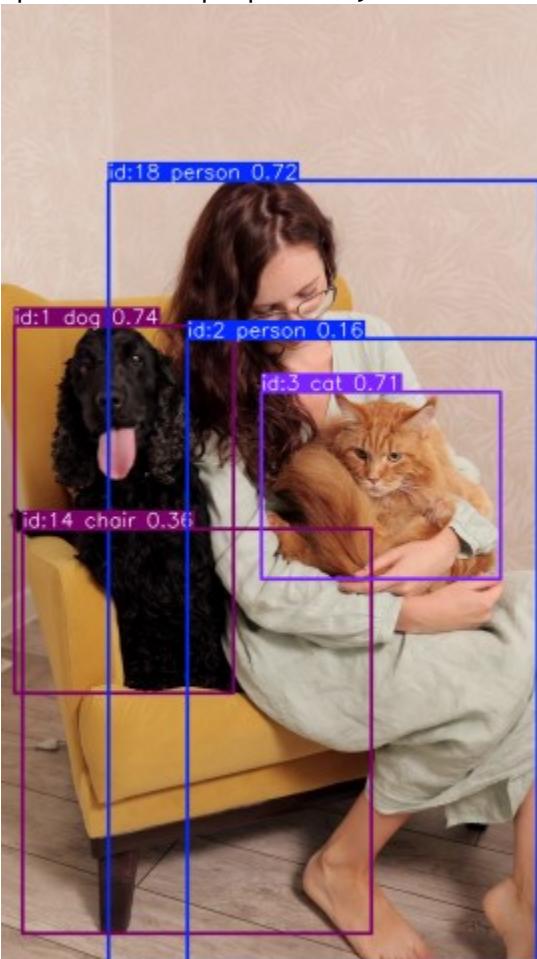
Speed: 5.1ms preprocess, 191.6ms inference, 0.4ms postprocess per image at shape (1,



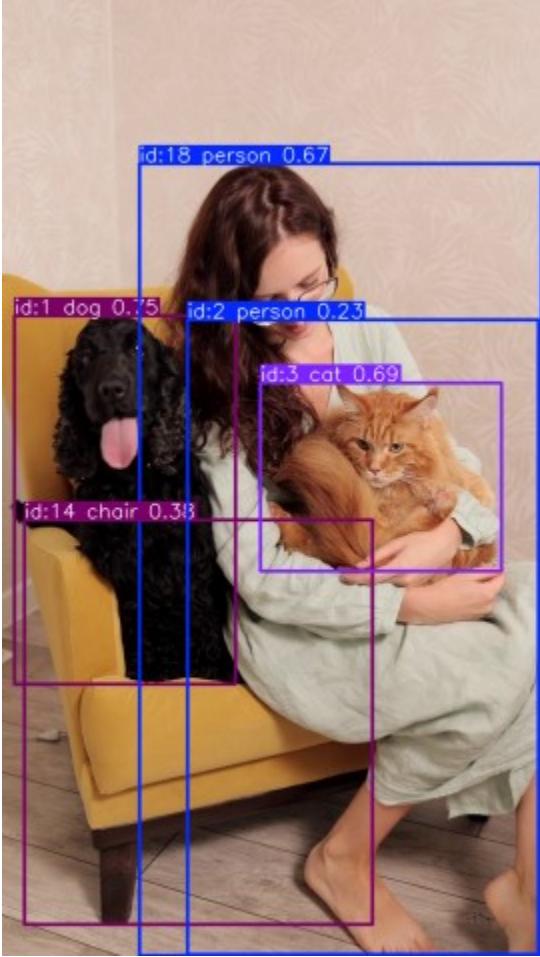


0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 180.1ms

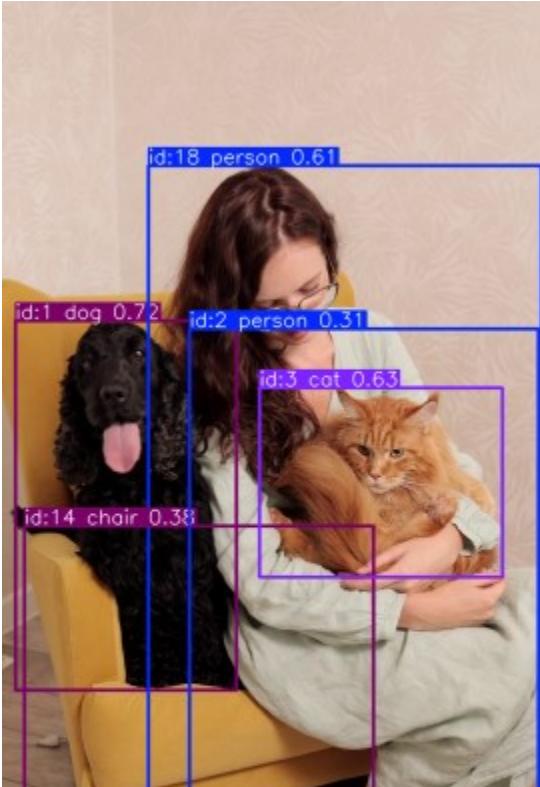
Speed: 5.2ms preprocess, 180.1ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 189.6ms
Speed: 5.4ms preprocess, 189.6ms inference, 0.4ms postprocess per image at shape (1,



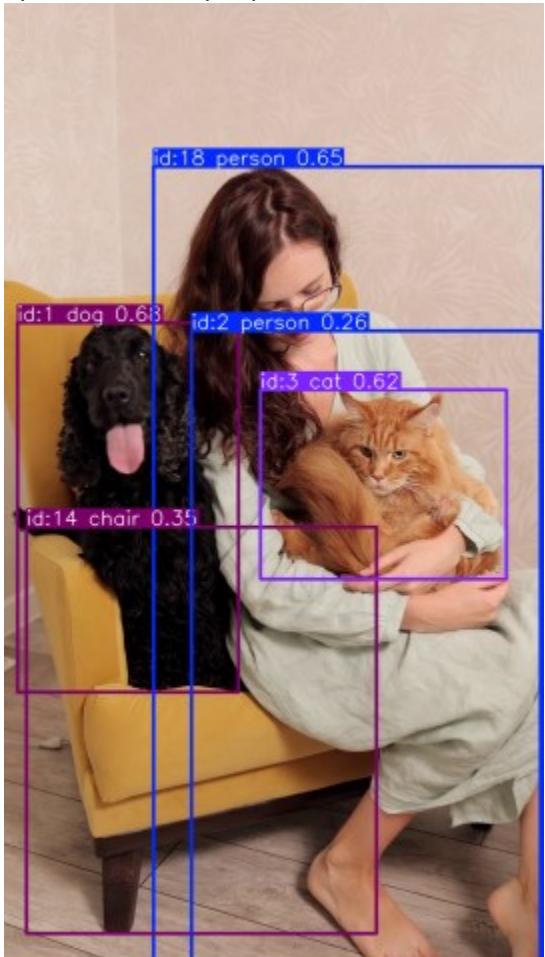
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 186.3ms
Speed: 3.9ms preprocess, 186.3ms inference, 0.4ms postprocess per image at shape (1,





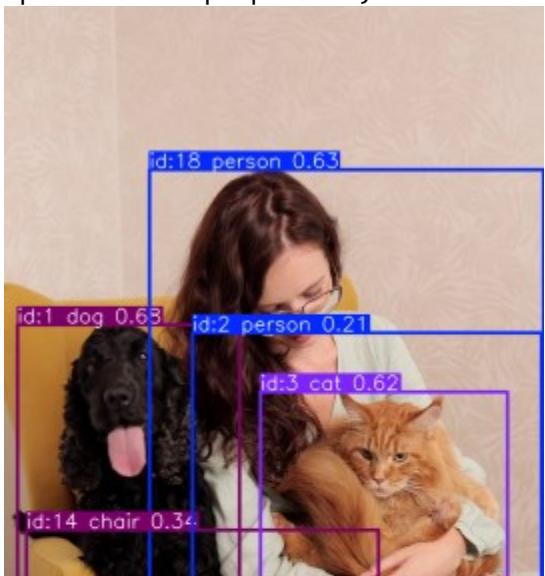
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 182.5ms

Speed: 3.7ms preprocess, 182.5ms inference, 0.4ms postprocess per image at shape (1,



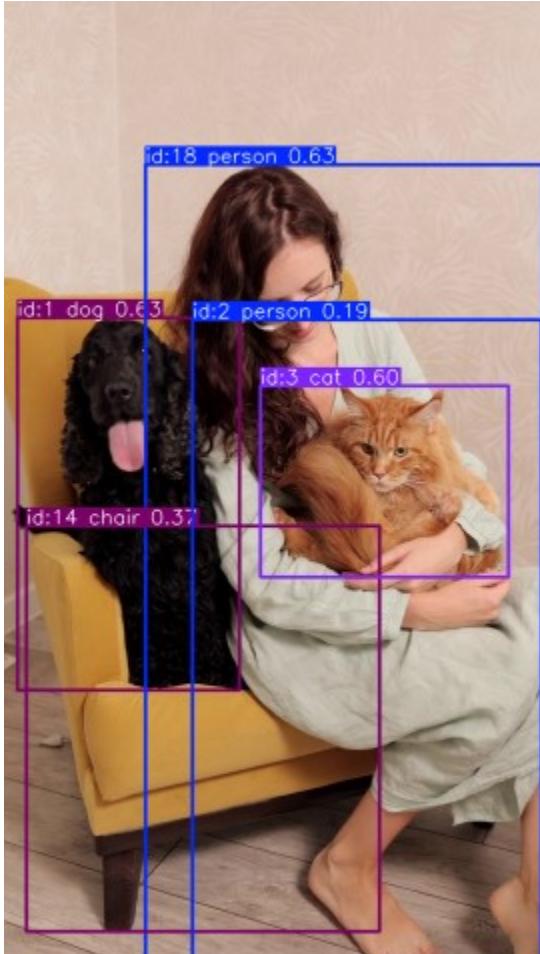
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 180.4ms

Speed: 3.5ms preprocess, 180.4ms inference, 0.6ms postprocess per image at shape (1,

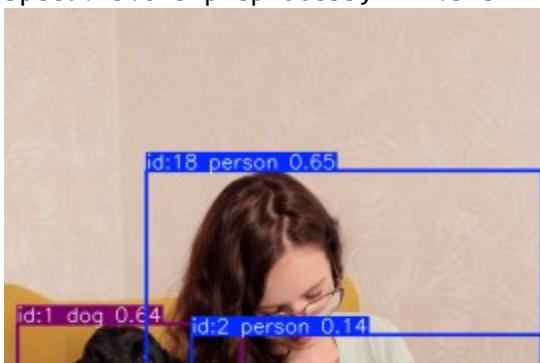


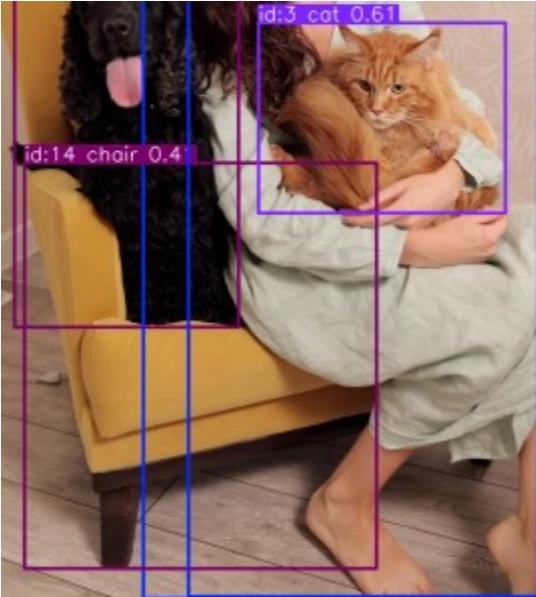


0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 182.6ms
Speed: 3.9ms preprocess, 182.6ms inference, 0.4ms postprocess per image at shape (1,



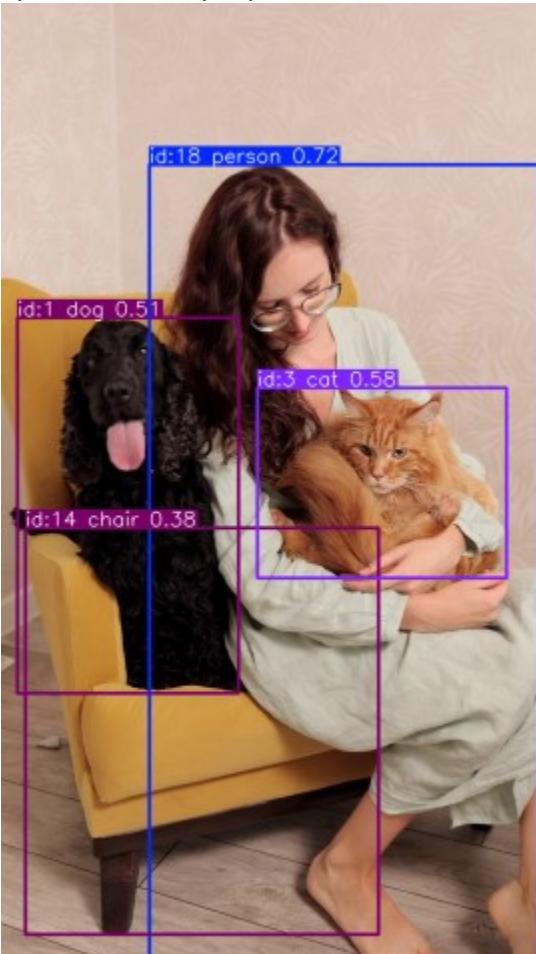
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 171.3ms
Speed: 3.8ms preprocess, 171.3ms inference, 0.4ms postprocess per image at shape (1,





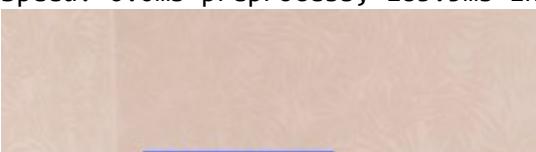
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 175.3ms

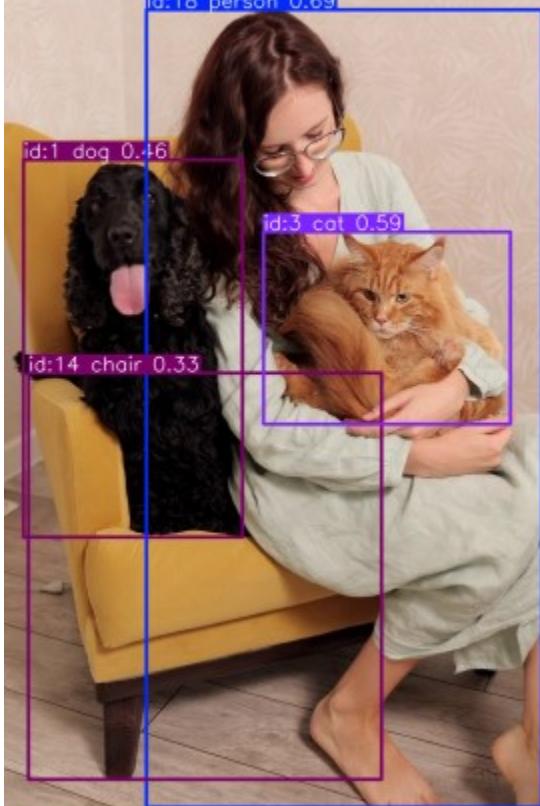
Speed: 7.9ms preprocess, 175.3ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 183.5ms

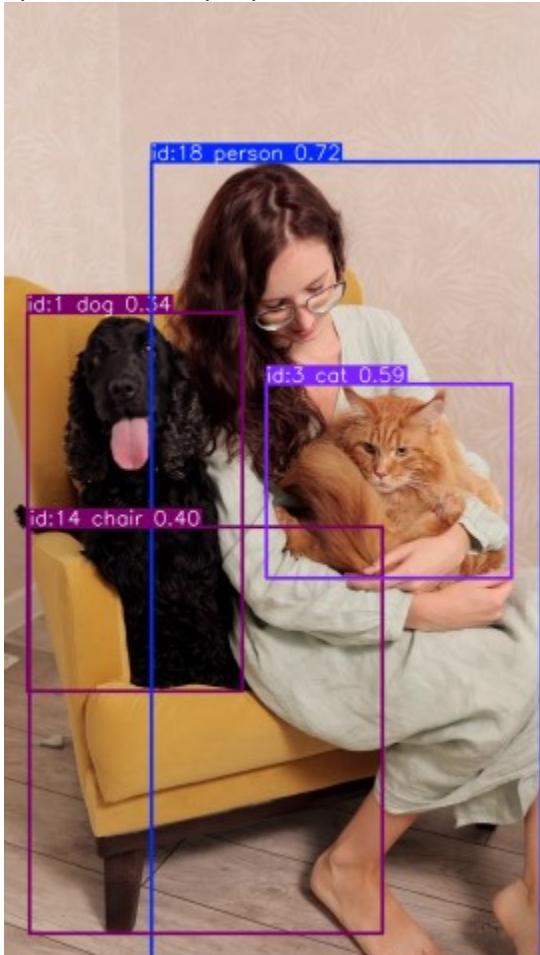
Speed: 6.0ms preprocess, 183.5ms inference, 0.4ms postprocess per image at shape (1,



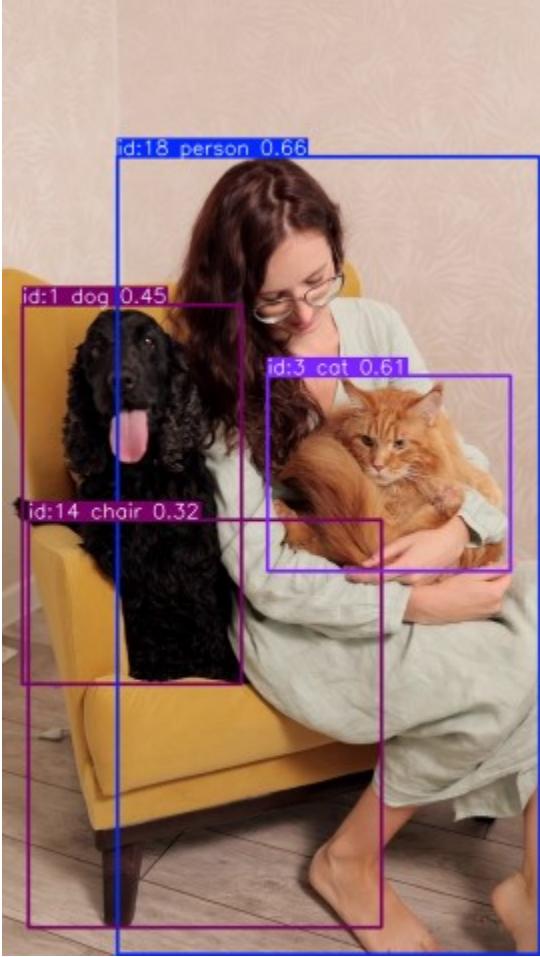


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 199.3ms

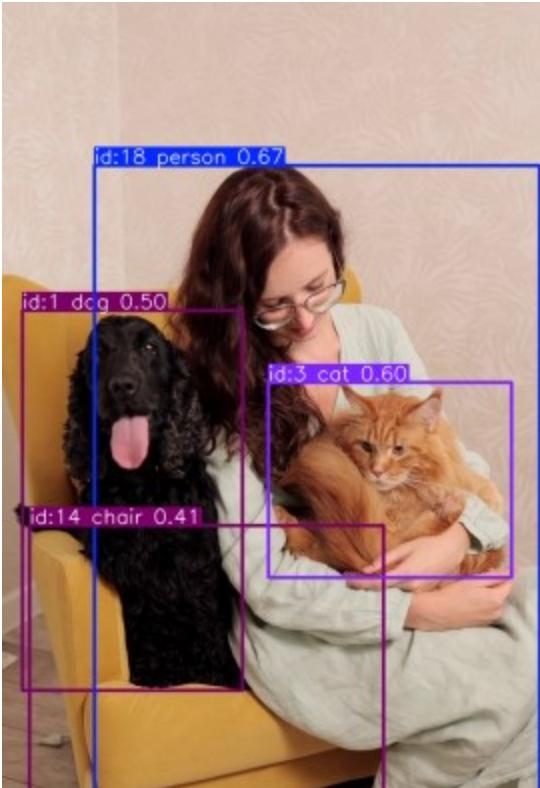
Speed: 5.5ms preprocess, 199.3ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 185.8ms
Speed: 5.3ms preprocess, 185.8ms inference, 0.4ms postprocess per image at shape (1,

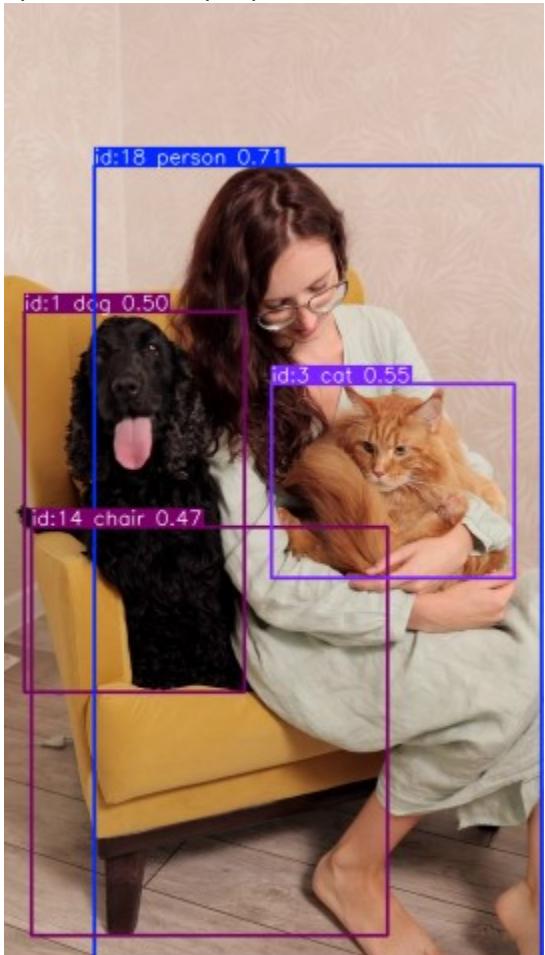


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 180.8ms
Speed: 5.5ms preprocess, 180.8ms inference, 0.4ms postprocess per image at shape (1,

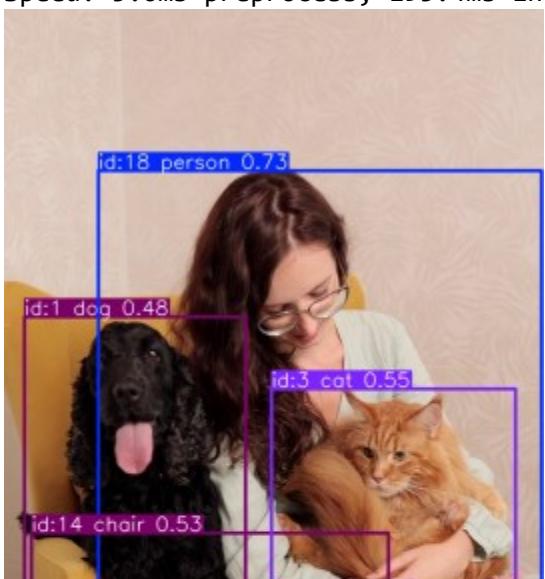




0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 187.9ms
Speed: 7.6ms preprocess, 187.9ms inference, 0.4ms postprocess per image at shape (1,



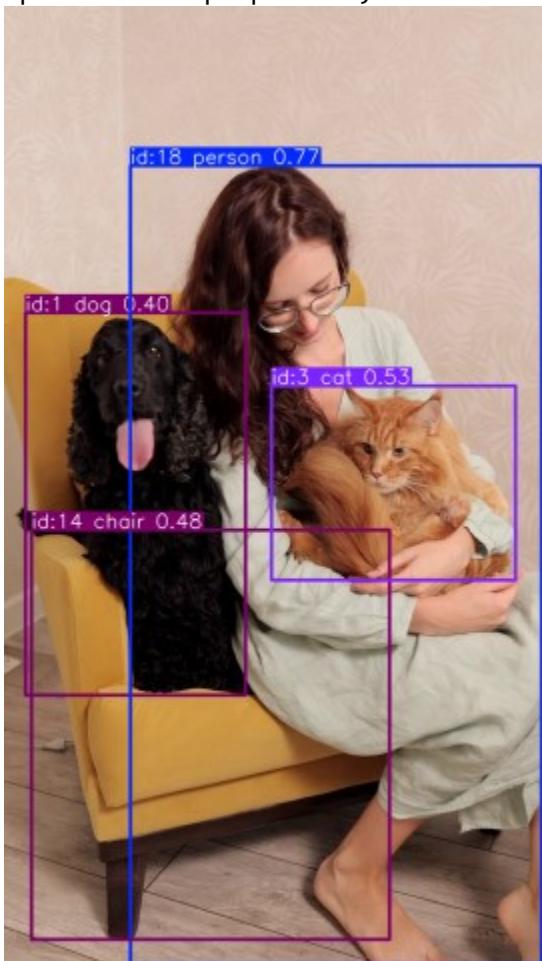
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 195.4ms
Speed: 5.6ms preprocess, 195.4ms inference, 0.7ms postprocess per image at shape (1,





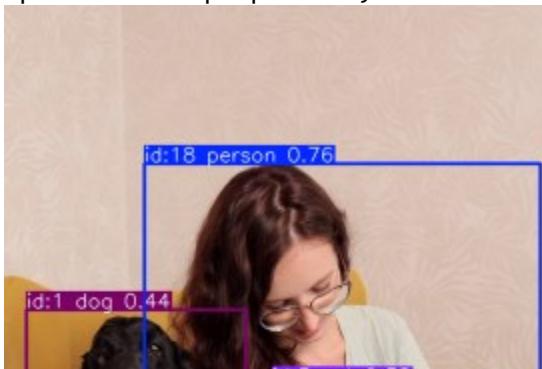
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 216.4ms

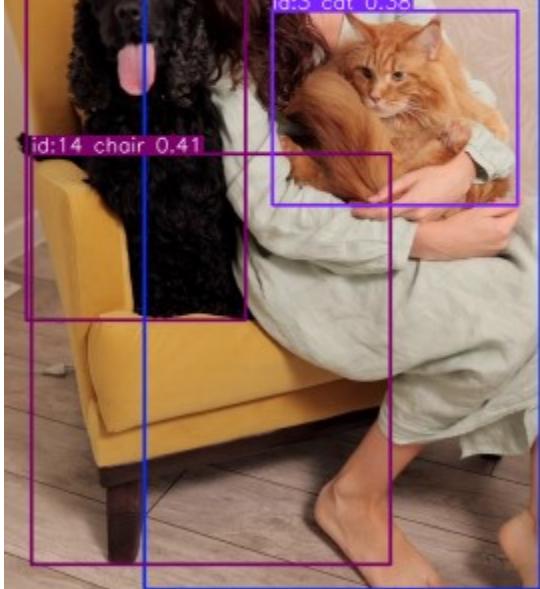
Speed: 3.9ms preprocess, 216.4ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 194.0ms

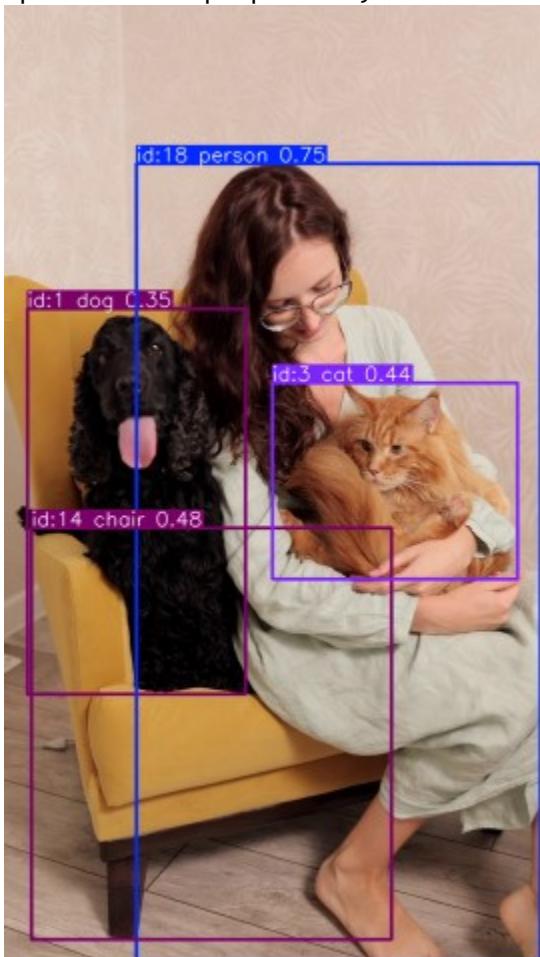
Speed: 5.9ms preprocess, 194.0ms inference, 0.4ms postprocess per image at shape (1,





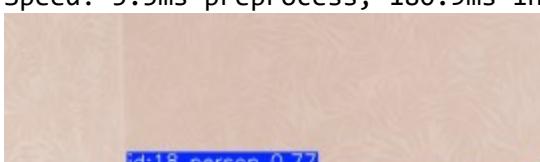
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 185.5ms

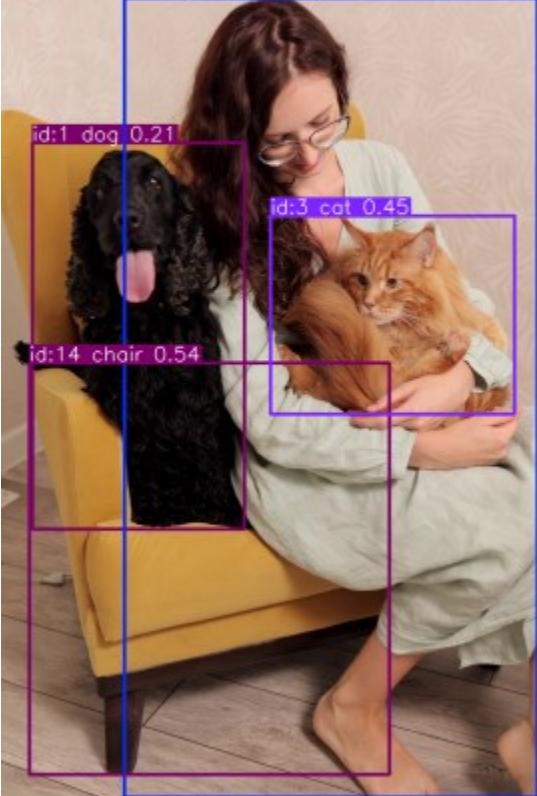
Speed: 5.8ms preprocess, 185.5ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 180.9ms

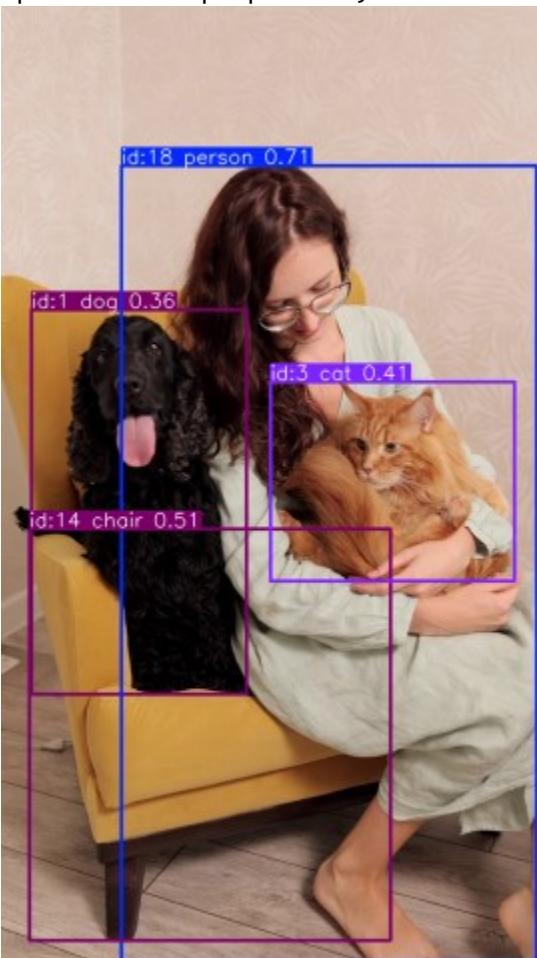
Speed: 5.5ms preprocess, 180.9ms inference, 0.4ms postprocess per image at shape (1,



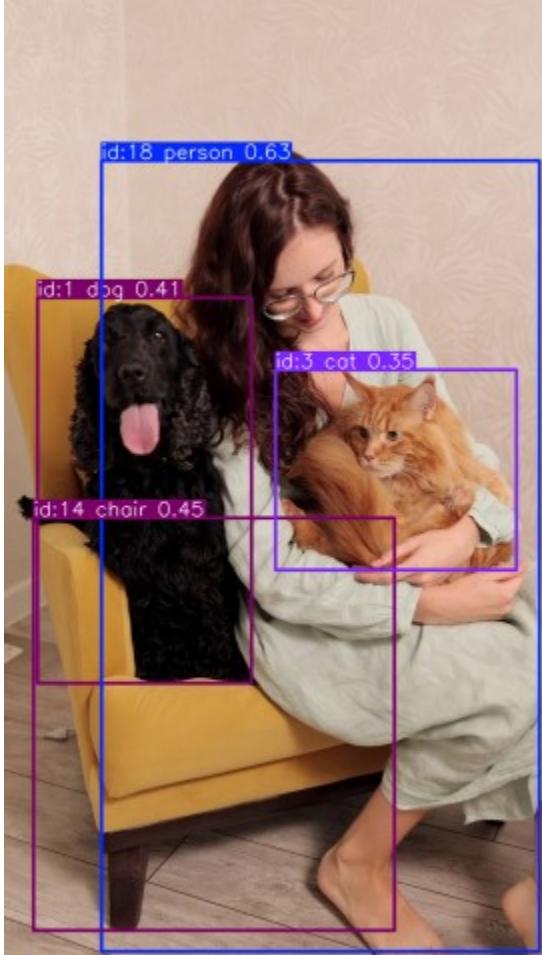


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 197.8ms

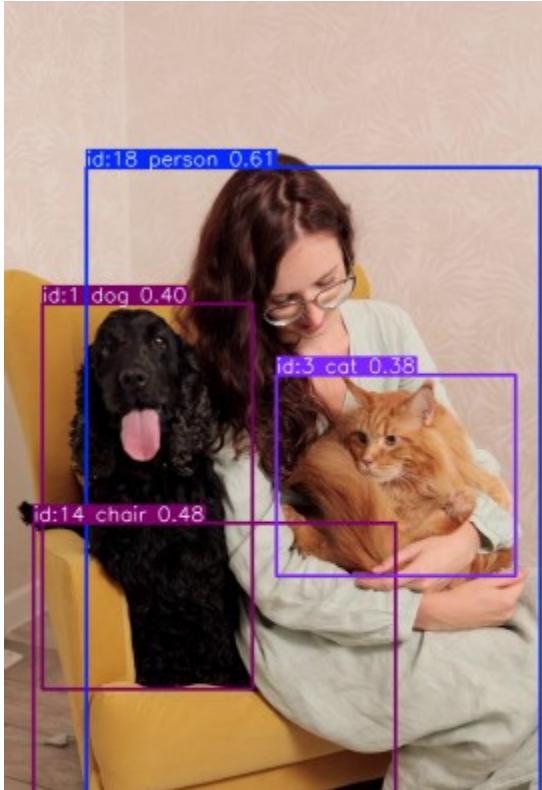
Speed: 5.6ms preprocess, 197.8ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 188.9ms
Speed: 7.3ms preprocess, 188.9ms inference, 0.4ms postprocess per image at shape (1,



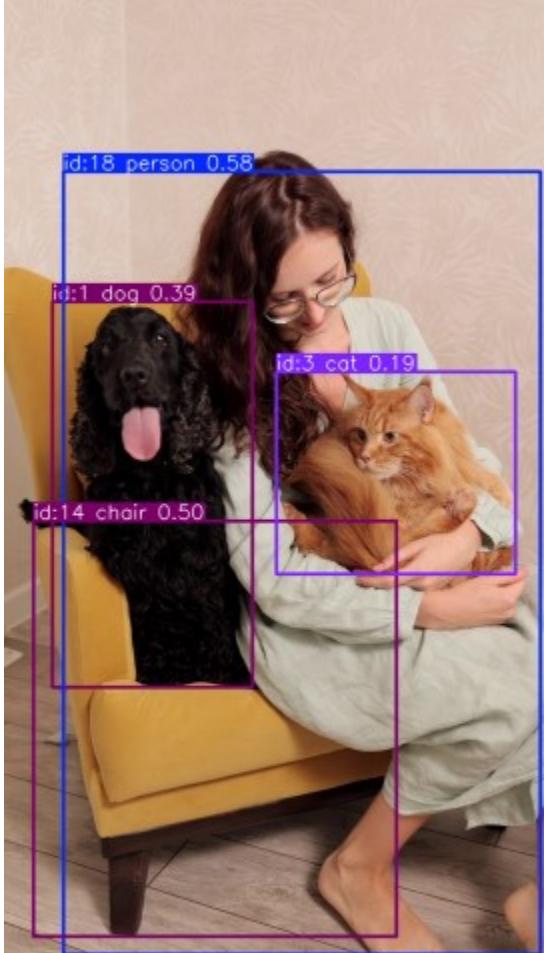
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 186.9ms
Speed: 5.5ms preprocess, 186.9ms inference, 0.4ms postprocess per image at shape (1,





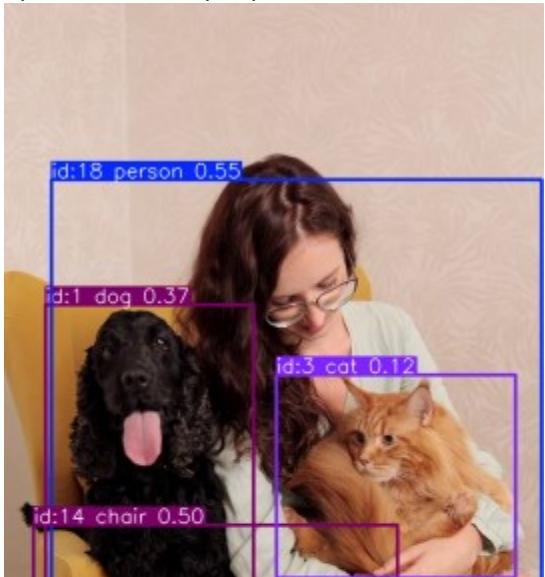
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 172.2ms

Speed: 5.9ms preprocess, 172.2ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 196.8ms

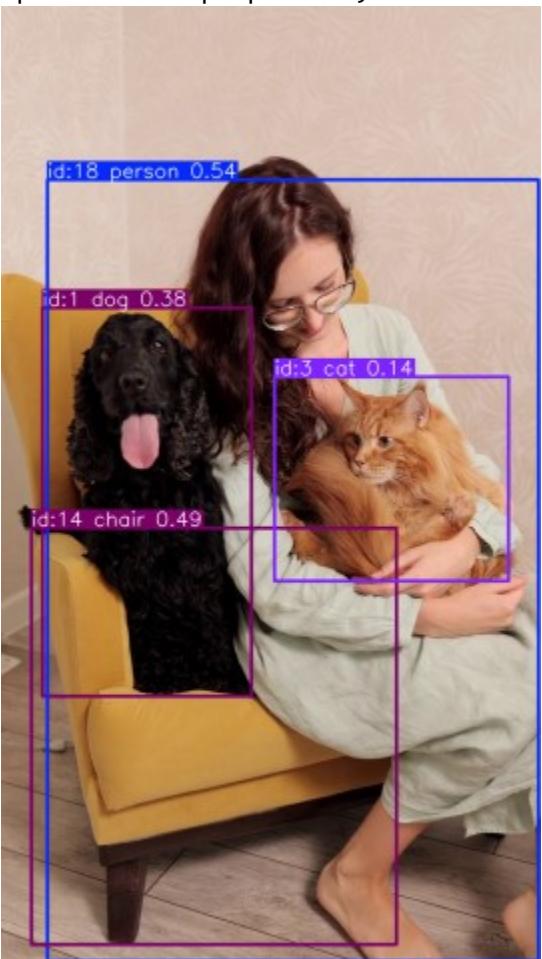
Speed: 5.3ms preprocess, 196.8ms inference, 0.4ms postprocess per image at shape (1,





0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 184.2ms

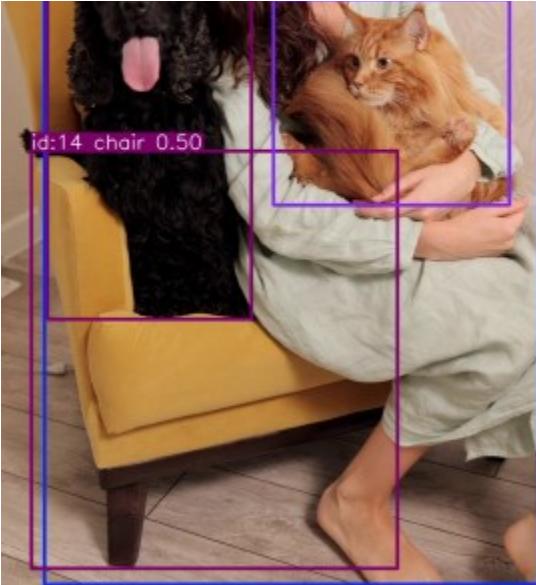
Speed: 5.3ms preprocess, 184.2ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 185.3ms

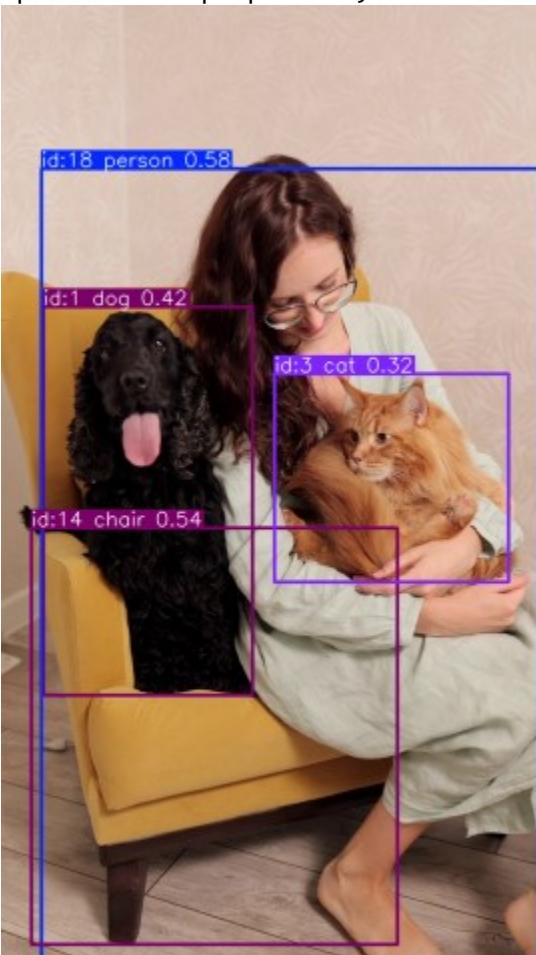
Speed: 6.0ms preprocess, 185.3ms inference, 0.4ms postprocess per image at shape (1,





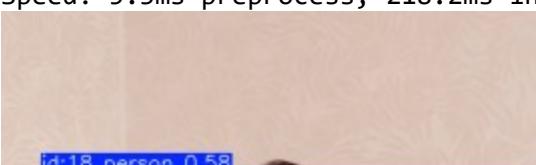
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 181.4ms

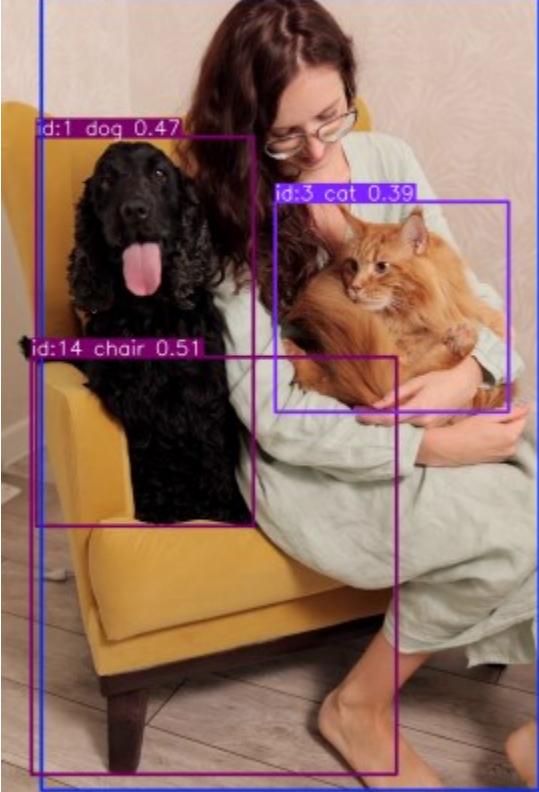
Speed: 5.7ms preprocess, 181.4ms inference, 0.5ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 218.2ms

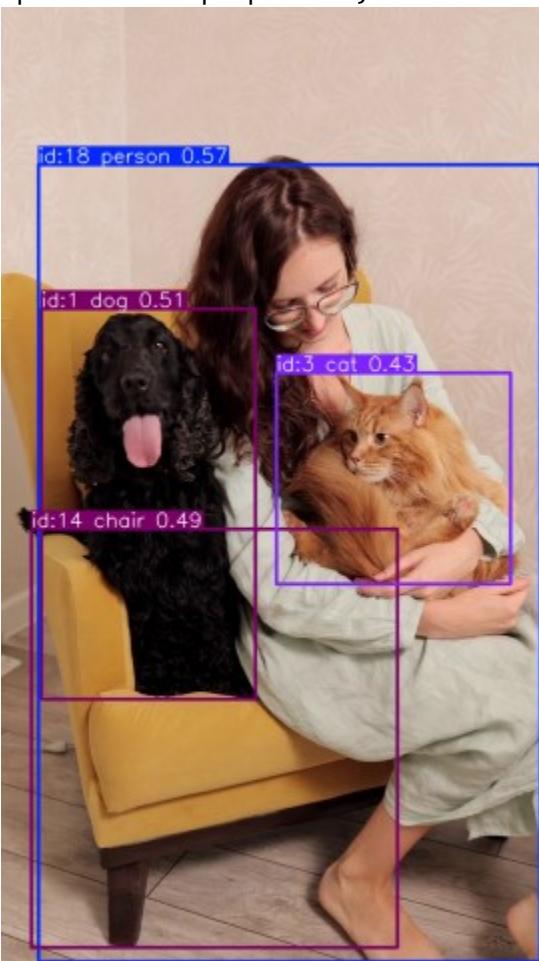
Speed: 5.3ms preprocess, 218.2ms inference, 0.4ms postprocess per image at shape (1,





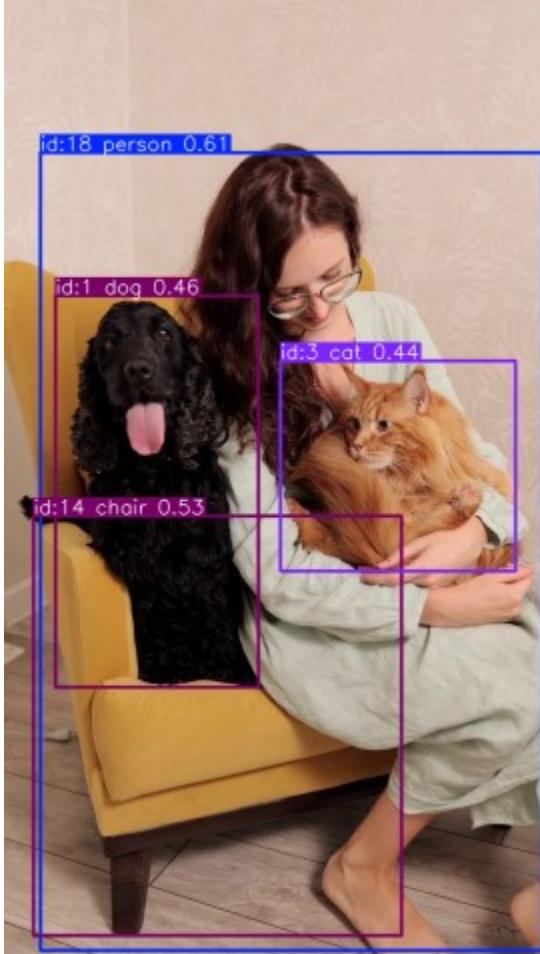
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 182.3ms

Speed: 5.5ms preprocess, 182.3ms inference, 0.4ms postprocess per image at shape (1,

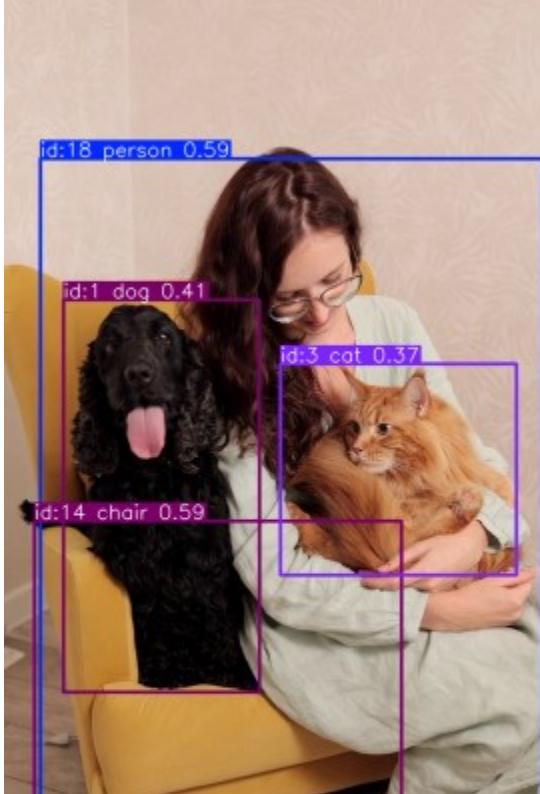


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 179.7ms

0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 181.1ms
Speed: 5.3ms preprocess, 179.7ms inference, 0.4ms postprocess per image at shape (1,



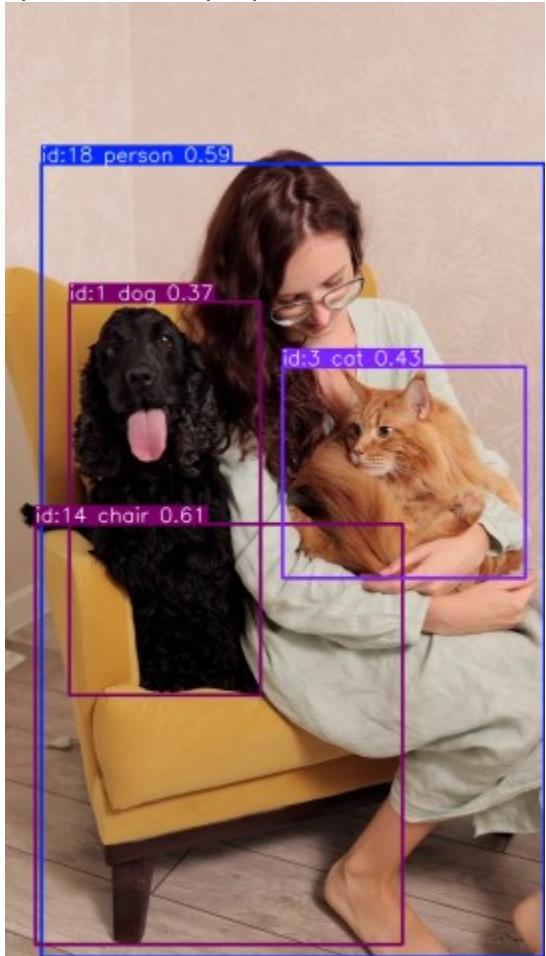
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 181.1ms
Speed: 3.6ms preprocess, 181.1ms inference, 0.4ms postprocess per image at shape (1,





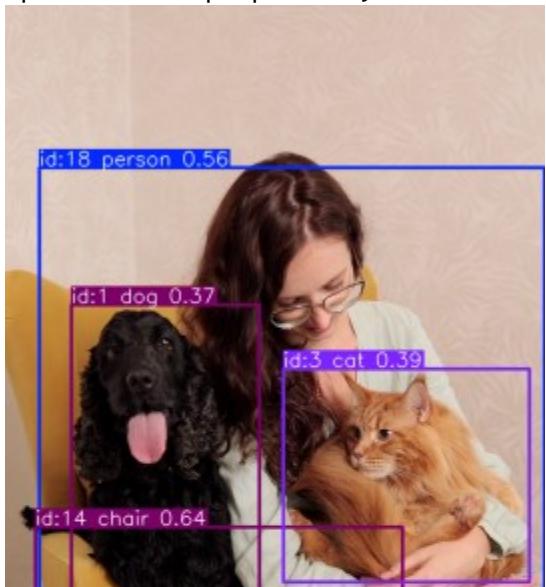
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 222.3ms

Speed: 3.7ms preprocess, 222.3ms inference, 0.4ms postprocess per image at shape (1,



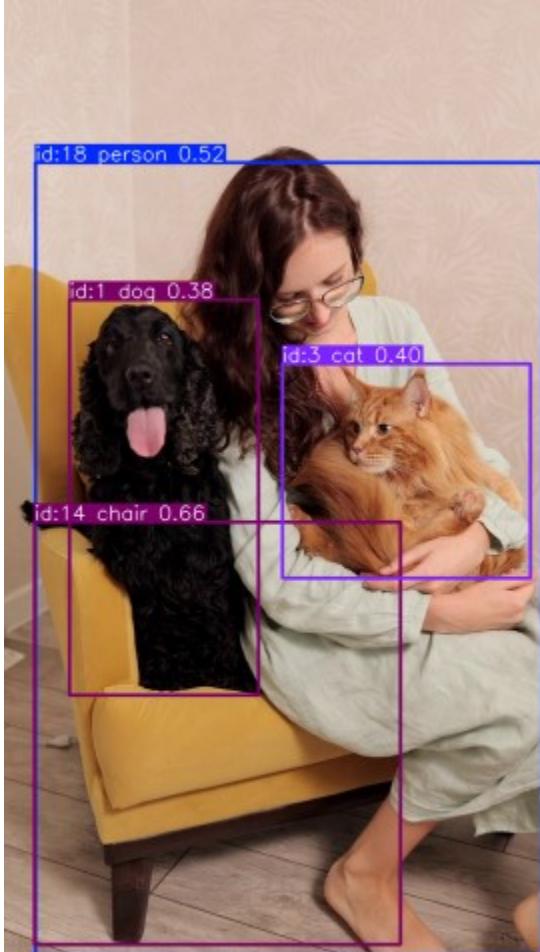
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 246.4ms

Speed: 3.6ms preprocess, 246.4ms inference, 0.4ms postprocess per image at shape (1,

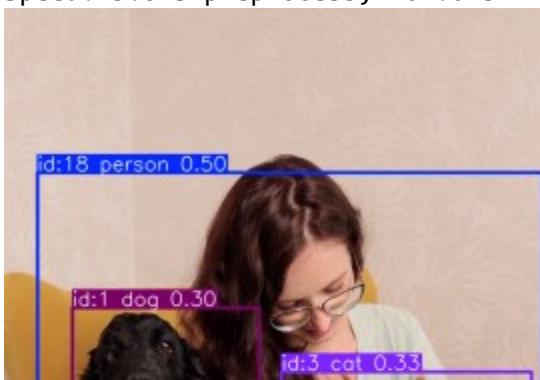


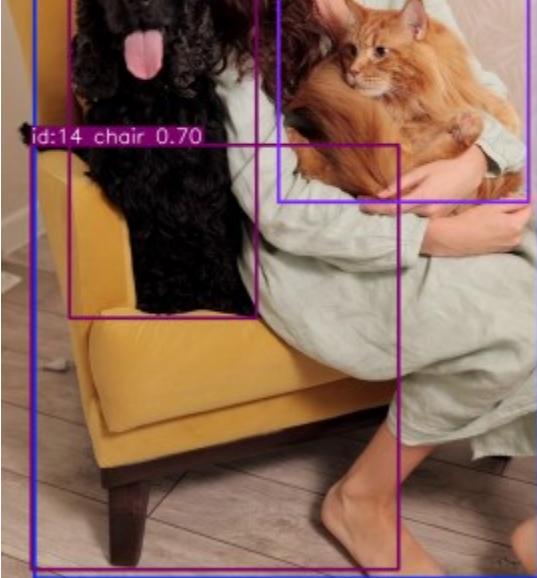


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 278.5ms
Speed: 9.7ms preprocess, 278.5ms inference, 0.4ms postprocess per image at shape (1,



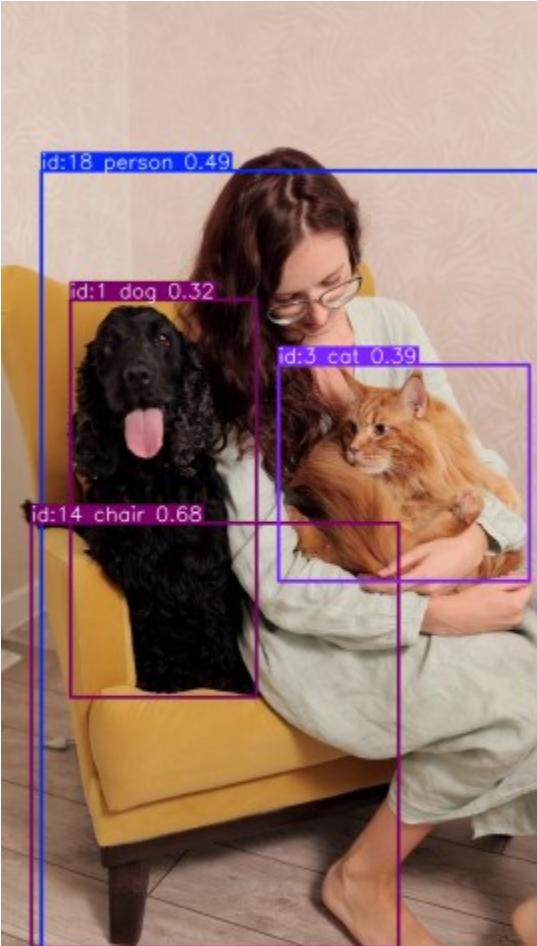
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 204.0ms
Speed: 3.8ms preprocess, 204.0ms inference, 0.4ms postprocess per image at shape (1,





0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 192.4ms

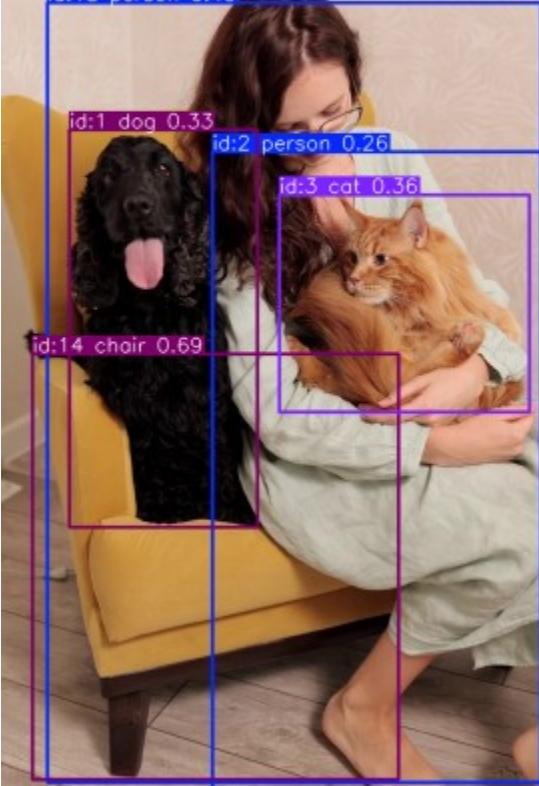
Speed: 3.8ms preprocess, 192.4ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 212.0ms

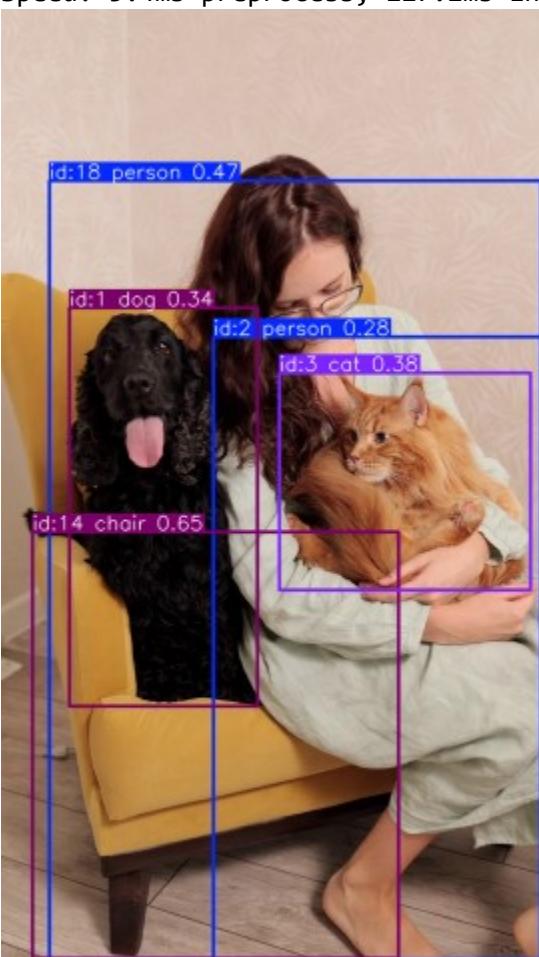
Speed: 3.7ms preprocess, 212.0ms inference, 0.4ms postprocess per image at shape (1,





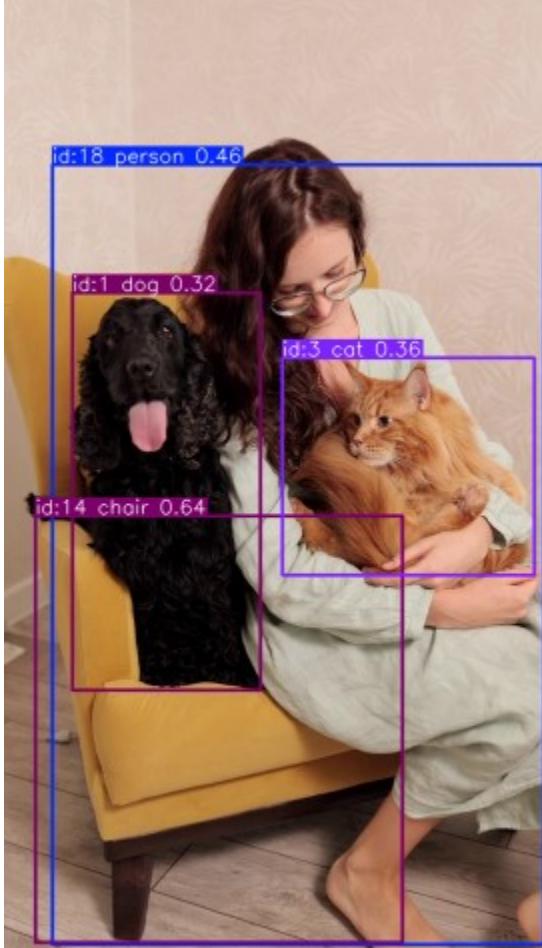
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 227.2ms

Speed: 5.4ms preprocess, 227.2ms inference, 4.5ms postprocess per image at shape (1,

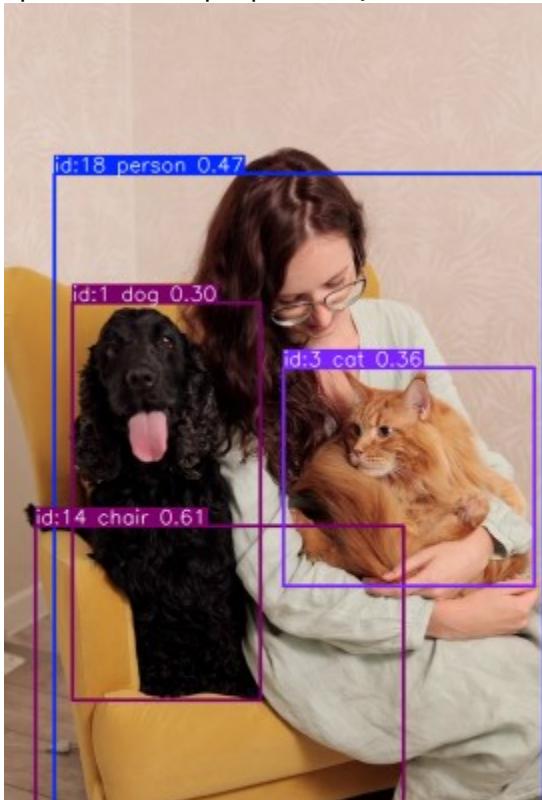


0: 640x384 1 person 1 cat 1 dog 1 chair 207.5ms

0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 188.3ms
Speed: 5.1ms preprocess, 207.5ms inference, 0.4ms postprocess per image at shape (1,



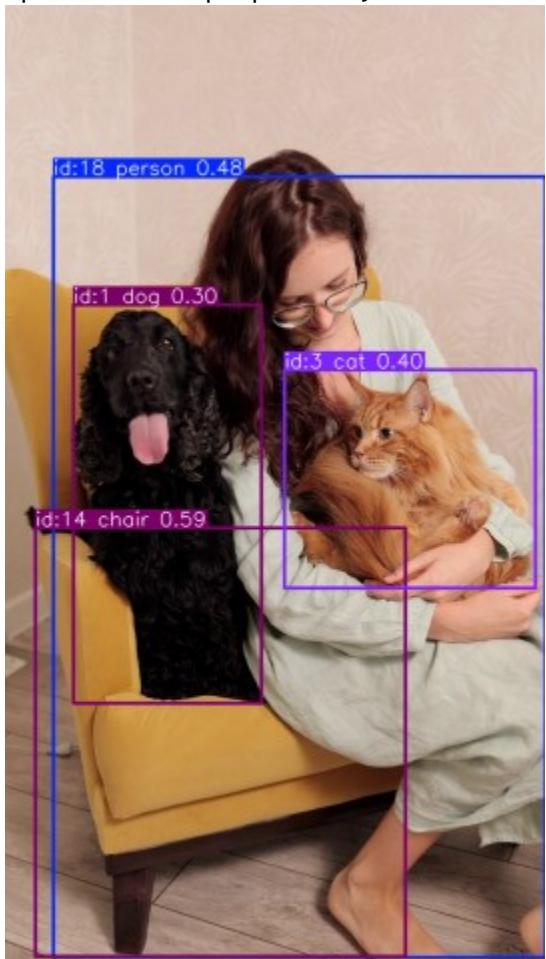
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 188.3ms
Speed: 3.8ms preprocess, 188.3ms inference, 0.5ms postprocess per image at shape (1,





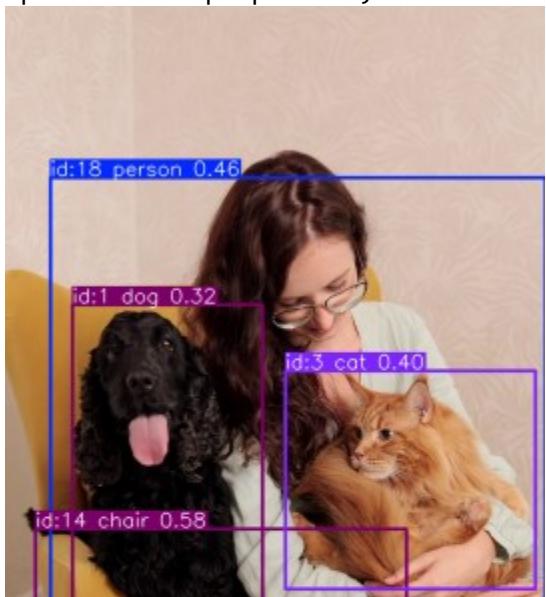
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 220.8ms

Speed: 3.8ms preprocess, 220.8ms inference, 0.5ms postprocess per image at shape (1,



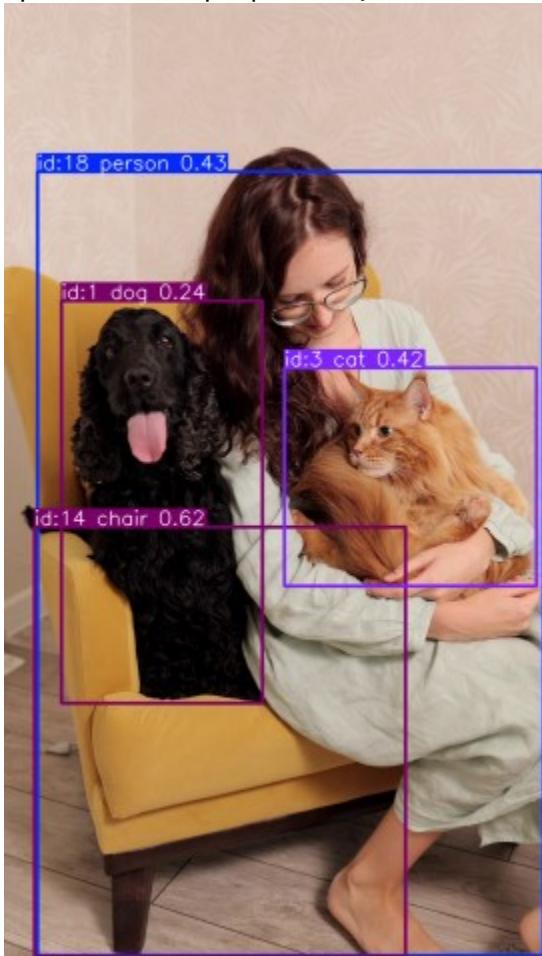
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 234.3ms

Speed: 5.6ms preprocess, 234.3ms inference, 0.4ms postprocess per image at shape (1,

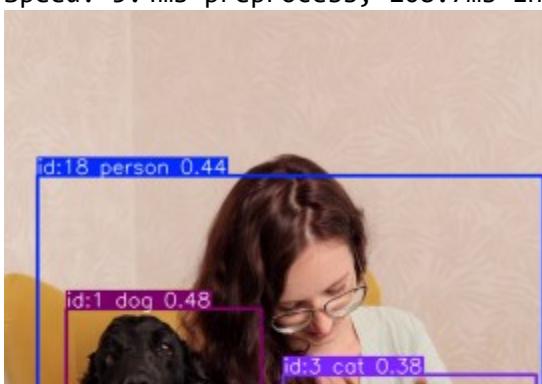


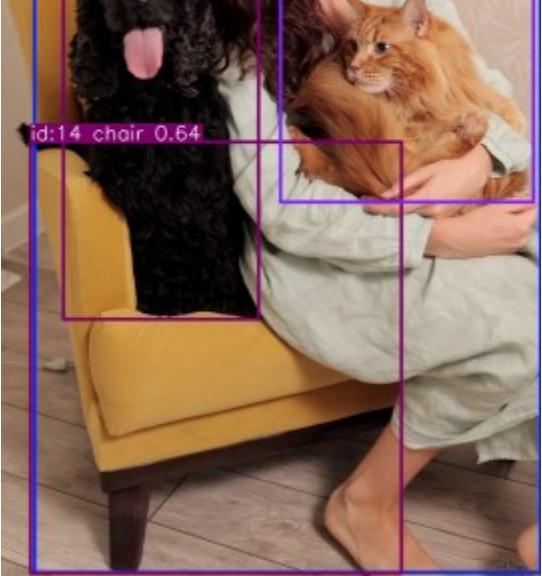


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 234.4ms
Speed: 7.2ms preprocess, 234.4ms inference, 1.1ms postprocess per image at shape (1,



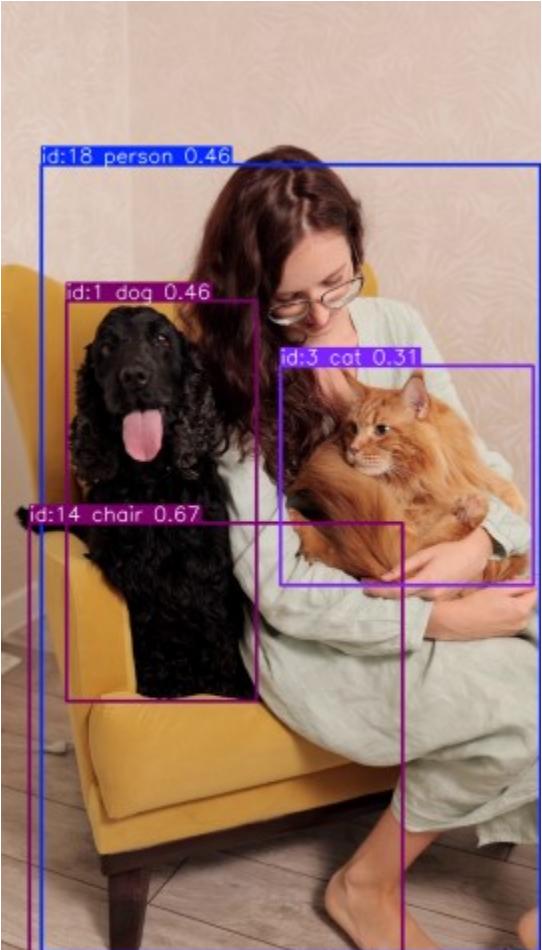
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 208.7ms
Speed: 5.4ms preprocess, 208.7ms inference, 0.4ms postprocess per image at shape (1,





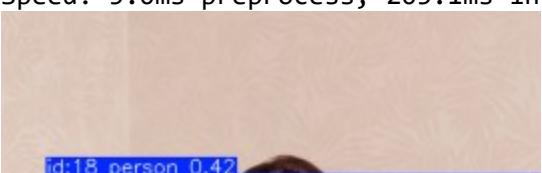
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 227.6ms

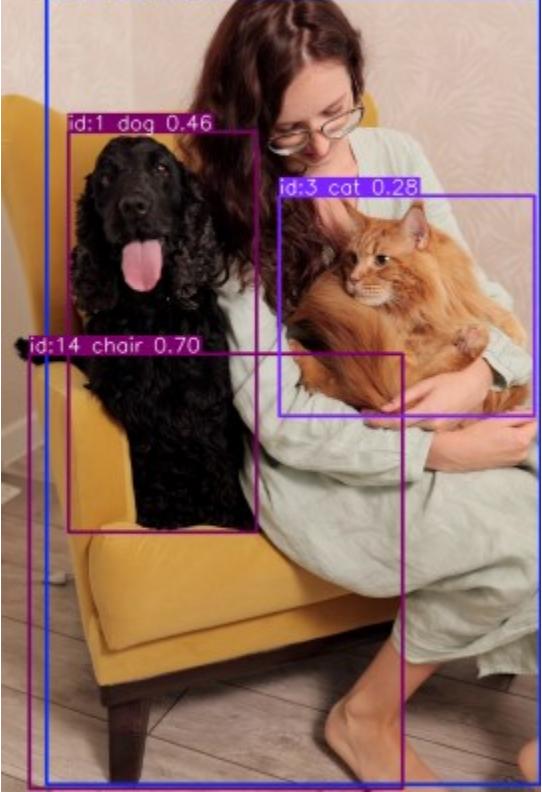
Speed: 5.3ms preprocess, 227.6ms inference, 0.5ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 205.1ms

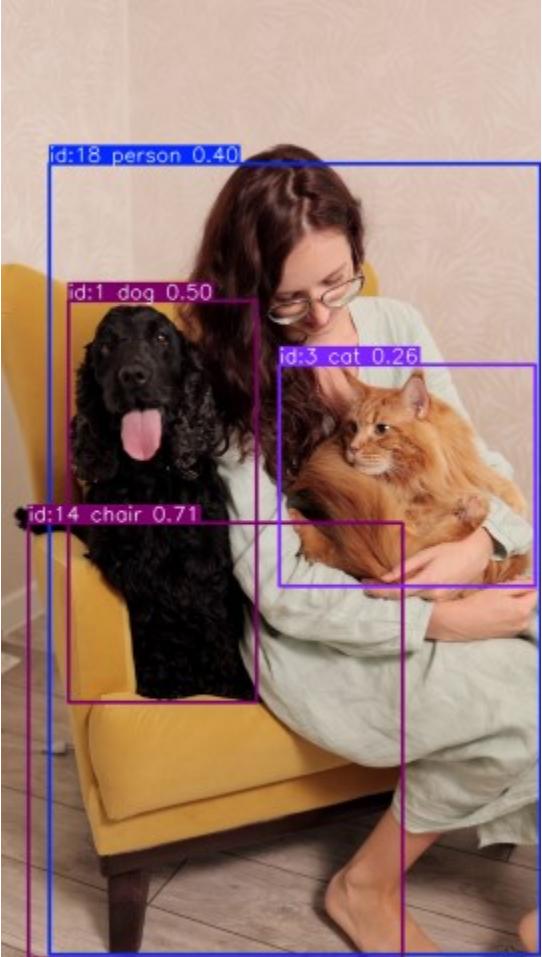
Speed: 5.0ms preprocess, 205.1ms inference, 0.4ms postprocess per image at shape (1,





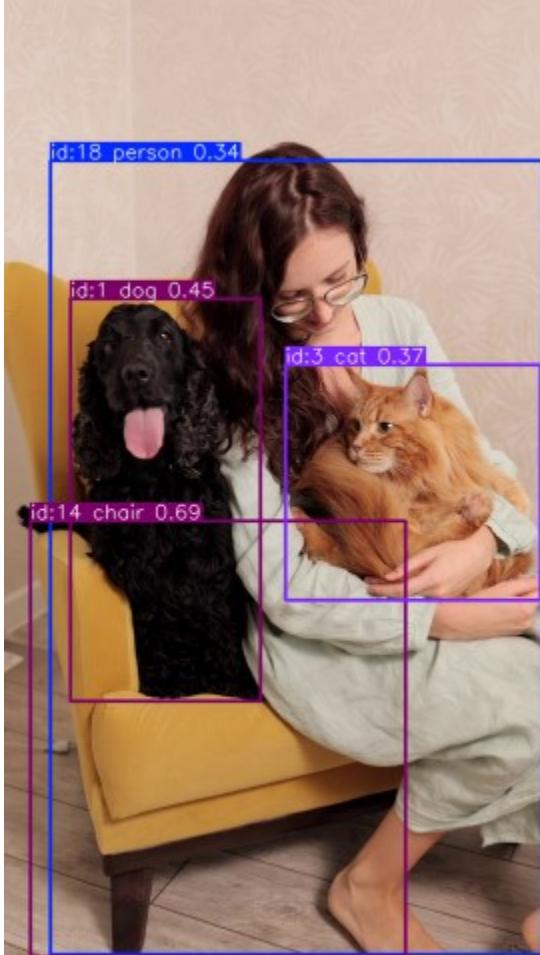
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 239.3ms

Speed: 5.3ms preprocess, 239.3ms inference, 0.4ms postprocess per image at shape (1,



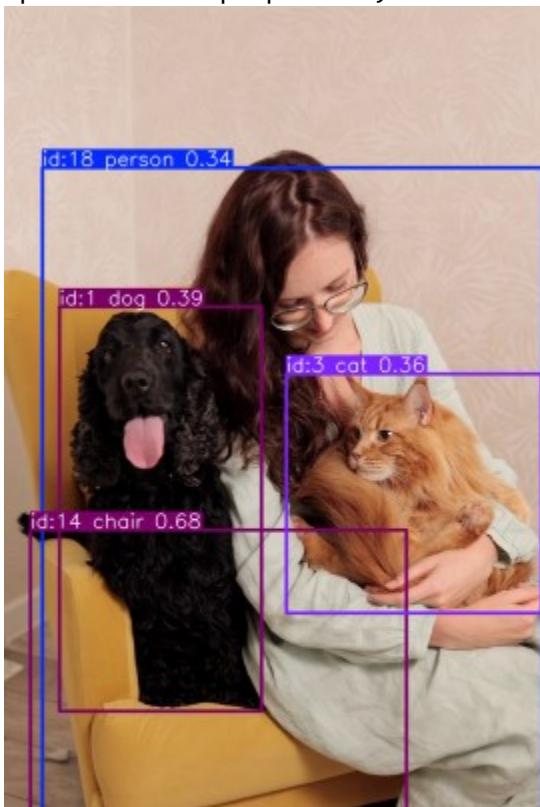
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 194.3ms

Speed: 5.6ms preprocess, 194.3ms inference, 0.4ms postprocess per image at shape (1,



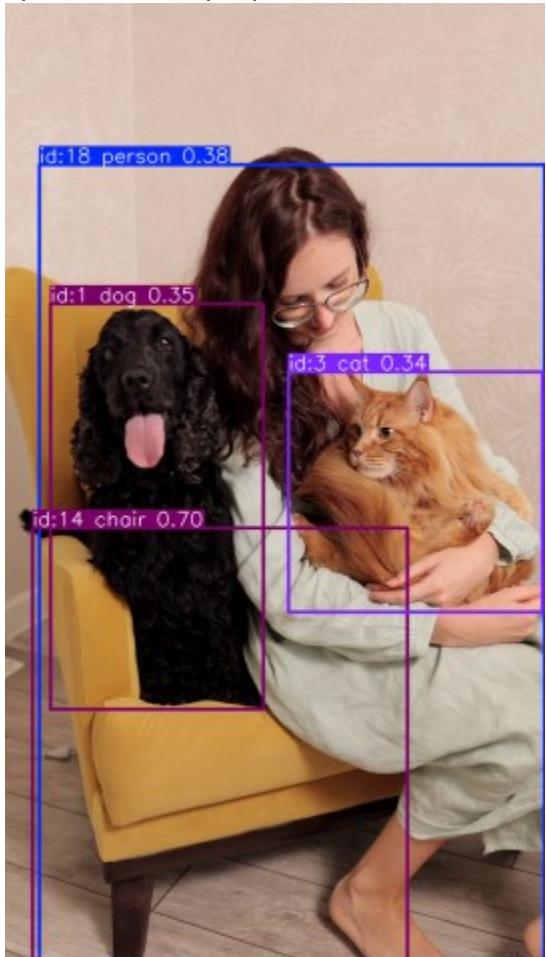
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 189.4ms

Speed: 10.7ms preprocess, 189.4ms inference, 0.4ms postprocess per image at shape (1,

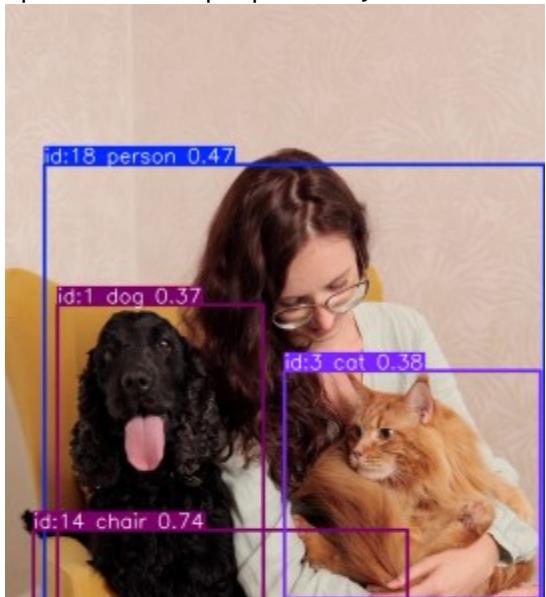




0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 186.3ms
Speed: 5.5ms preprocess, 186.3ms inference, 0.4ms postprocess per image at shape (1,



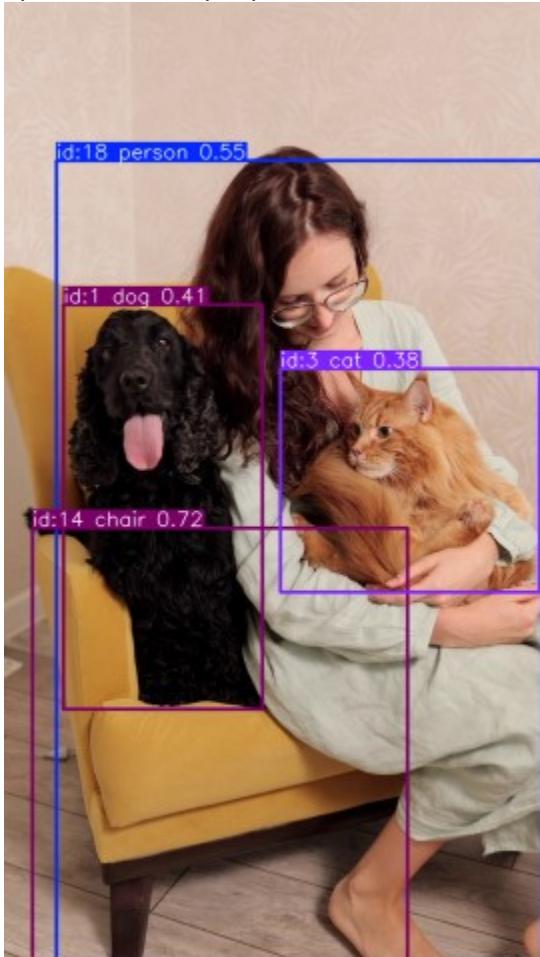
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 187.4ms
Speed: 5.4ms preprocess, 187.4ms inference, 0.4ms postprocess per image at shape (1,





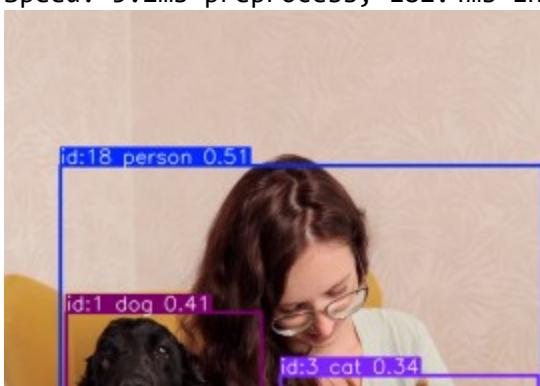
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 210.8ms

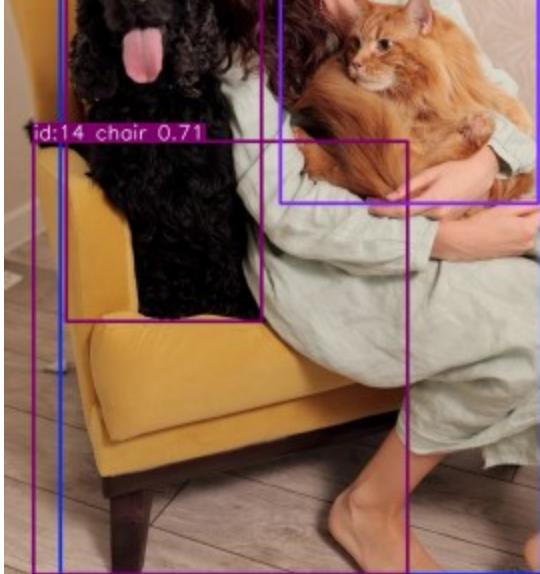
Speed: 5.5ms preprocess, 210.8ms inference, 0.4ms postprocess per image at shape (1,



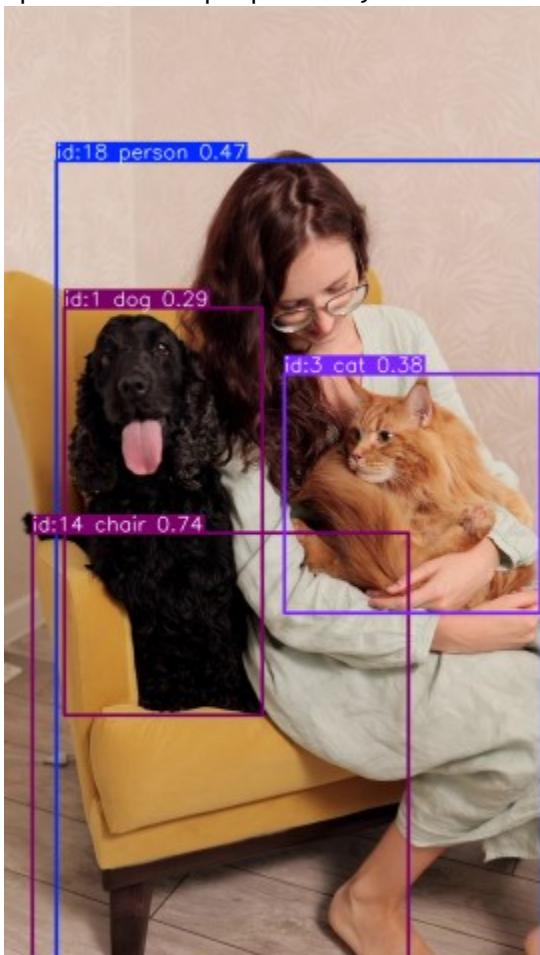
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 182.4ms

Speed: 5.2ms preprocess, 182.4ms inference, 0.4ms postprocess per image at shape (1,

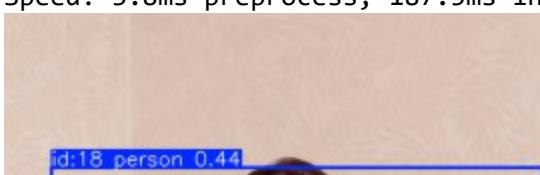


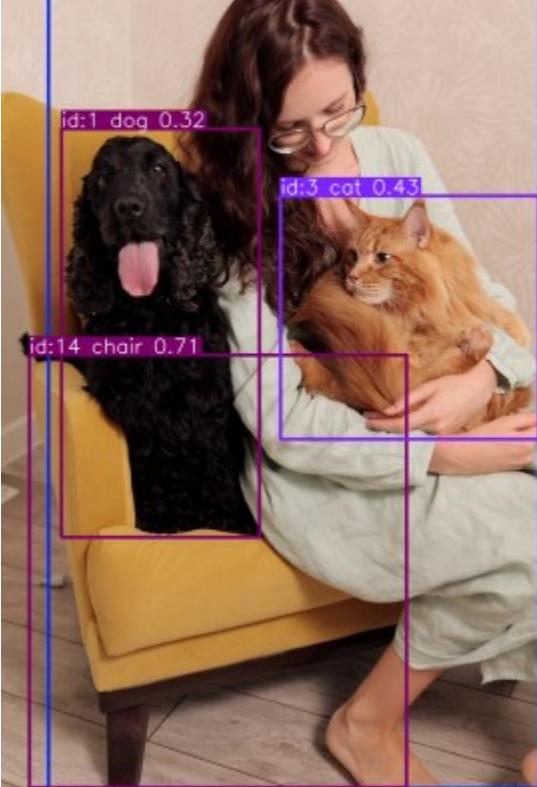


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 190.9ms
Speed: 5.5ms preprocess, 190.9ms inference, 0.4ms postprocess per image at shape (1,



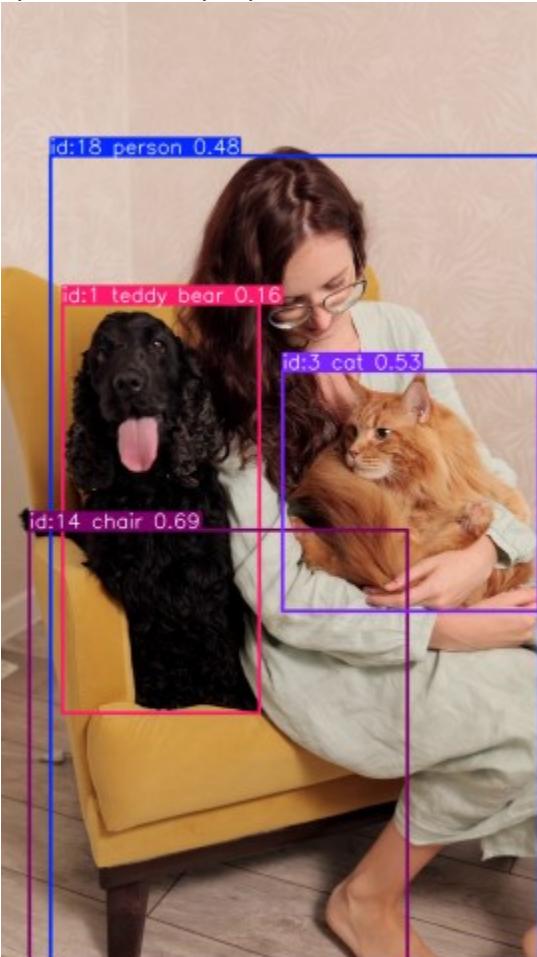
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 187.5ms
Speed: 3.8ms preprocess, 187.5ms inference, 0.4ms postprocess per image at shape (1,





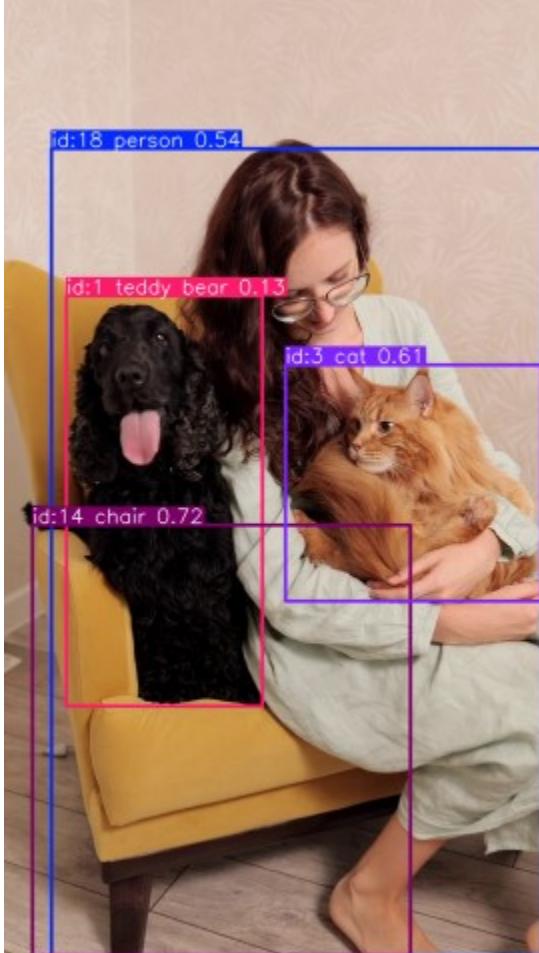
0: 640x384 1 person, 1 cat, 1 chair, 1 teddy bear, 203.5ms

Speed: 3.7ms preprocess, 203.5ms inference, 0.4ms postprocess per image at shape (1,



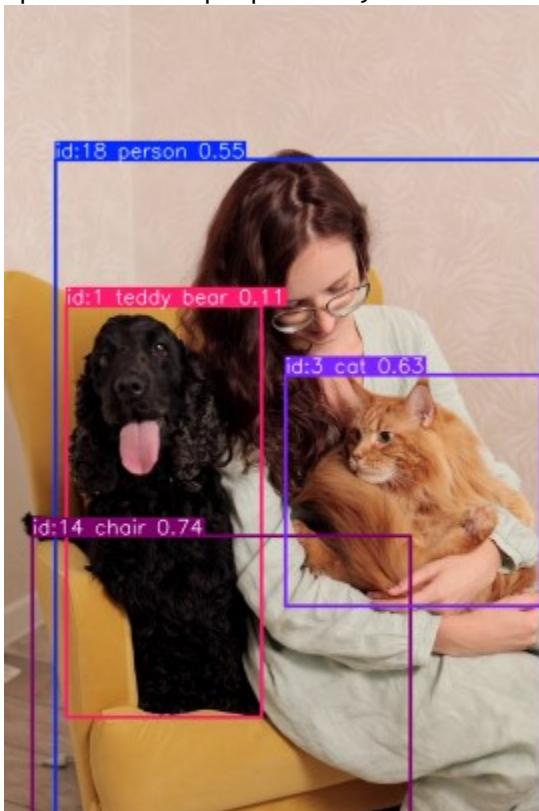
0: 640x384 1 person, 1 cat, 1 chair, 1 teddy bear, 190.2ms

Speed: 5.3ms preprocess, 190.2ms inference, 0.4ms postprocess per image at shape (1,



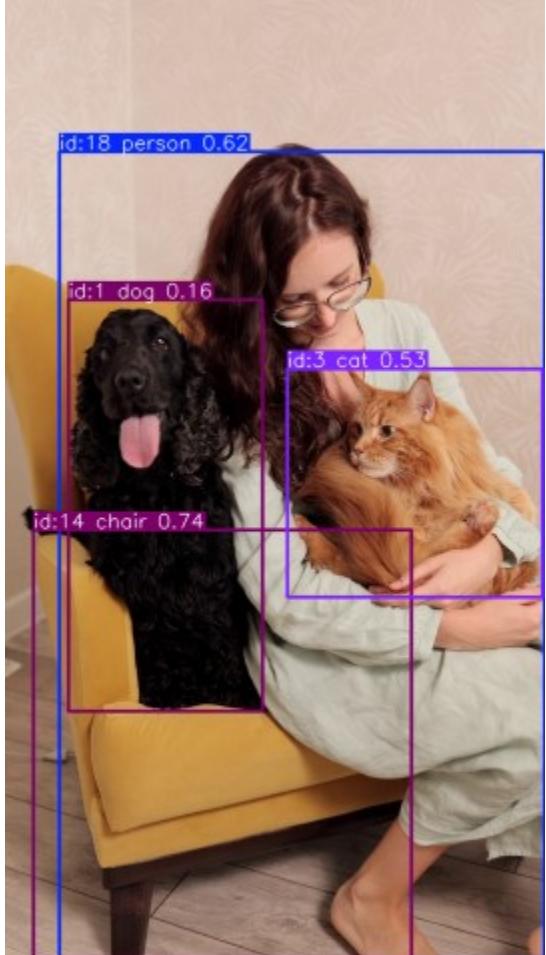
0: 640x384 1 person, 1 cat, 1 chair, 1 teddy bear, 186.7ms

Speed: 5.3ms preprocess, 186.7ms inference, 0.4ms postprocess per image at shape (1,

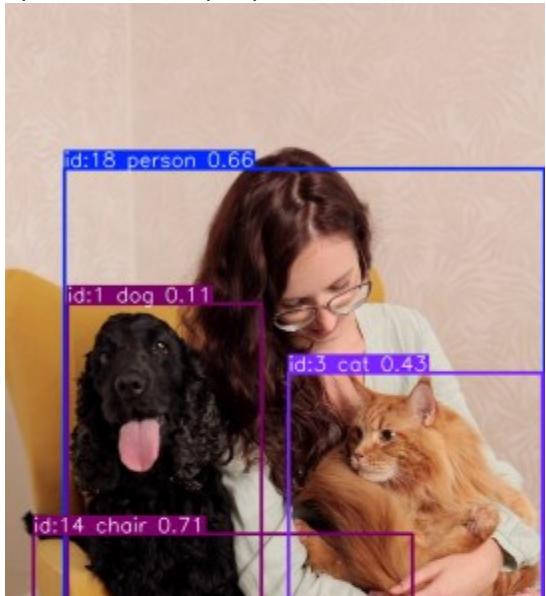




0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 185.0ms
Speed: 8.1ms preprocess, 185.0ms inference, 0.4ms postprocess per image at shape (1,



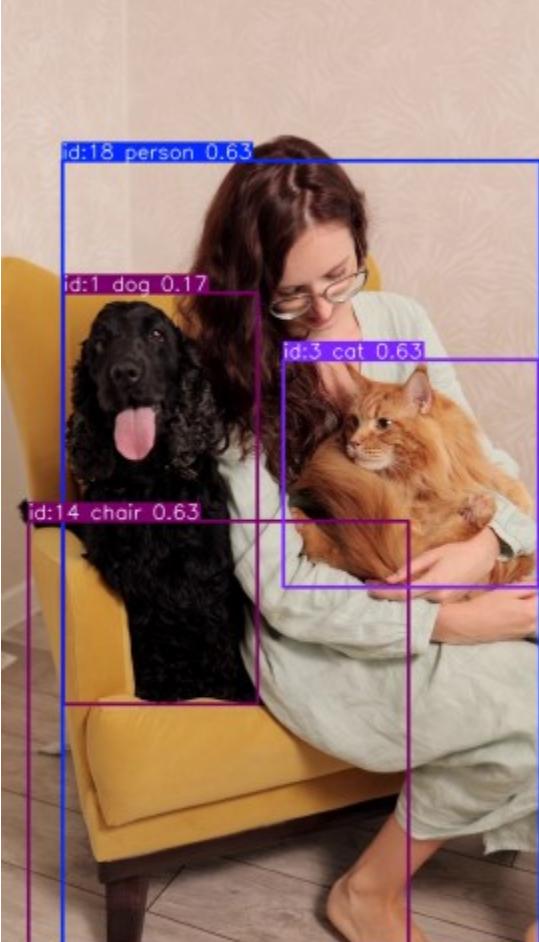
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 207.3ms
Speed: 6.7ms preprocess, 207.3ms inference, 0.4ms postprocess per image at shape (1,





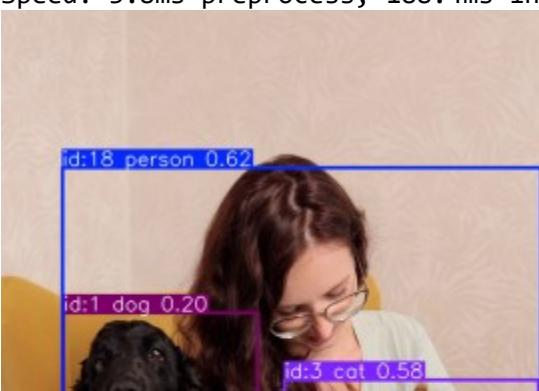
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 197.6ms

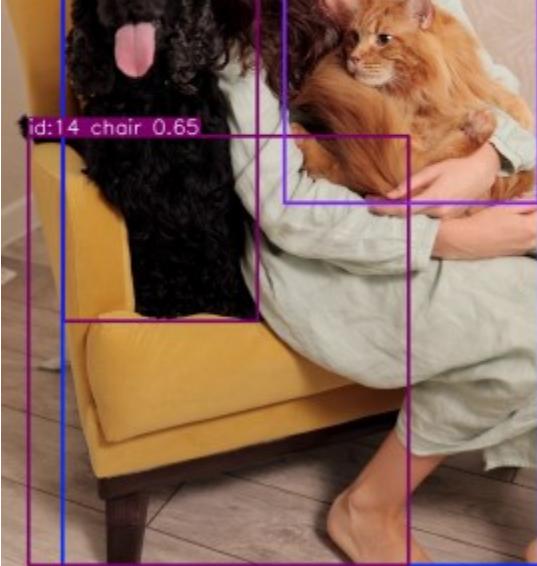
Speed: 5.3ms preprocess, 197.6ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 188.4ms

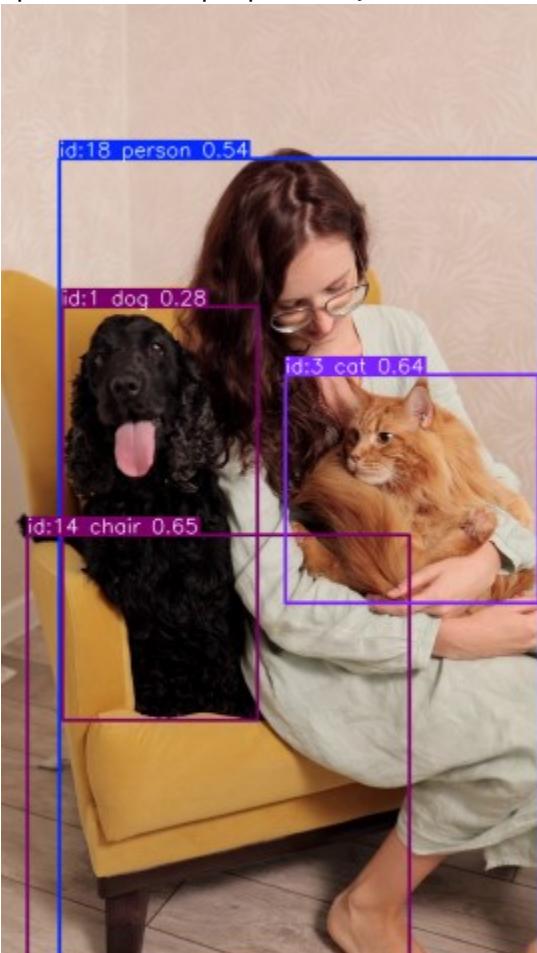
Speed: 3.8ms preprocess, 188.4ms inference, 0.4ms postprocess per image at shape (1,





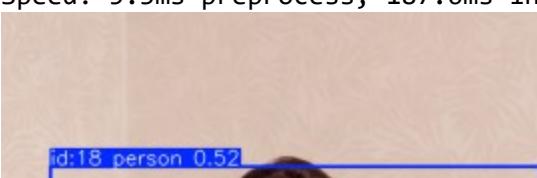
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 181.1ms

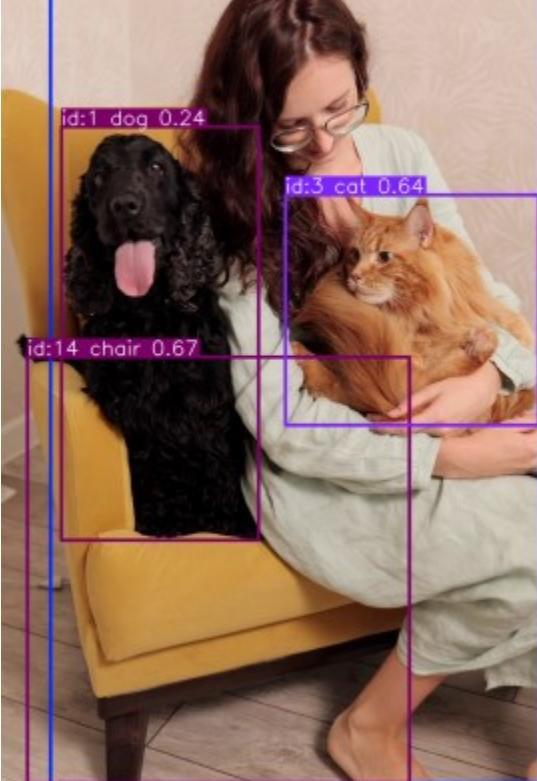
Speed: 4.7ms preprocess, 181.1ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 187.6ms

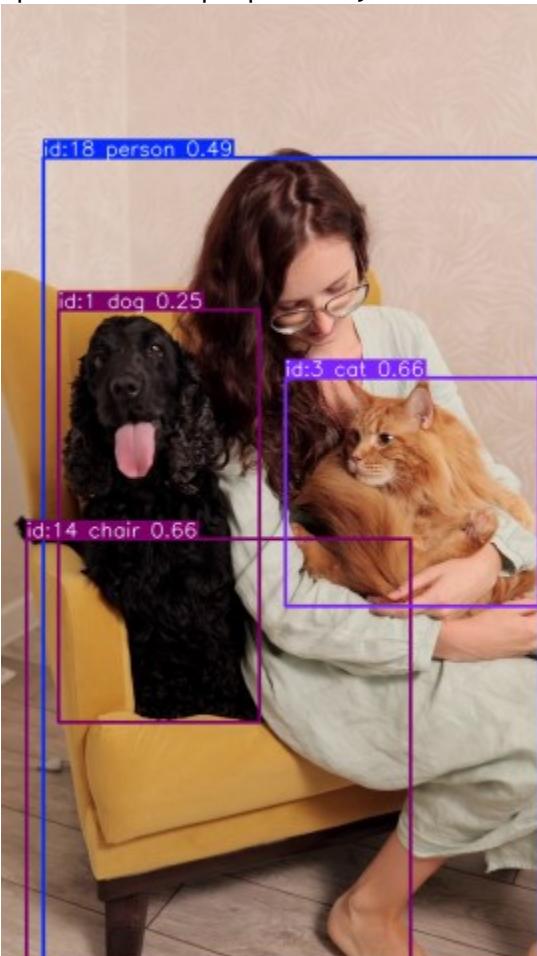
Speed: 5.3ms preprocess, 187.6ms inference, 0.6ms postprocess per image at shape (1,





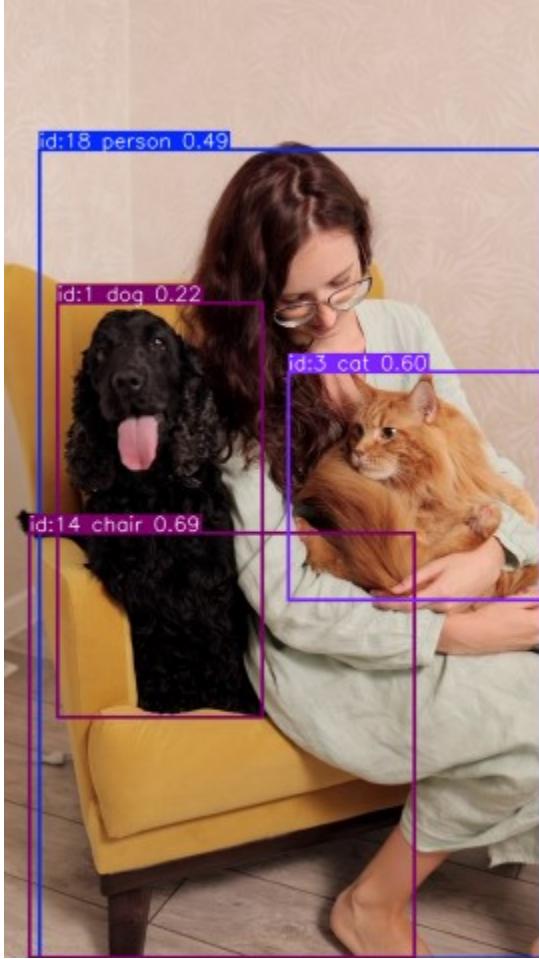
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 172.0ms

Speed: 6.2ms preprocess, 172.0ms inference, 0.4ms postprocess per image at shape (1,



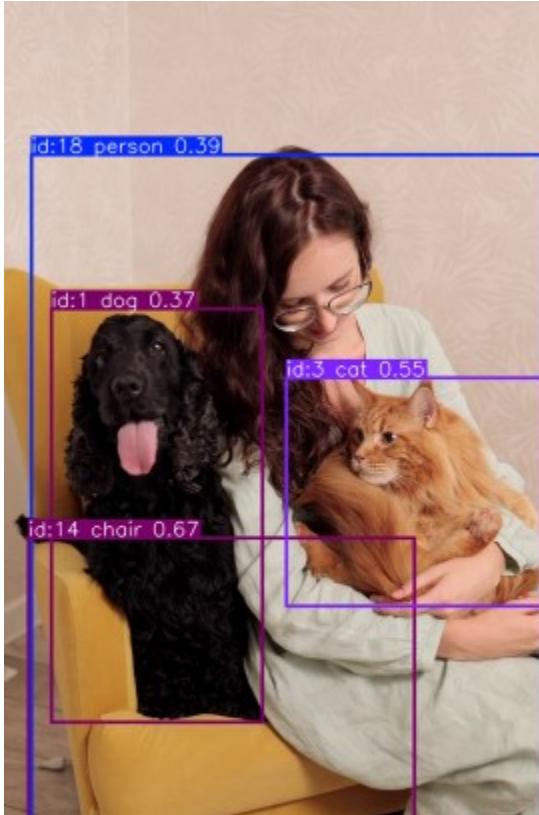
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 181.0ms

Speed: 3.7ms preprocess, 181.0ms inference, 0.4ms postprocess per image at shape (1,



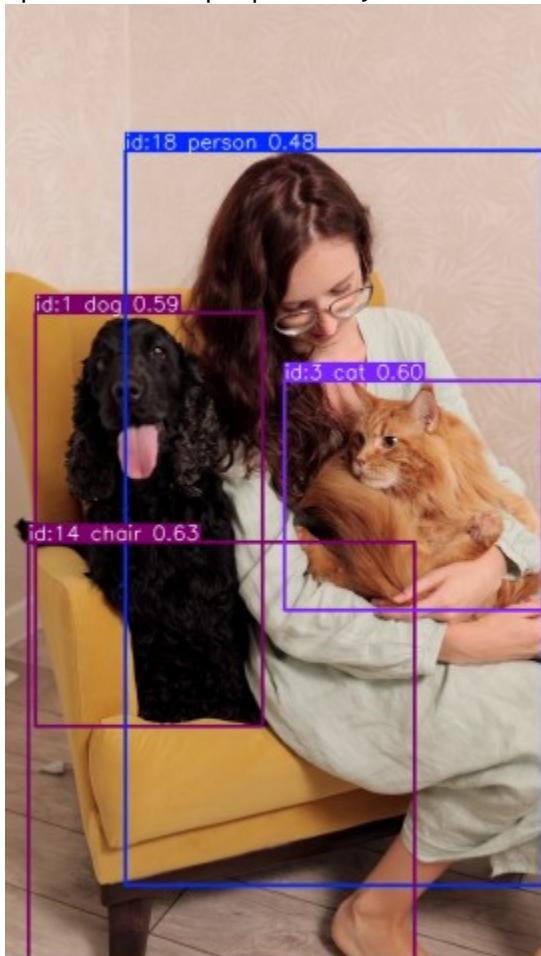
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 190.8ms

Speed: 3.3ms preprocess, 190.8ms inference, 0.4ms postprocess per image at shape (1,

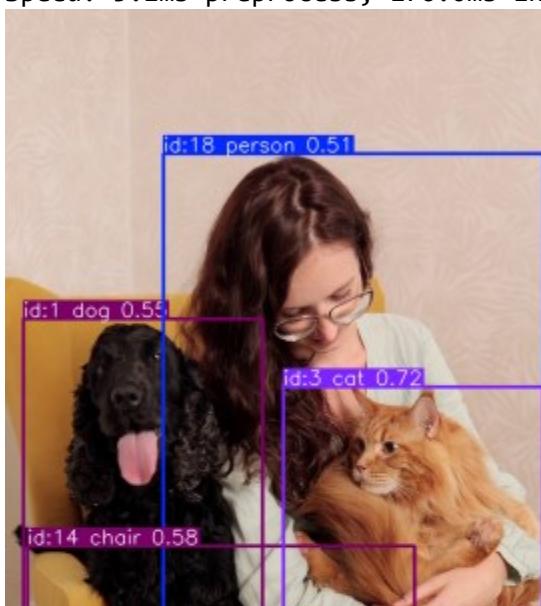




0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 190.4ms
Speed: 5.1ms preprocess, 190.4ms inference, 0.4ms postprocess per image at shape (1,



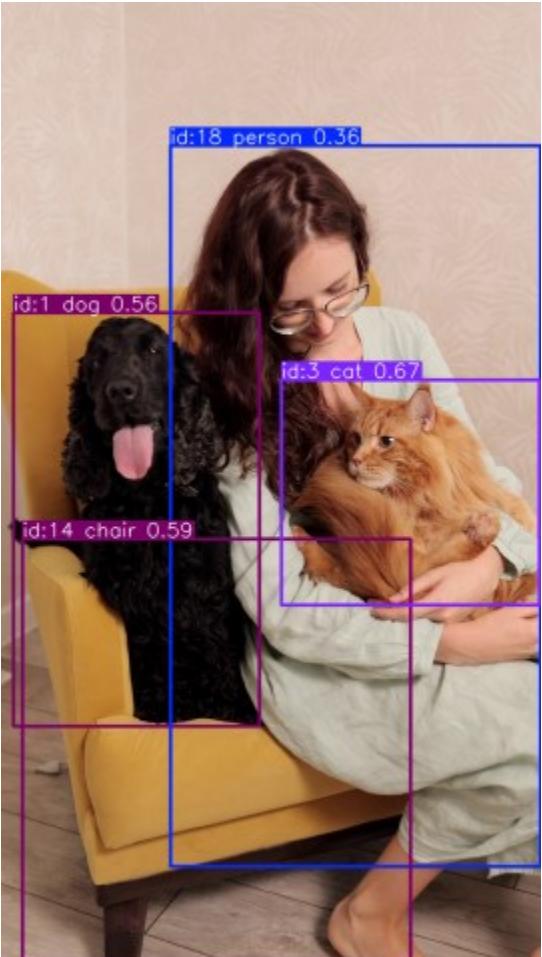
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 176.0ms
Speed: 5.1ms preprocess, 176.0ms inference, 0.4ms postprocess per image at shape (1,





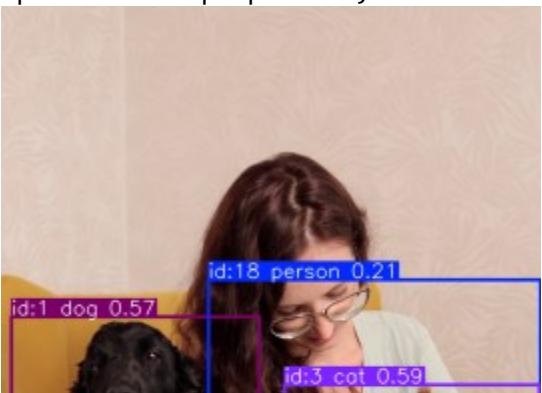
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 186.5ms

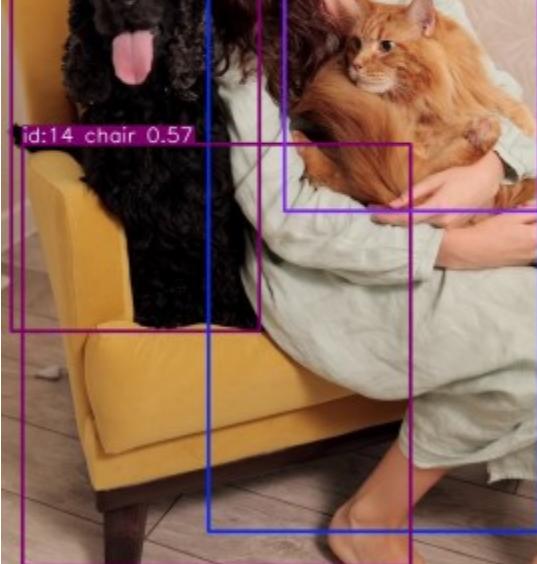
Speed: 6.5ms preprocess, 186.5ms inference, 0.6ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 220.8ms

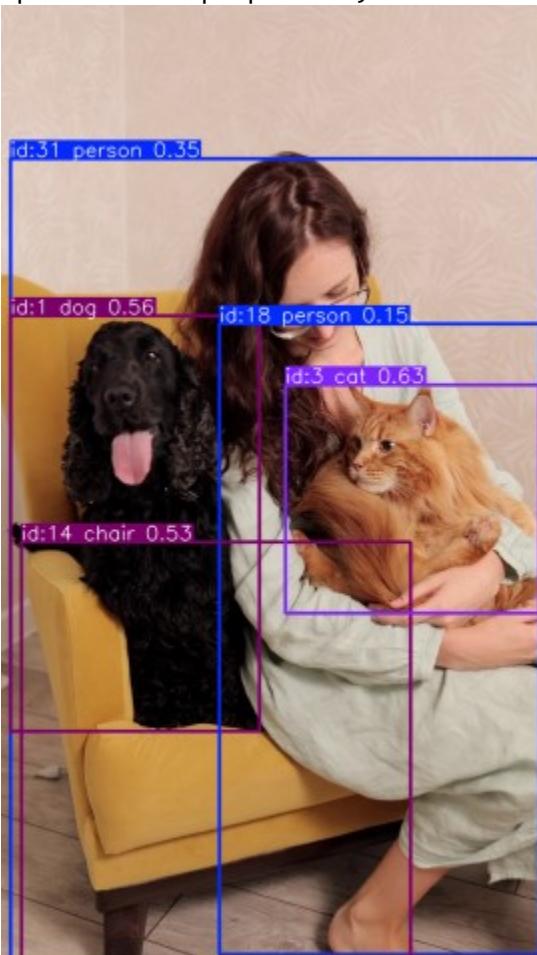
Speed: 8.8ms preprocess, 220.8ms inference, 0.4ms postprocess per image at shape (1,





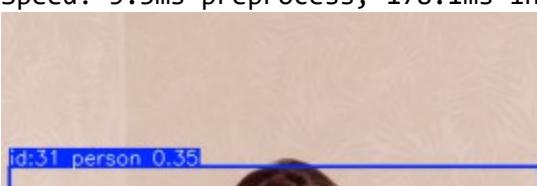
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 181.5ms

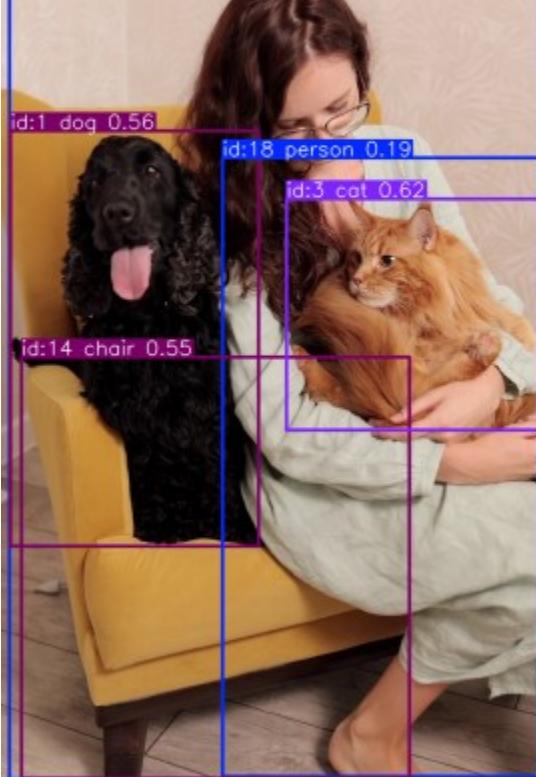
Speed: 5.3ms preprocess, 181.5ms inference, 0.4ms postprocess per image at shape (1,



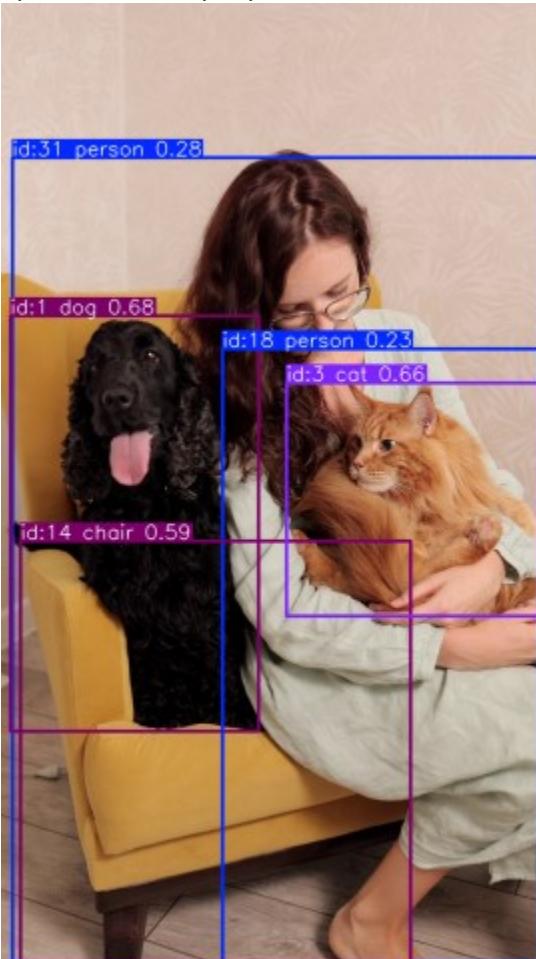
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 178.1ms

Speed: 5.3ms preprocess, 178.1ms inference, 0.4ms postprocess per image at shape (1,



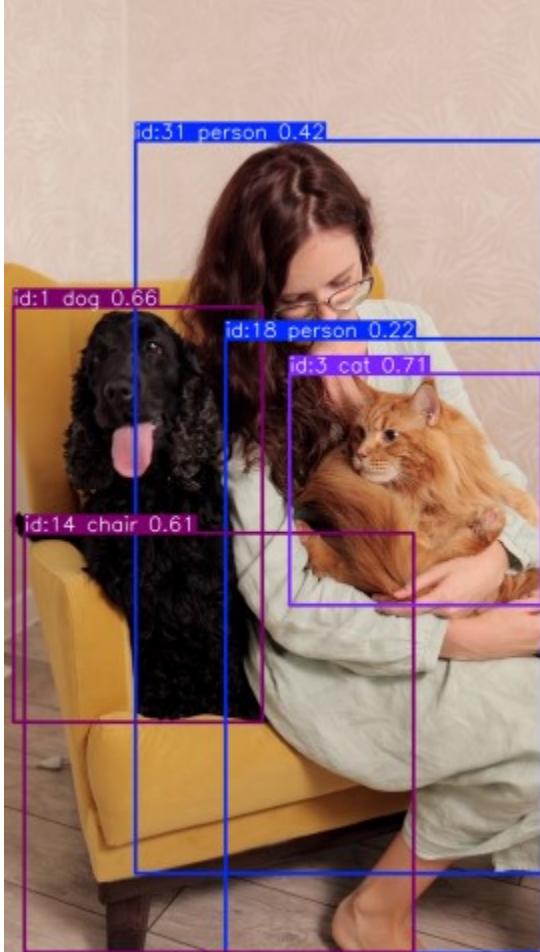


0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 180.9ms
Speed: 5.2ms preprocess, 180.9ms inference, 0.4ms postprocess per image at shape (1,



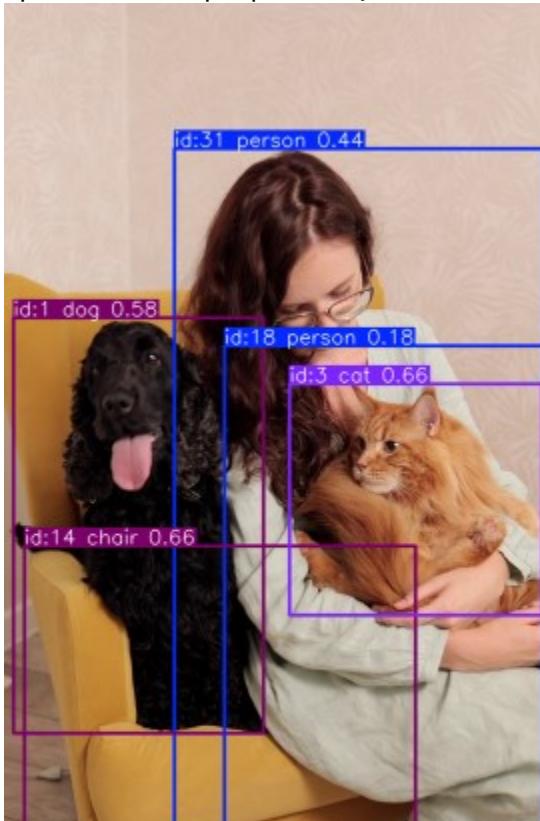
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 195.7ms

Speed: 5.3ms preprocess, 195.7ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 181.6ms

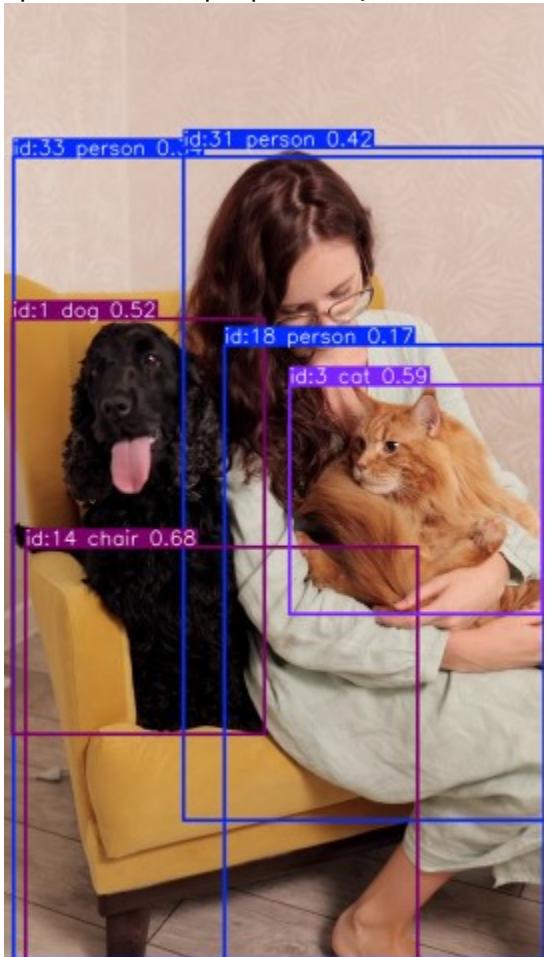
Speed: 5.5ms preprocess, 181.6ms inference, 0.4ms postprocess per image at shape (1,





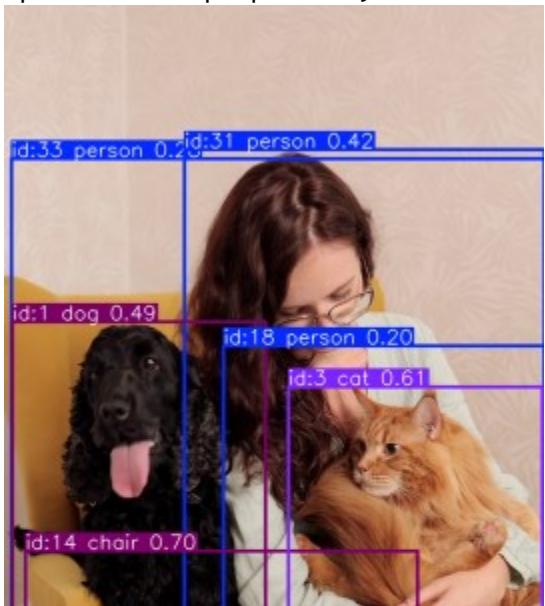
0: 640x384 3 persons, 1 cat, 1 dog, 1 chair, 178.5ms

Speed: 4.0ms preprocess, 178.5ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 3 persons, 1 cat, 1 dog, 1 chair, 180.4ms

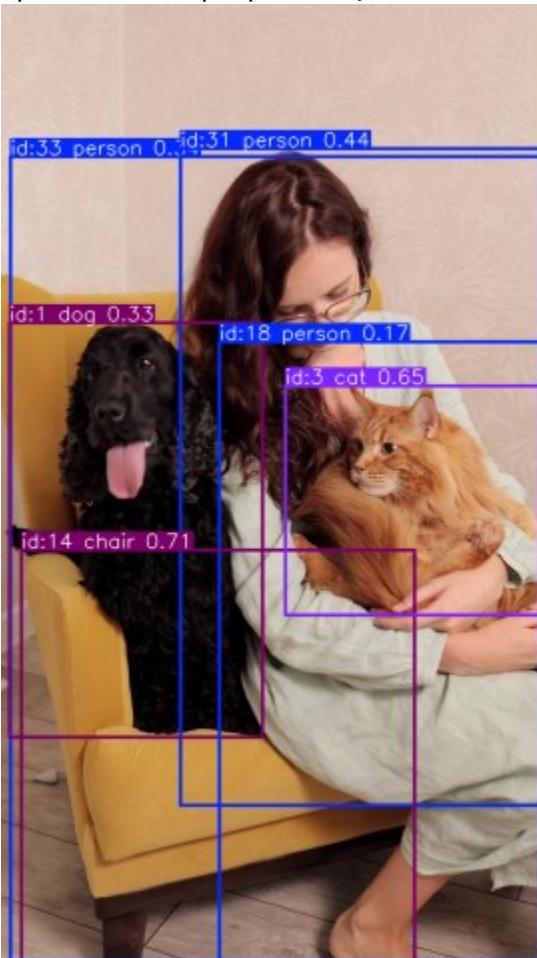
Speed: 5.4ms preprocess, 180.4ms inference, 0.4ms postprocess per image at shape (1,





0: 640x384 3 persons, 1 cat, 1 dog, 1 chair, 199.7ms

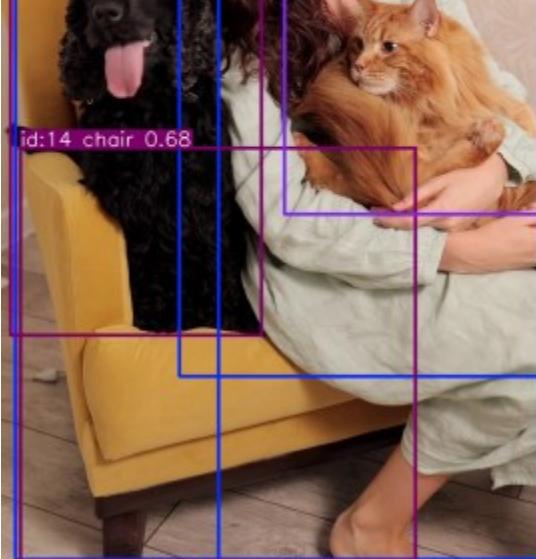
Speed: 5.3ms preprocess, 199.7ms inference, 0.4ms postprocess per image at shape (1,



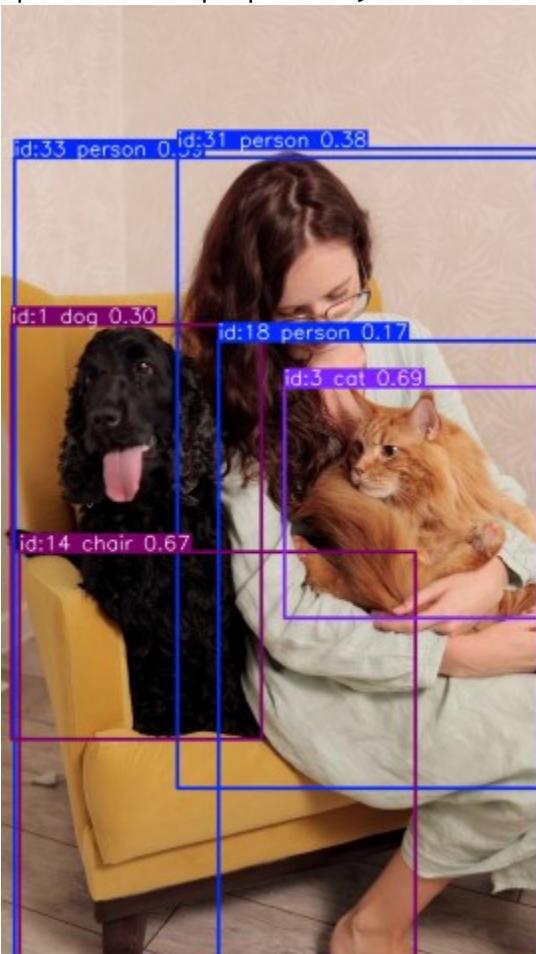
0: 640x384 3 persons, 1 cat, 1 dog, 1 chair, 171.1ms

Speed: 6.0ms preprocess, 171.1ms inference, 0.4ms postprocess per image at shape (1,

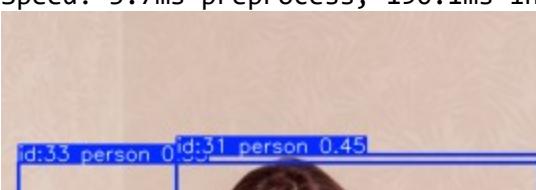


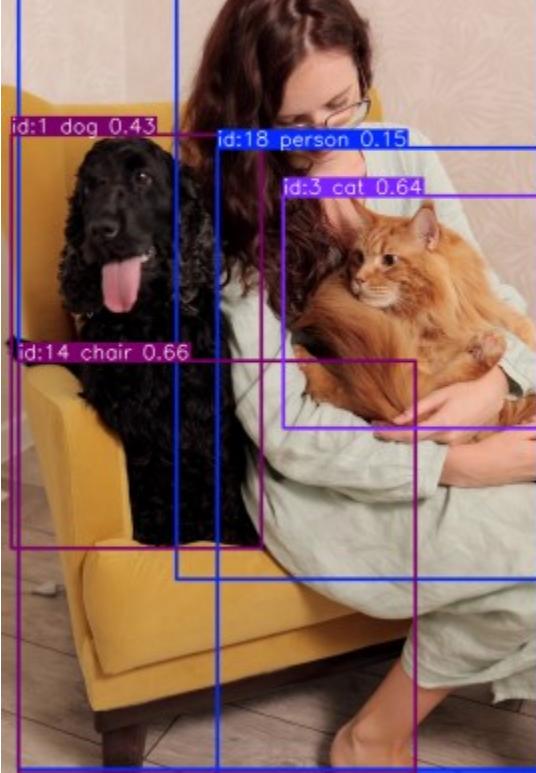


0: 640x384 3 persons, 1 cat, 1 dog, 1 chair, 181.3ms
Speed: 3.8ms preprocess, 181.3ms inference, 0.4ms postprocess per image at shape (1,



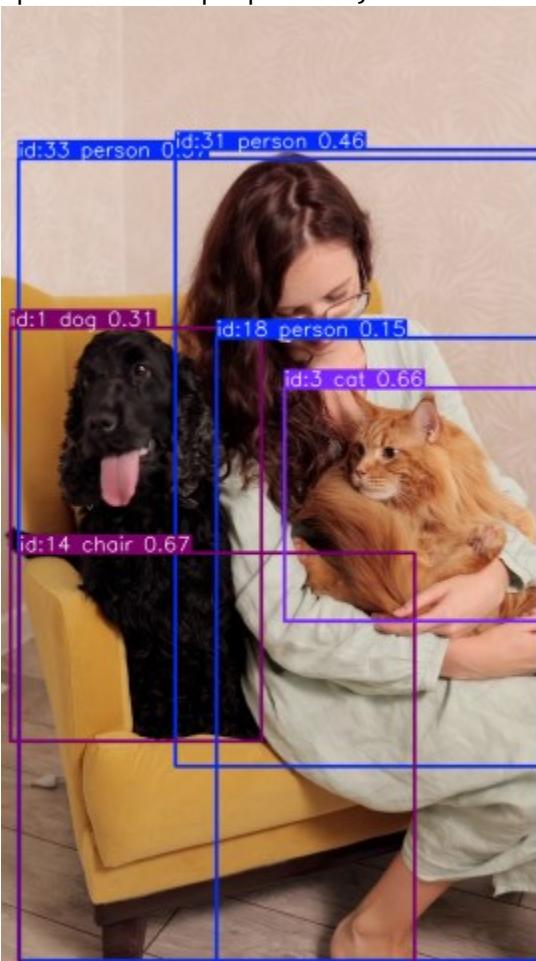
0: 640x384 3 persons, 1 cat, 1 dog, 1 chair, 190.1ms
Speed: 3.7ms preprocess, 190.1ms inference, 0.4ms postprocess per image at shape (1,





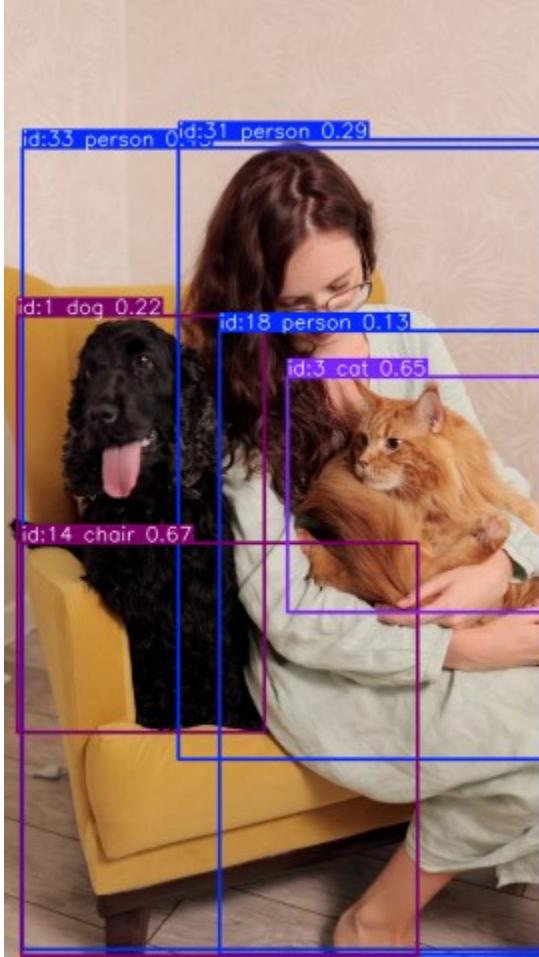
0: 640x384 3 persons, 1 cat, 1 dog, 1 chair, 199.4ms

Speed: 5.3ms preprocess, 199.4ms inference, 0.4ms postprocess per image at shape (1,



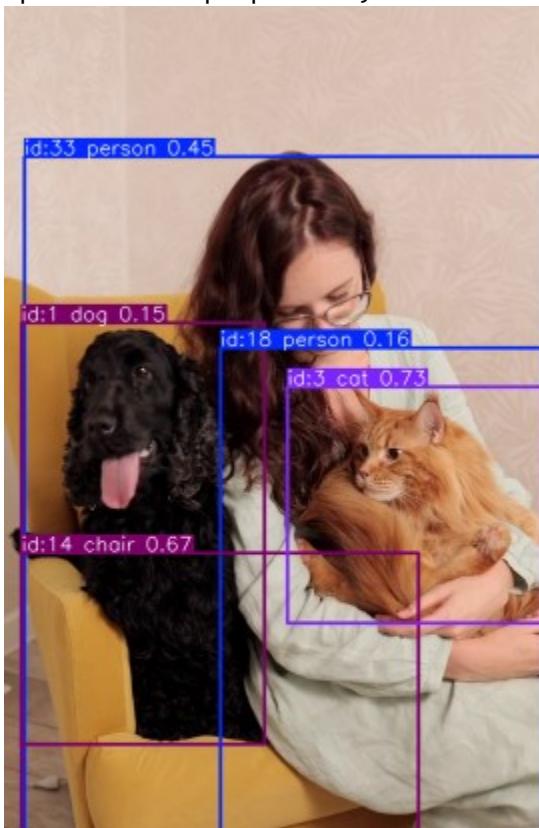
0: 640x384 3 persons, 1 cat, 1 dog, 1 chair, 200.1ms

Speed: 5.3ms preprocess, 200.1ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 206.1ms

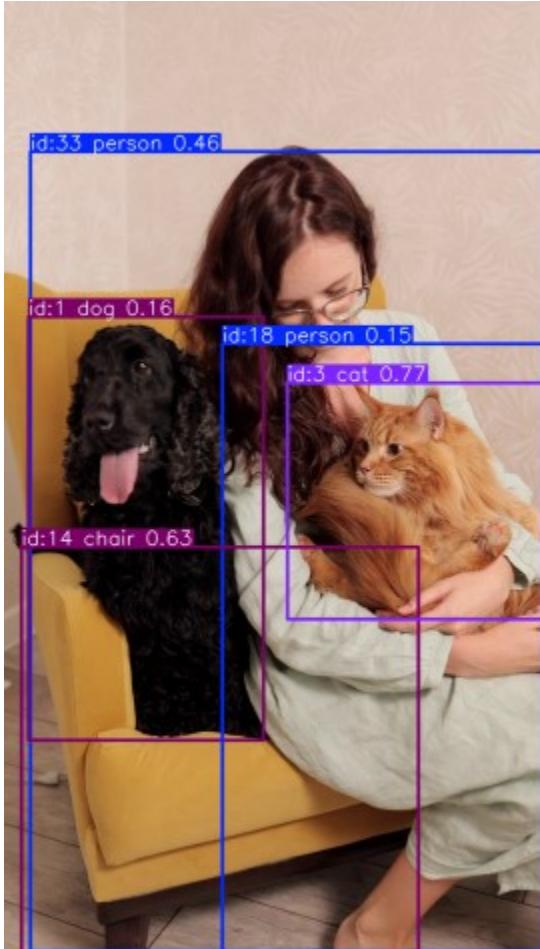
Speed: 5.3ms preprocess, 206.1ms inference, 0.4ms postprocess per image at shape (1,





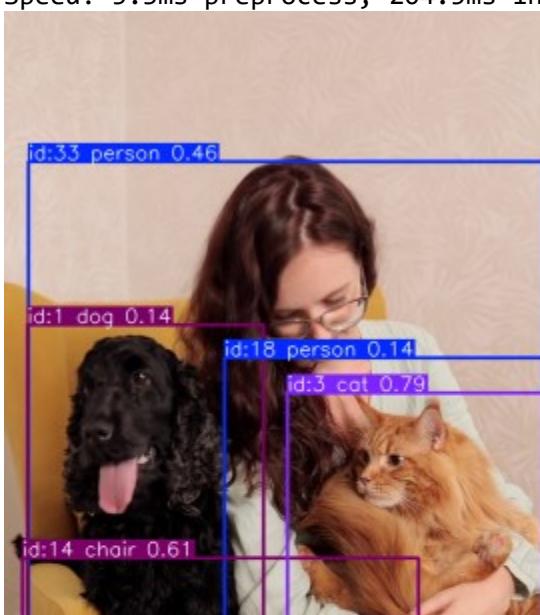
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 183.2ms

Speed: 6.5ms preprocess, 183.2ms inference, 0.4ms postprocess per image at shape (1,



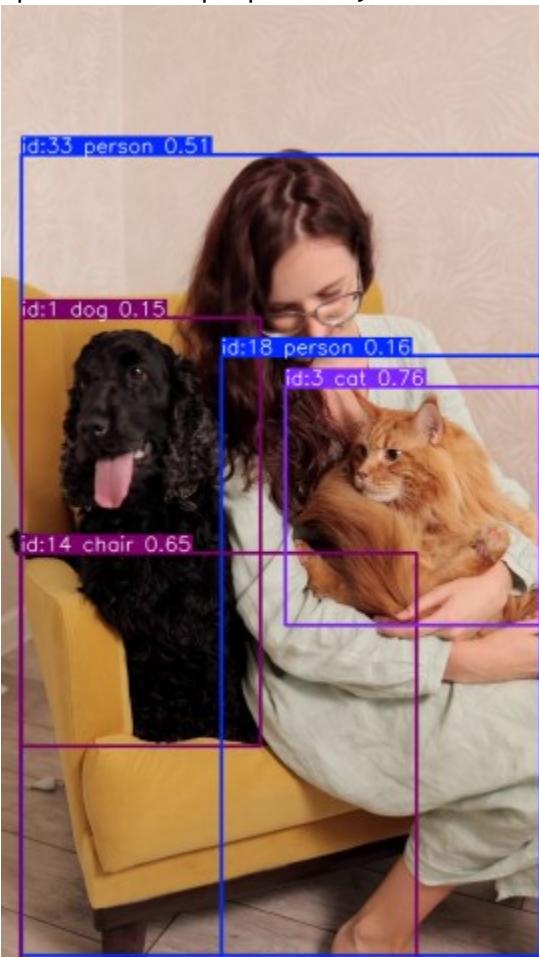
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 204.5ms

Speed: 5.3ms preprocess, 204.5ms inference, 0.4ms postprocess per image at shape (1,

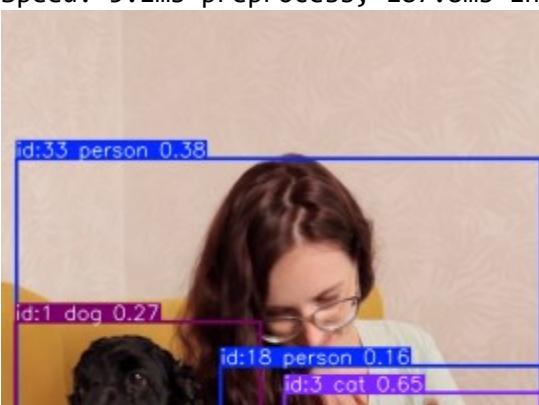


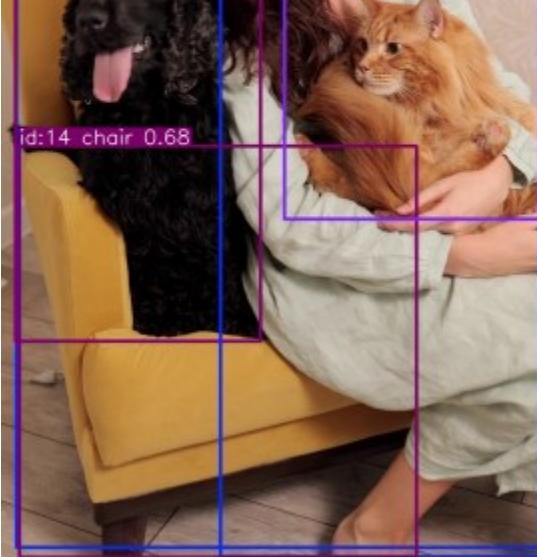


0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 182.7ms
Speed: 5.2ms preprocess, 182.7ms inference, 0.5ms postprocess per image at shape (1,



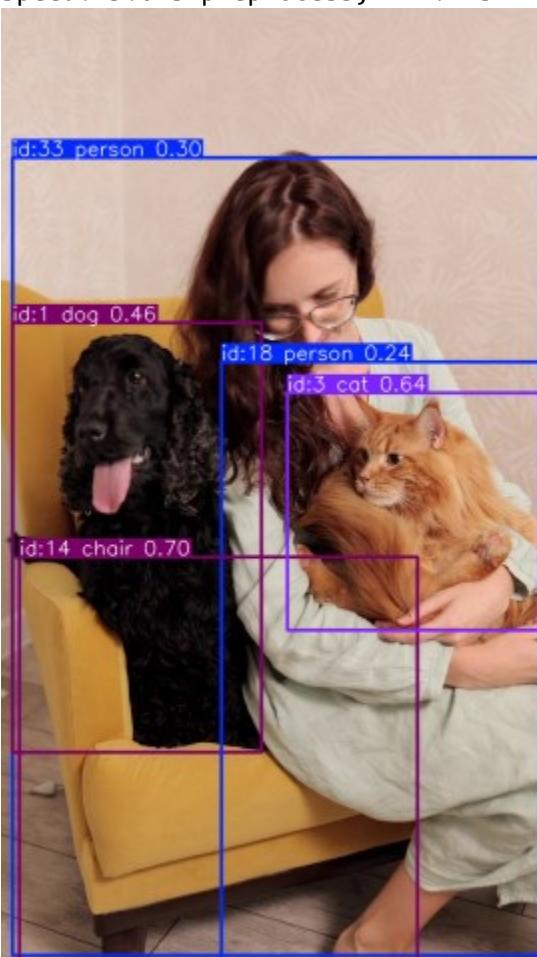
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 187.8ms
Speed: 5.1ms preprocess, 187.8ms inference, 0.4ms postprocess per image at shape (1,





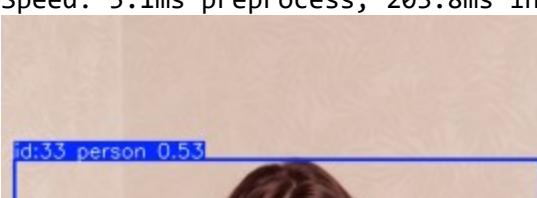
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 197.9ms

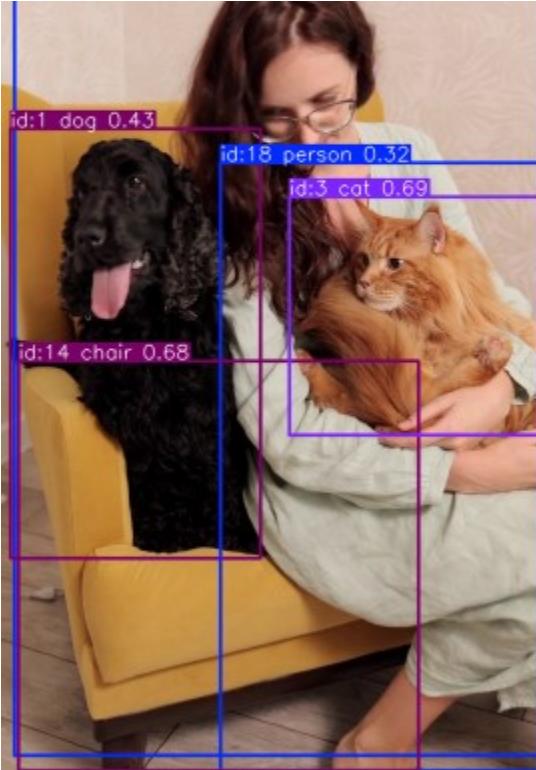
Speed: 5.0ms preprocess, 197.9ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 203.8ms

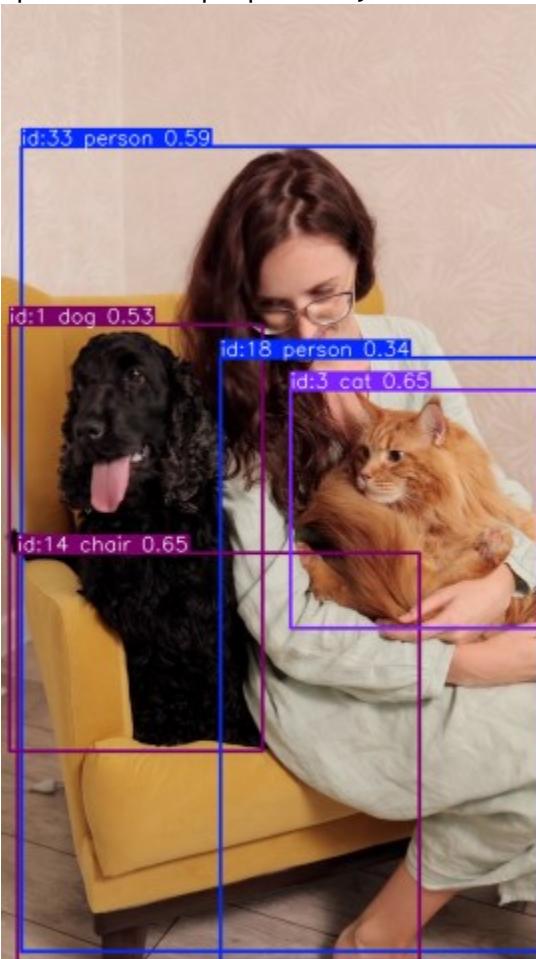
Speed: 5.1ms preprocess, 203.8ms inference, 0.4ms postprocess per image at shape (1,





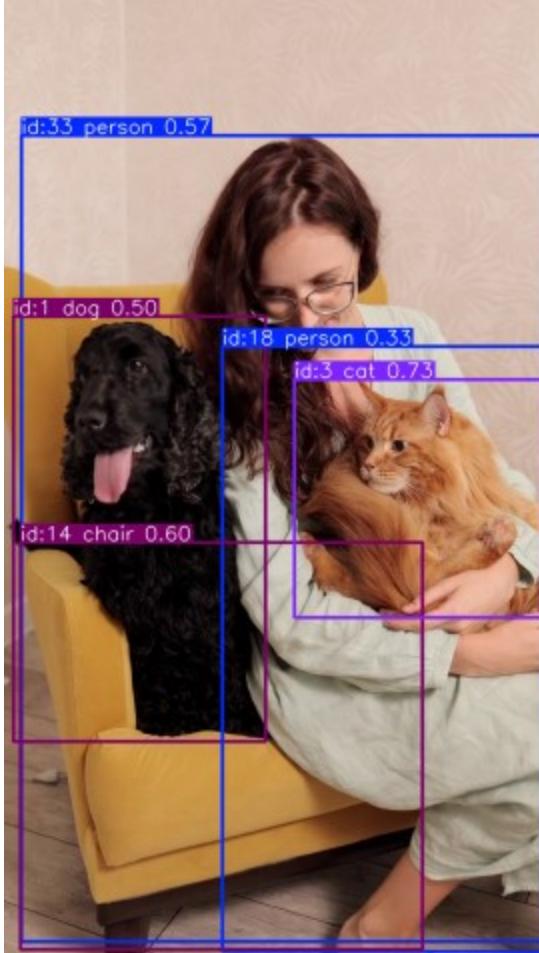
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 187.4ms

Speed: 5.3ms preprocess, 187.4ms inference, 0.4ms postprocess per image at shape (1,



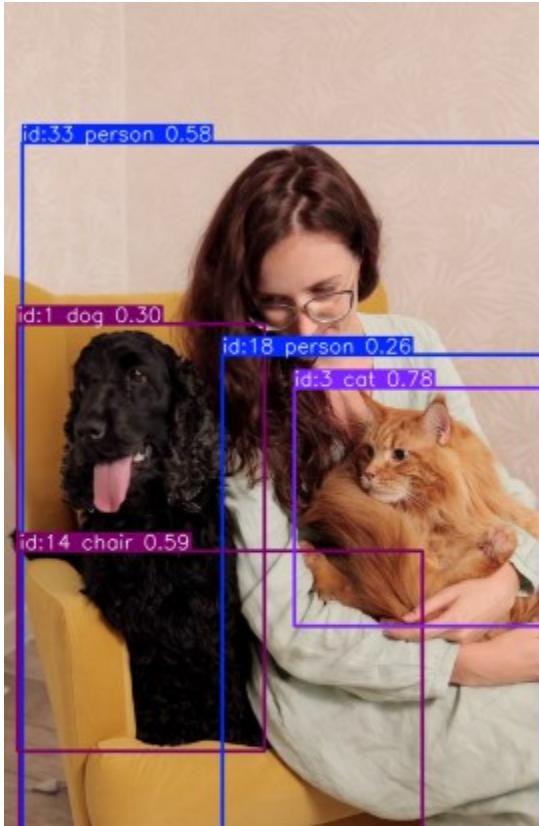
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 179.7ms

Speed: 5.5ms preprocess, 179.7ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 208.6ms

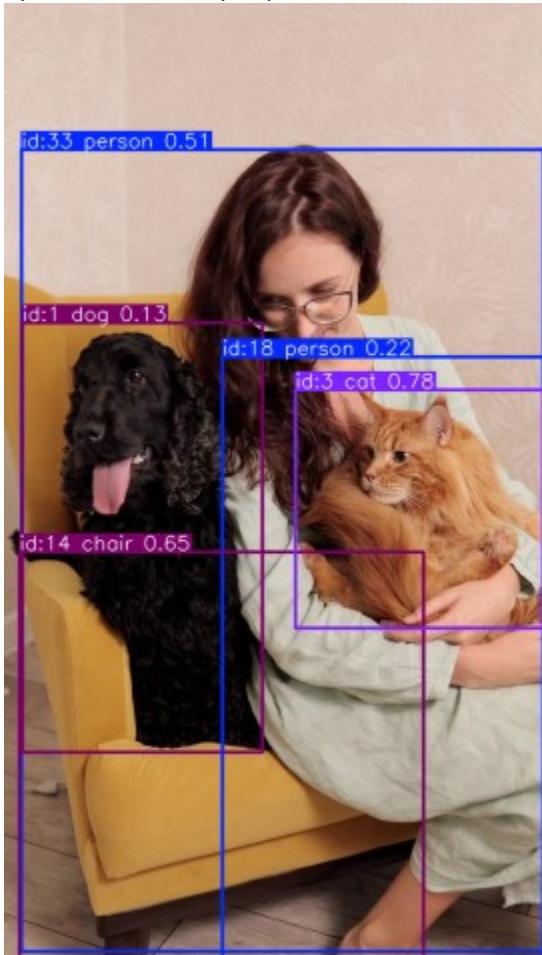
Speed: 5.2ms preprocess, 208.6ms inference, 0.4ms postprocess per image at shape (1,





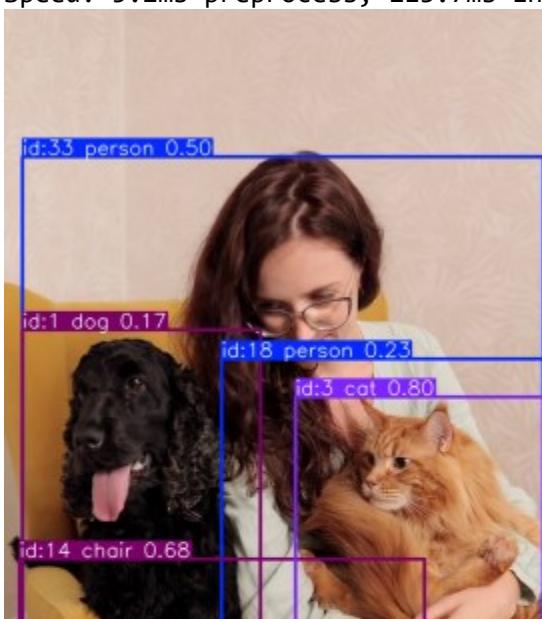
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 214.8ms

Speed: 10.1ms preprocess, 214.8ms inference, 0.4ms postprocess per image at shape (1,



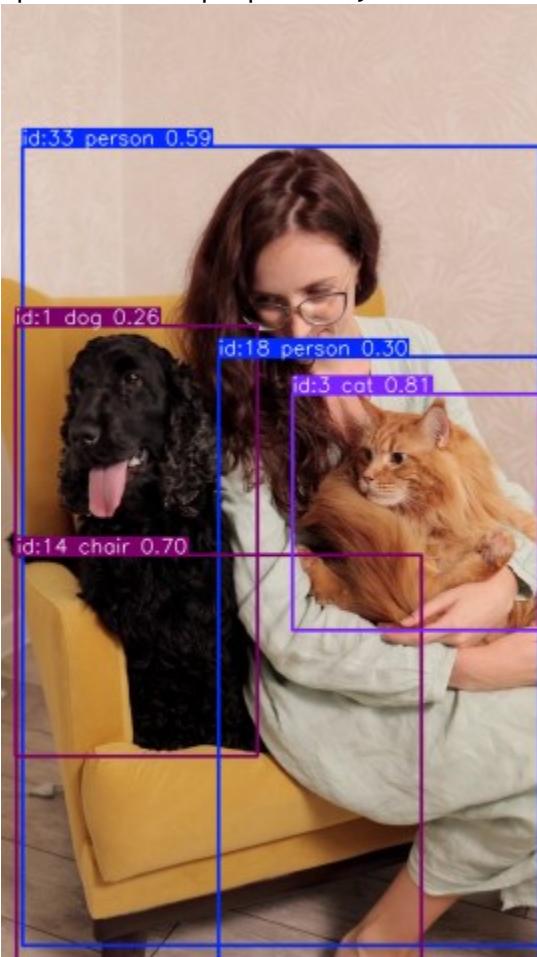
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 213.7ms

Speed: 5.2ms preprocess, 213.7ms inference, 0.4ms postprocess per image at shape (1,

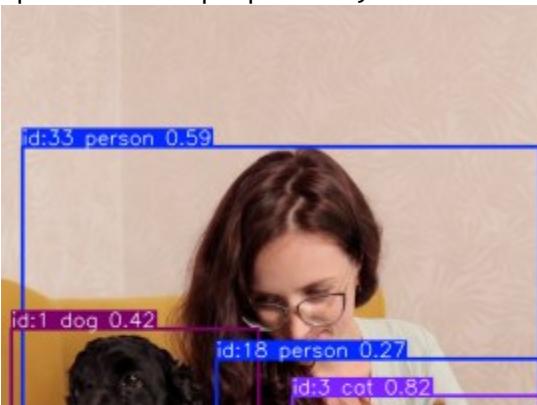


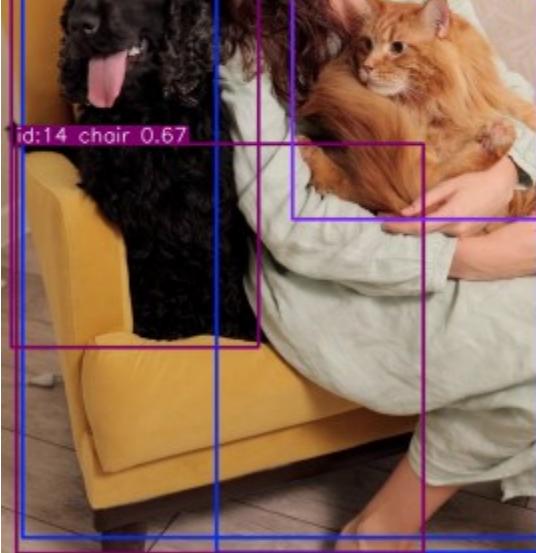


0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 205.4ms
Speed: 5.0ms preprocess, 205.4ms inference, 0.4ms postprocess per image at shape (1,

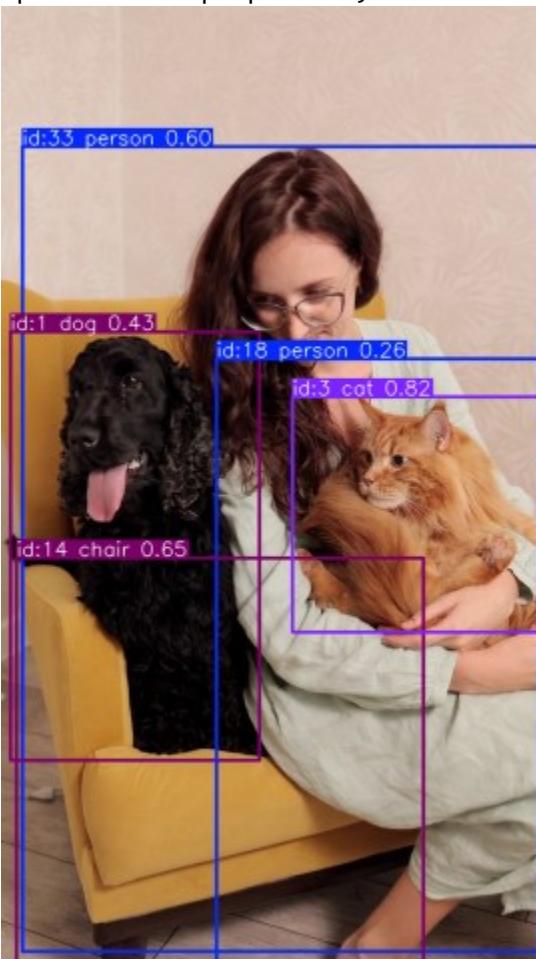


0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 211.4ms
Speed: 6.7ms preprocess, 211.4ms inference, 0.6ms postprocess per image at shape (1,

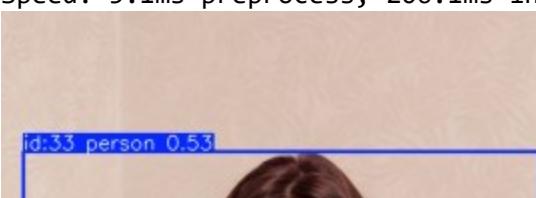


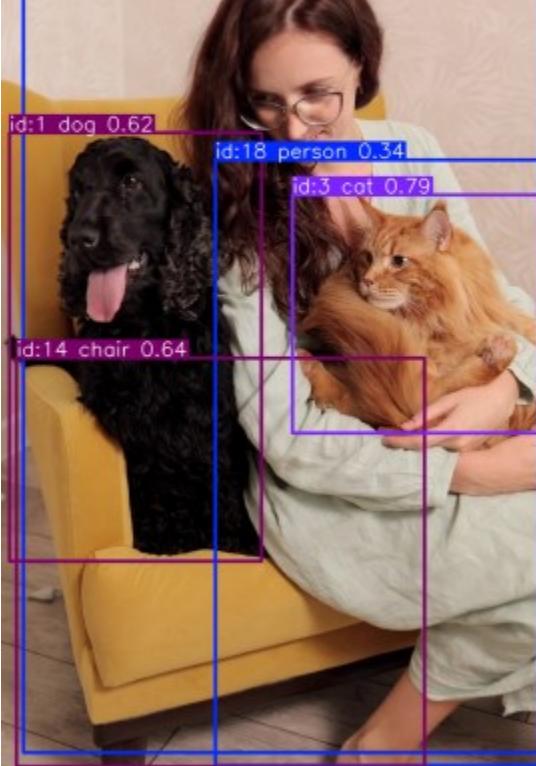


0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 209.5ms
Speed: 4.9ms preprocess, 209.5ms inference, 0.6ms postprocess per image at shape (1,



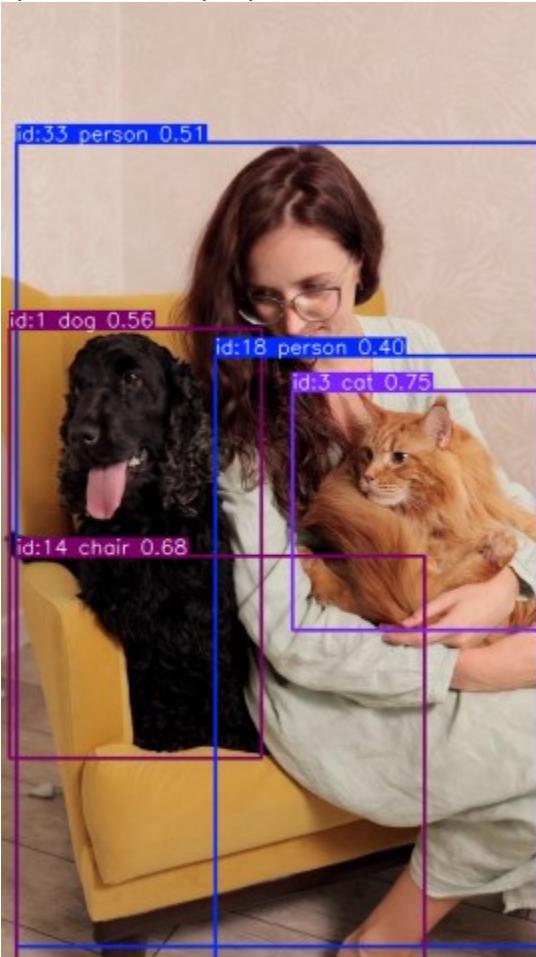
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 206.1ms
Speed: 5.1ms preprocess, 206.1ms inference, 0.5ms postprocess per image at shape (1,





0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 193.0ms

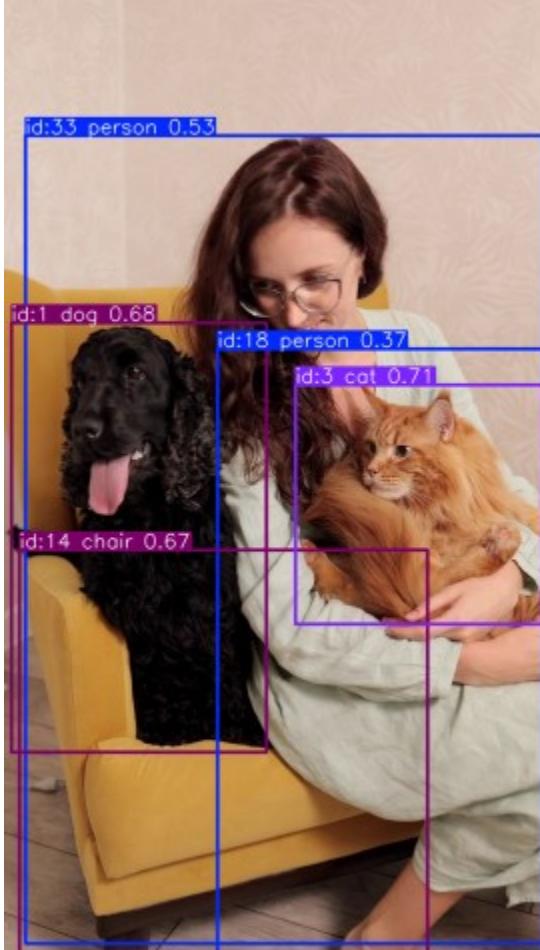
Speed: 5.4ms preprocess, 193.0ms inference, 0.6ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 200.0ms

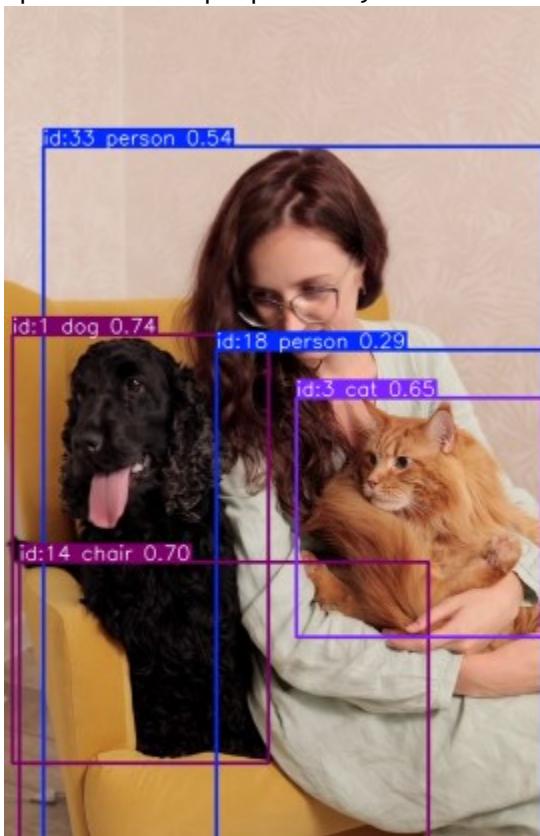
Speed: 5.4ms preprocess, 200.0ms inference, 0.5ms postprocess per image at shape (1,

Speed: 5.4ms preprocess, 200.0ms inference, 0.5ms postprocess per image at shape (1,



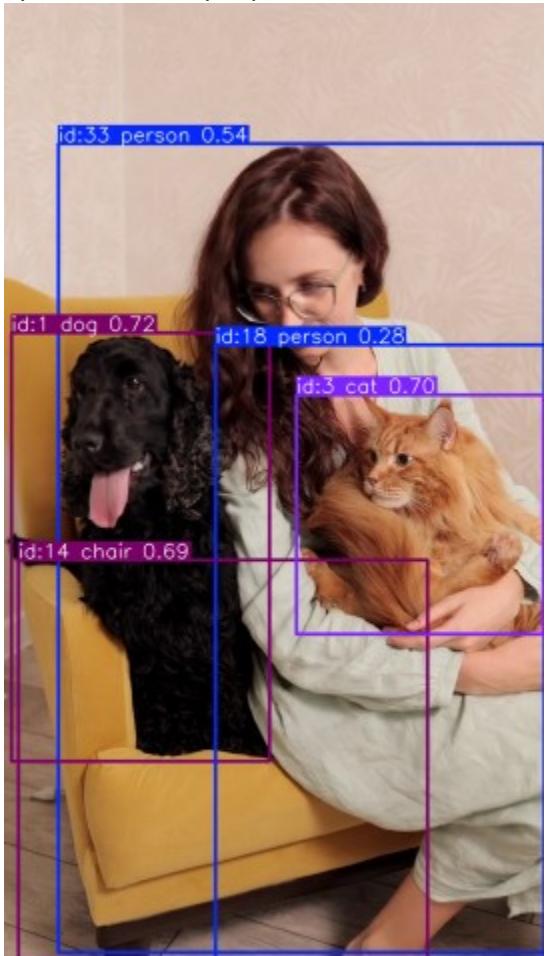
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 182.6ms

Speed: 5.5ms preprocess, 182.6ms inference, 0.5ms postprocess per image at shape (1,

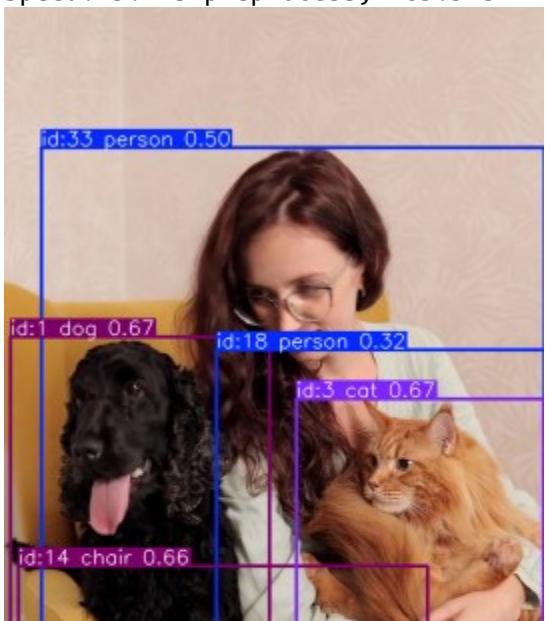




0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 179.3ms
Speed: 5.3ms preprocess, 179.3ms inference, 0.4ms postprocess per image at shape (1,



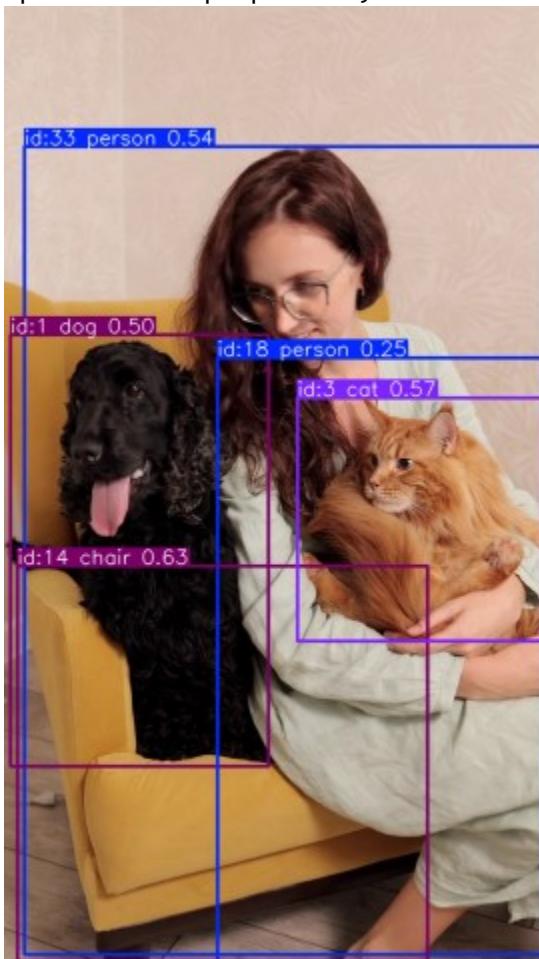
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 185.5ms
Speed: 5.1ms preprocess, 185.5ms inference, 0.4ms postprocess per image at shape (1,





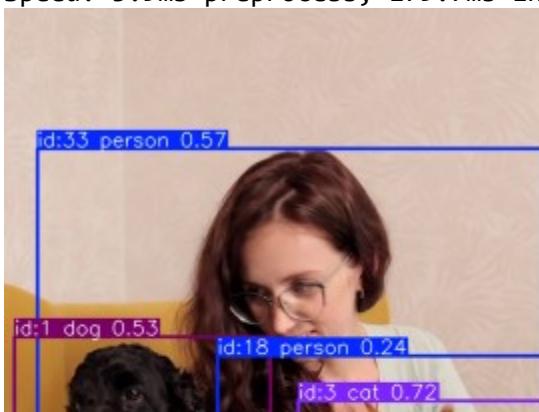
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 187.8ms

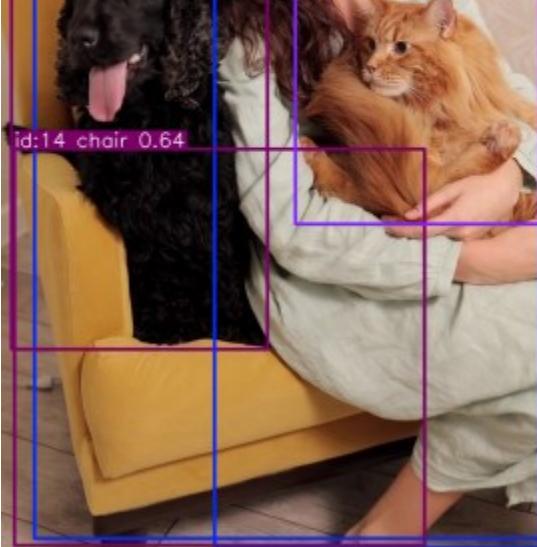
Speed: 3.6ms preprocess, 187.8ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 179.7ms

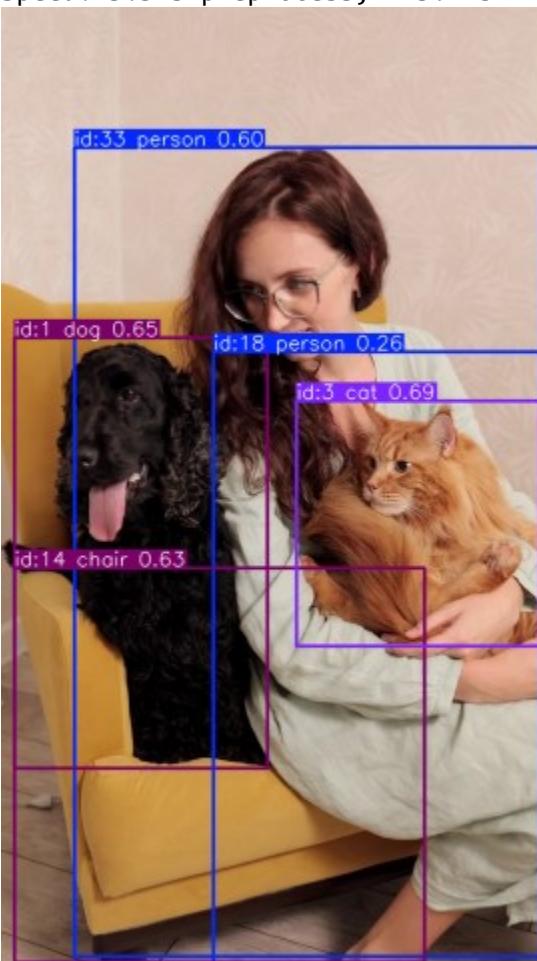
Speed: 3.9ms preprocess, 179.7ms inference, 0.4ms postprocess per image at shape (1,





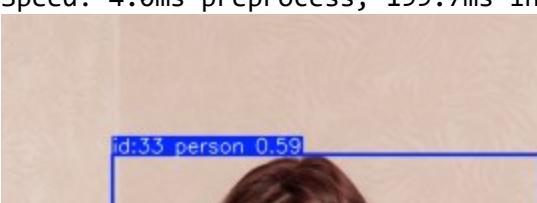
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 175.9ms

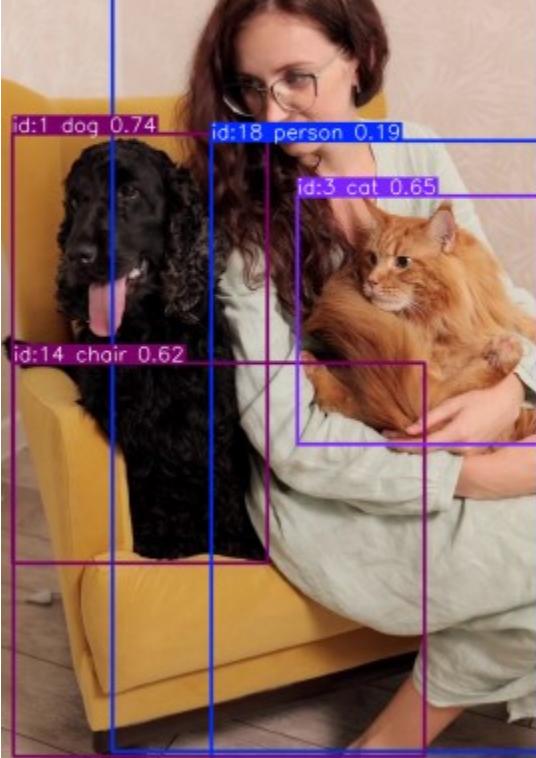
Speed: 5.3ms preprocess, 175.9ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 199.7ms

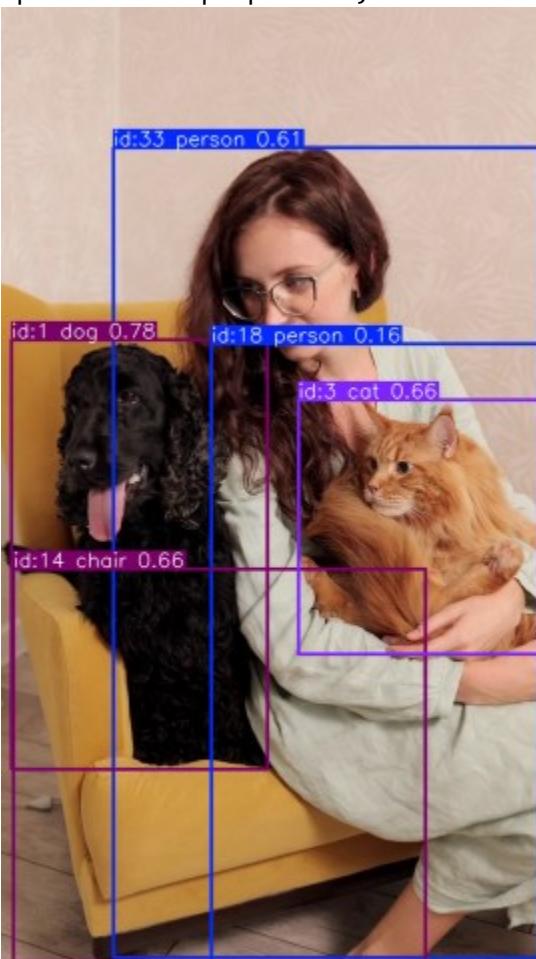
Speed: 4.0ms preprocess, 199.7ms inference, 1.3ms postprocess per image at shape (1,





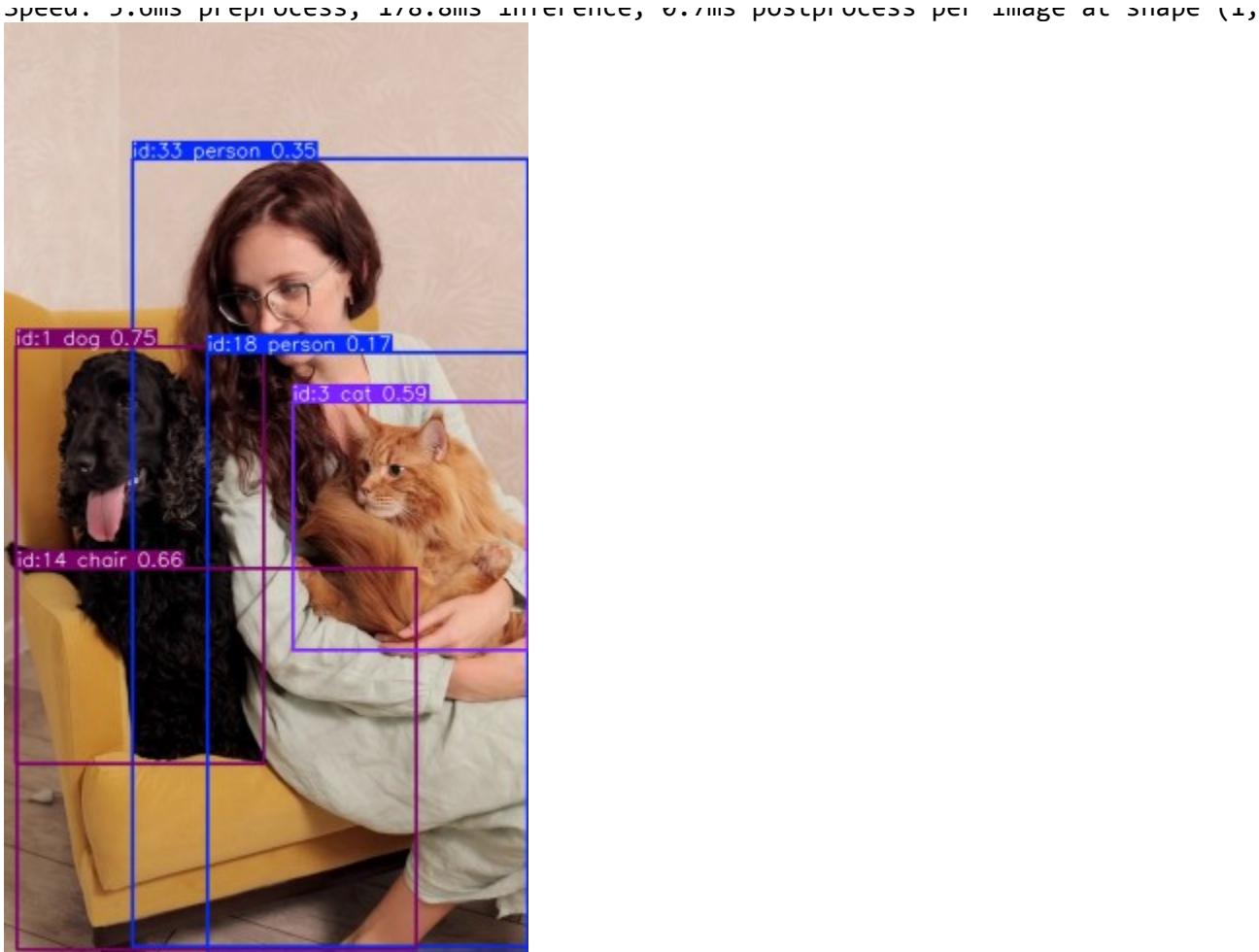
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 177.0ms

Speed: 5.5ms preprocess, 177.0ms inference, 0.4ms postprocess per image at shape (1,



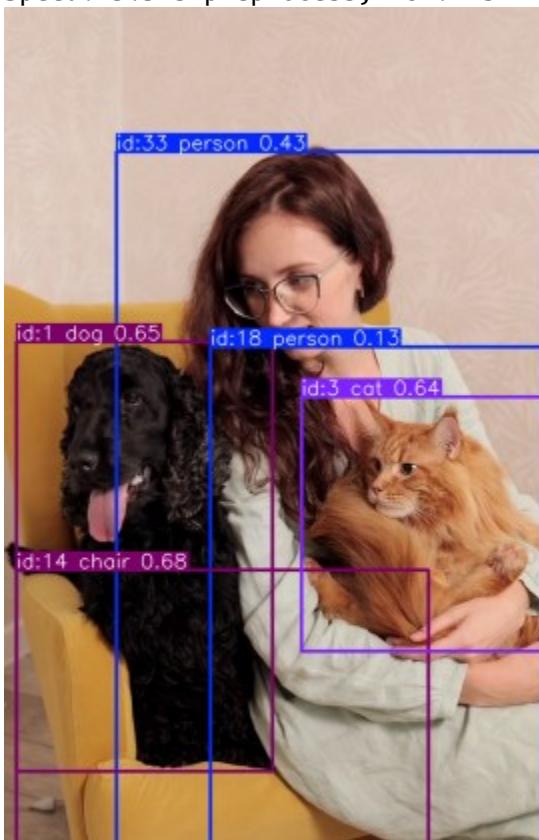
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 178.8ms

Speed: 5.6ms preprocess, 178.8ms inference, 0.7ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 187.1ms

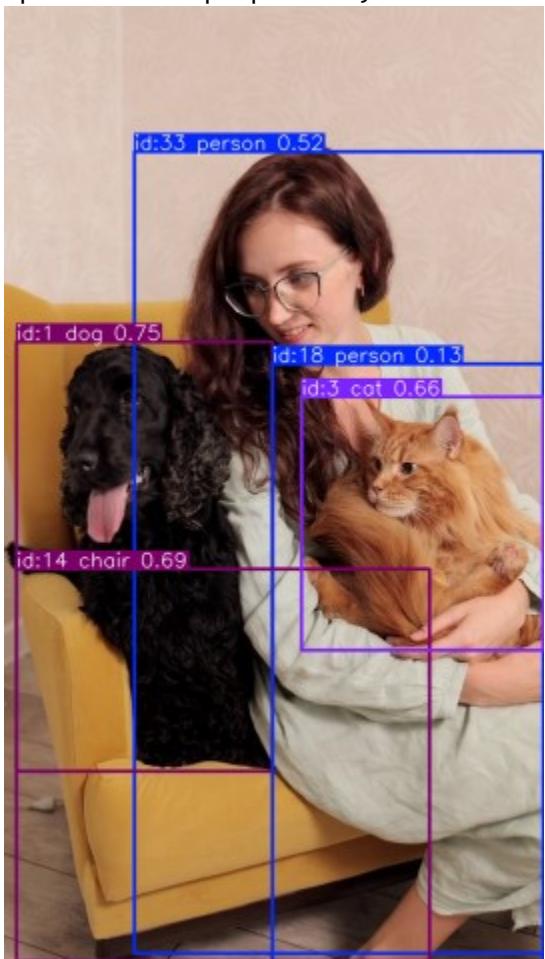
Speed: 5.5ms preprocess, 187.1ms inference, 0.4ms postprocess per image at shape (1,





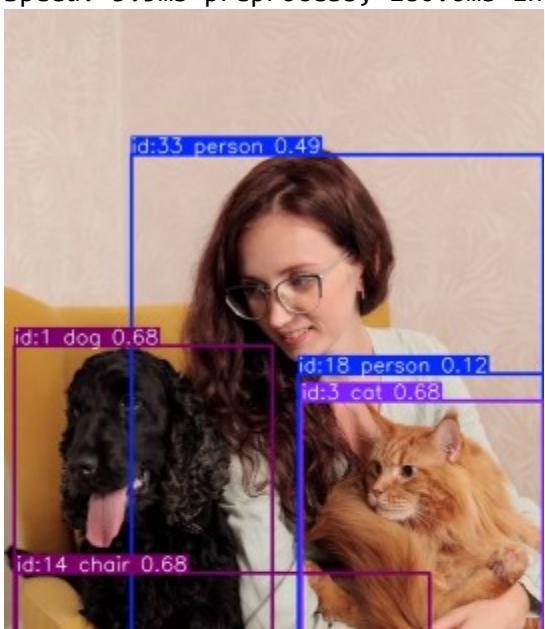
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 183.2ms

Speed: 8.8ms preprocess, 183.2ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 180.6ms

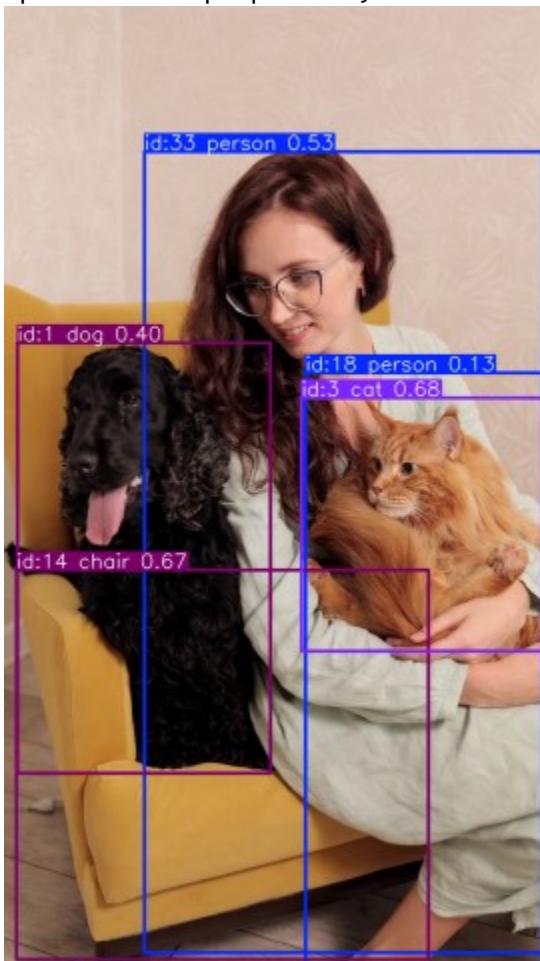
Speed: 3.5ms preprocess, 180.6ms inference, 0.4ms postprocess per image at shape (1,





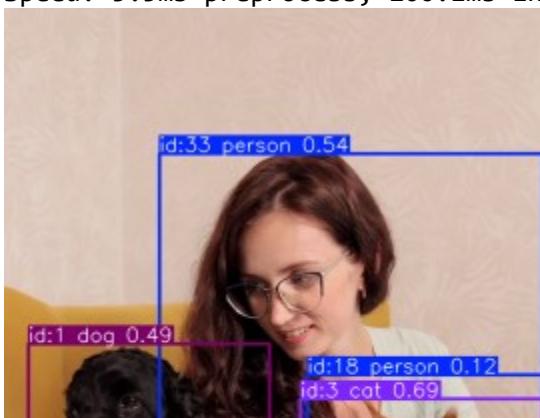
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 178.3ms

Speed: 5.3ms preprocess, 178.3ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 200.1ms

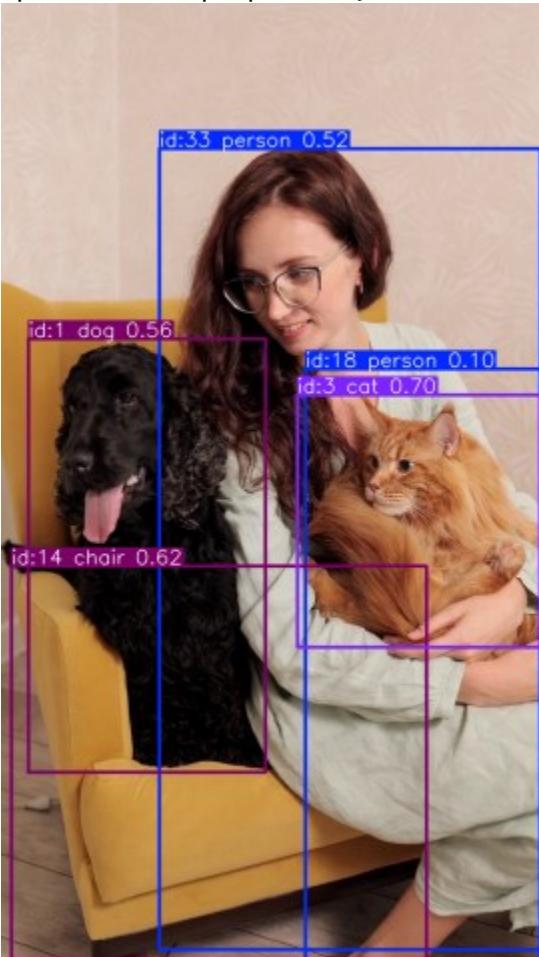
Speed: 5.5ms preprocess, 200.1ms inference, 0.4ms postprocess per image at shape (1,





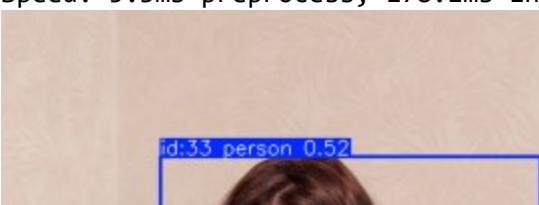
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 185.6ms

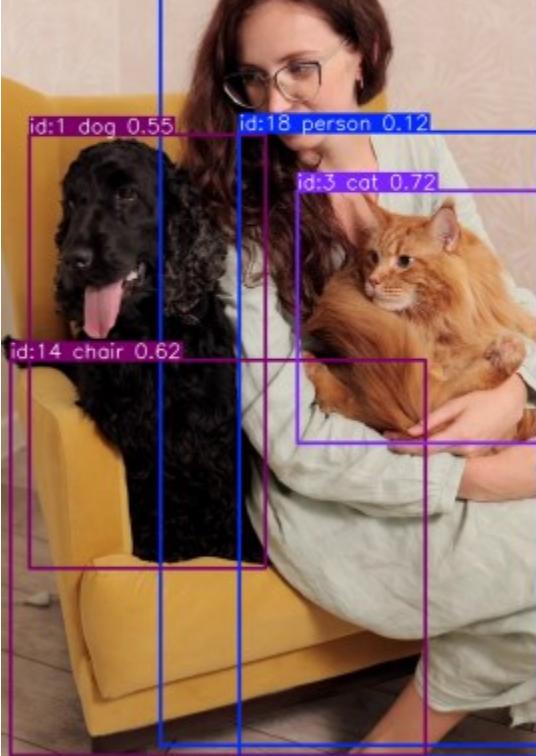
Speed: 5.3ms preprocess, 185.6ms inference, 0.5ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 178.1ms

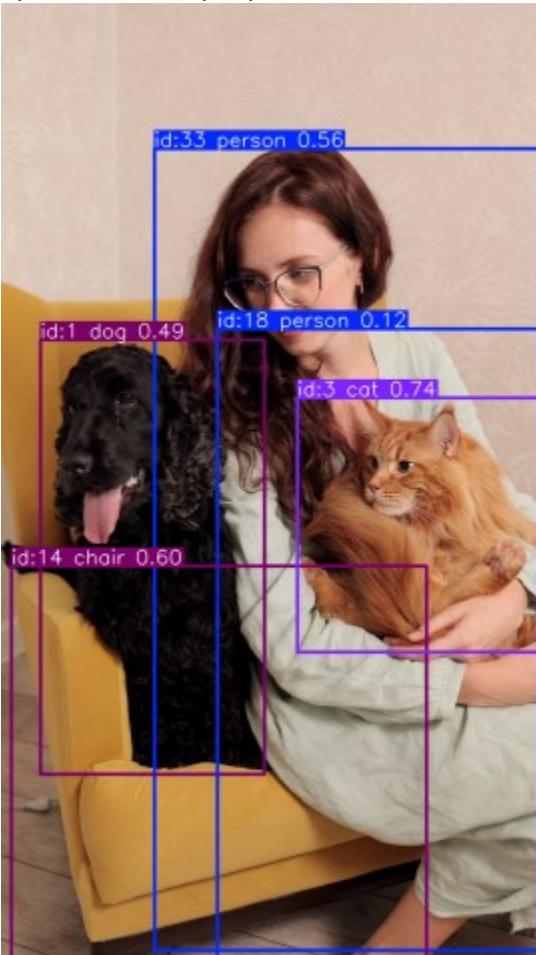
Speed: 5.3ms preprocess, 178.1ms inference, 0.4ms postprocess per image at shape (1,





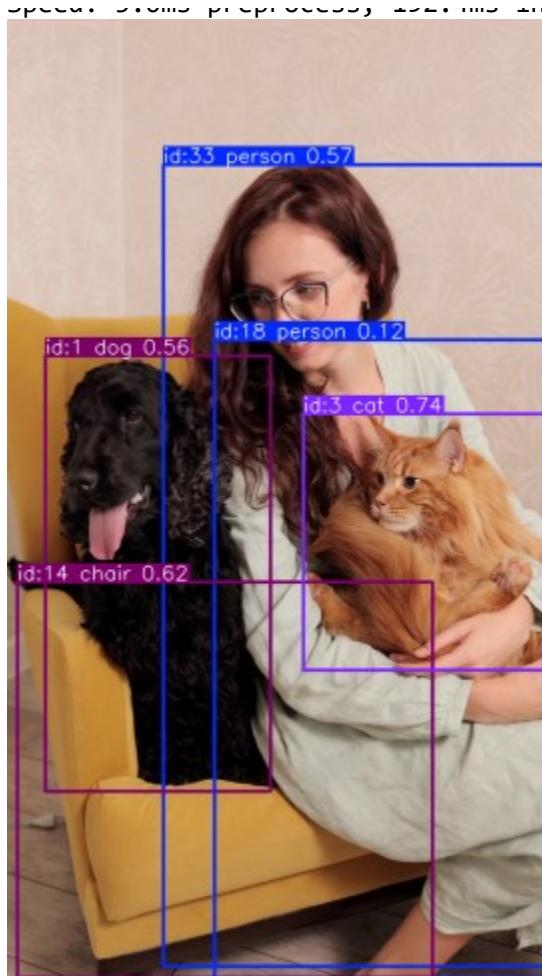
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 177.1ms

Speed: 5.5ms preprocess, 177.1ms inference, 0.4ms postprocess per image at shape (1,



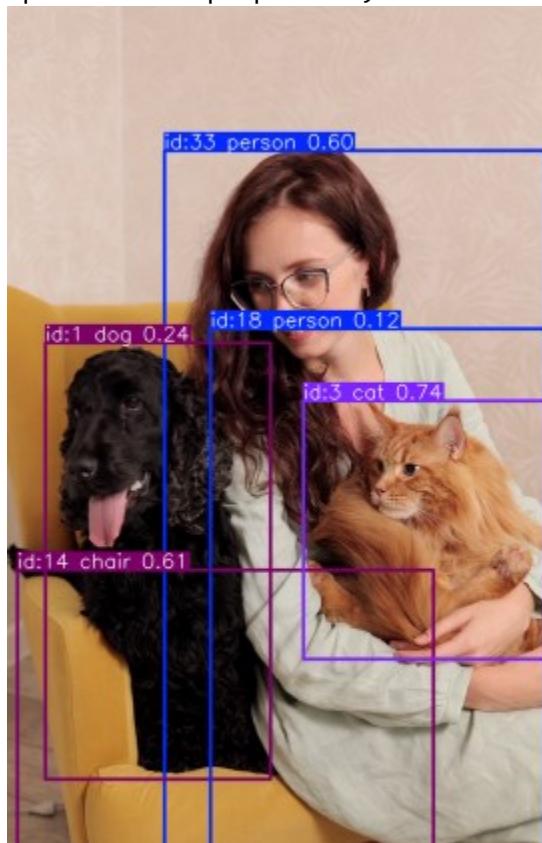
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 192.4ms

Speed: 5.0ms preprocess, 192.4ms inference, 0.6ms postprocess per image at shape (1,



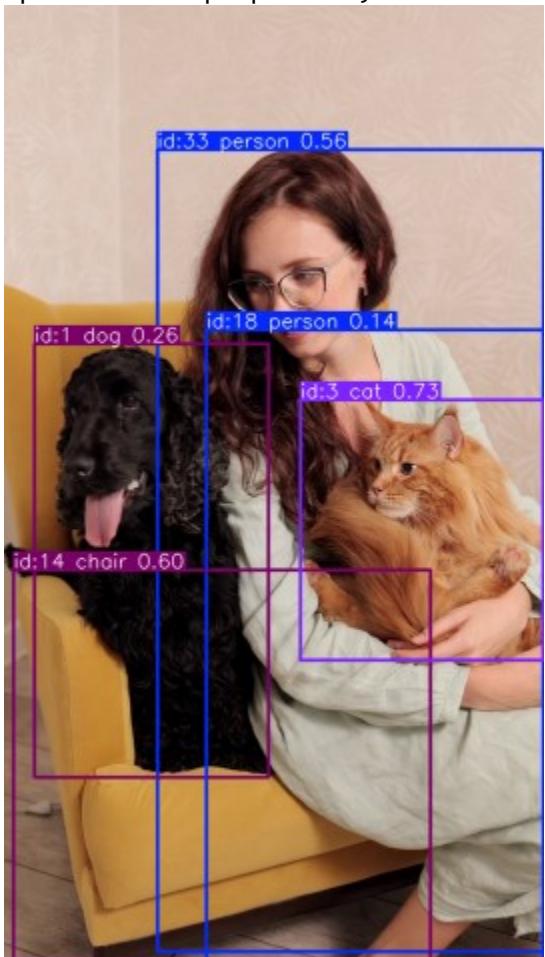
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 184.5ms

Speed: 9.2ms preprocess, 184.5ms inference, 0.5ms postprocess per image at shape (1,

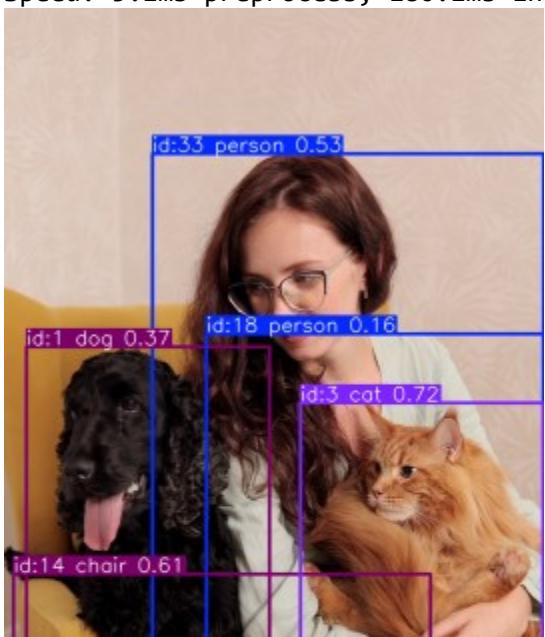


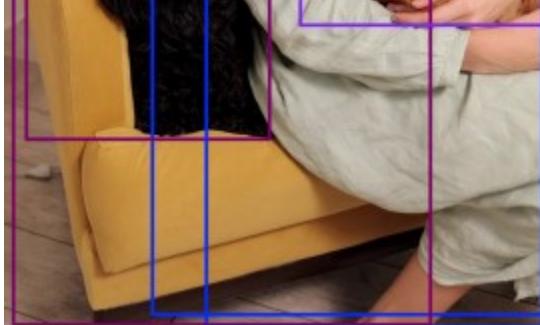


0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 179.6ms
Speed: 5.4ms preprocess, 179.6ms inference, 0.4ms postprocess per image at shape (1,

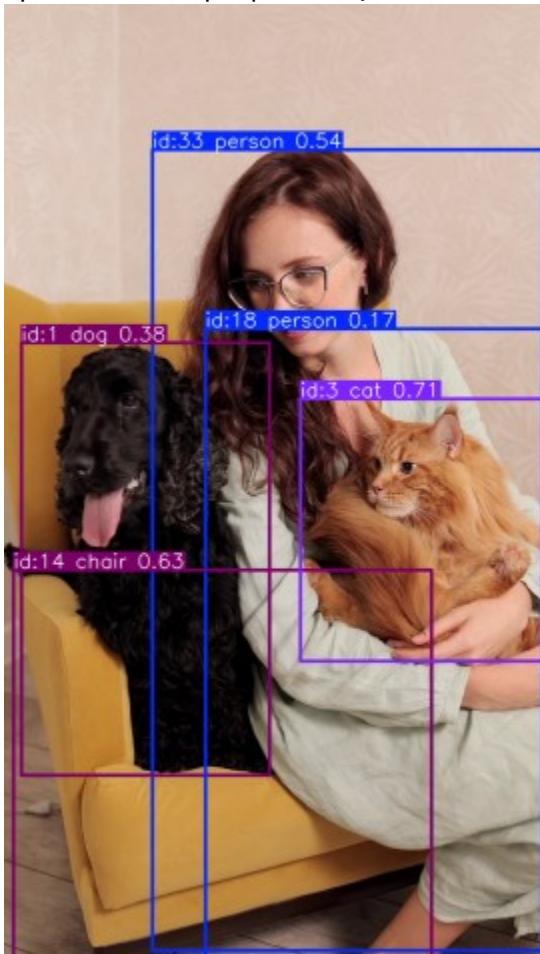


0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 180.1ms
Speed: 5.1ms preprocess, 180.1ms inference, 1.7ms postprocess per image at shape (1,

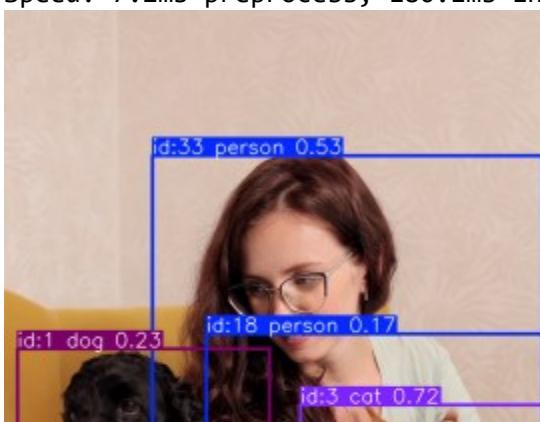




0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 199.2ms
Speed: 3.8ms preprocess, 199.2ms inference, 0.4ms postprocess per image at shape (1,



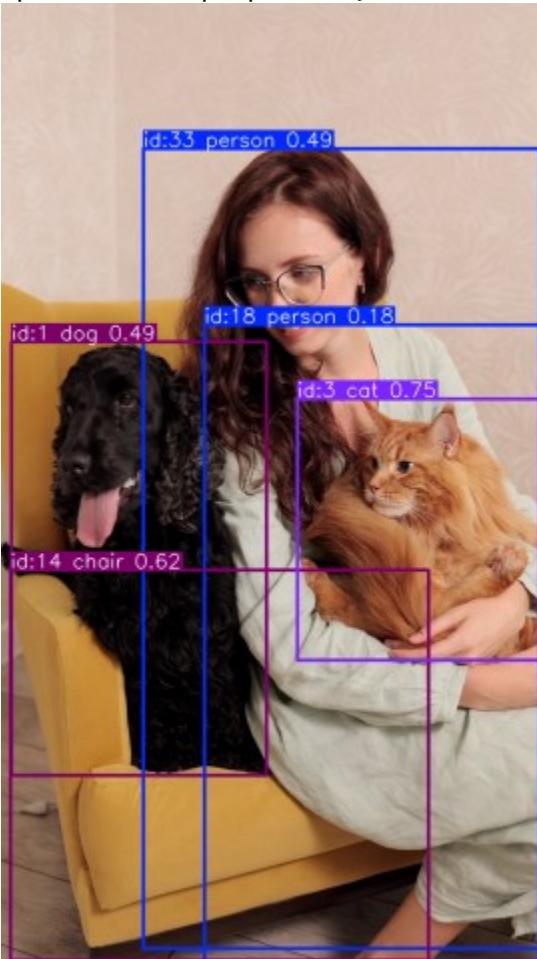
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 180.1ms
Speed: 7.2ms preprocess, 180.1ms inference, 0.7ms postprocess per image at shape (1,





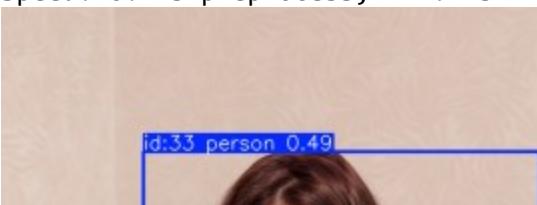
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 178.8ms

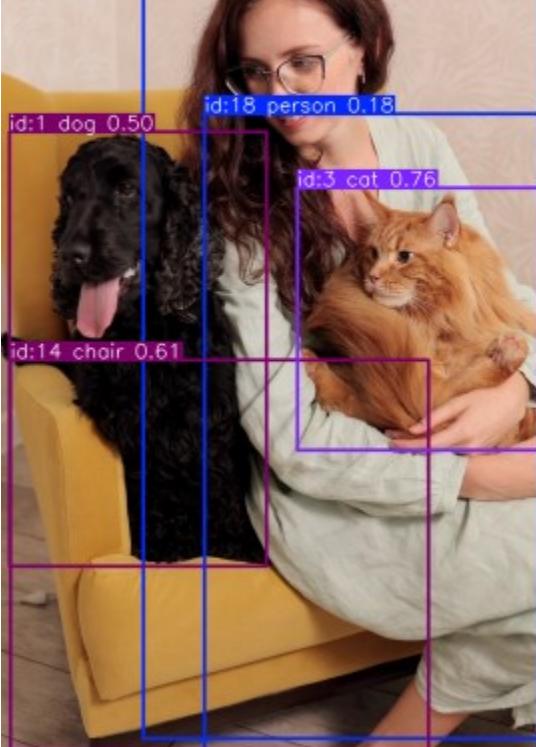
Speed: 4.0ms preprocess, 178.8ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 197.9ms

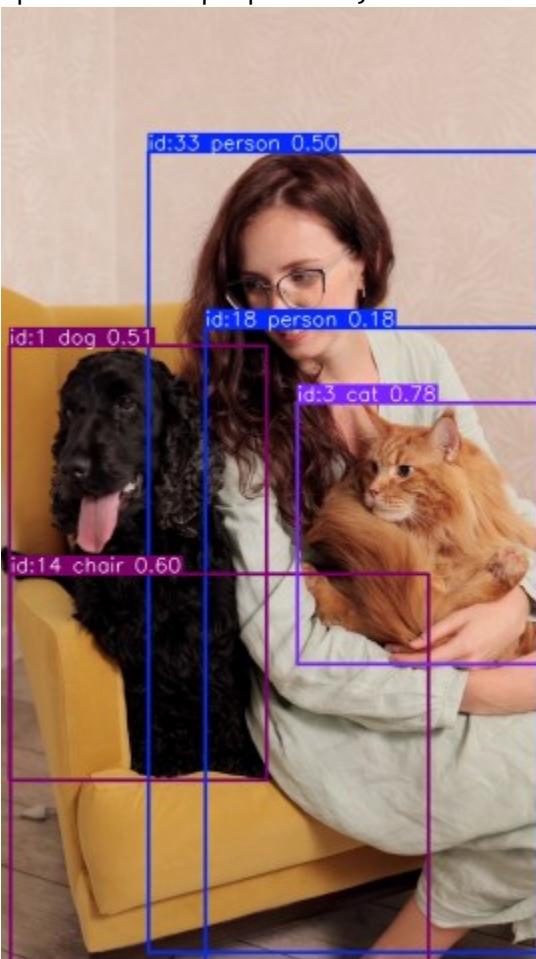
Speed: 6.1ms preprocess, 197.9ms inference, 0.5ms postprocess per image at shape (1,





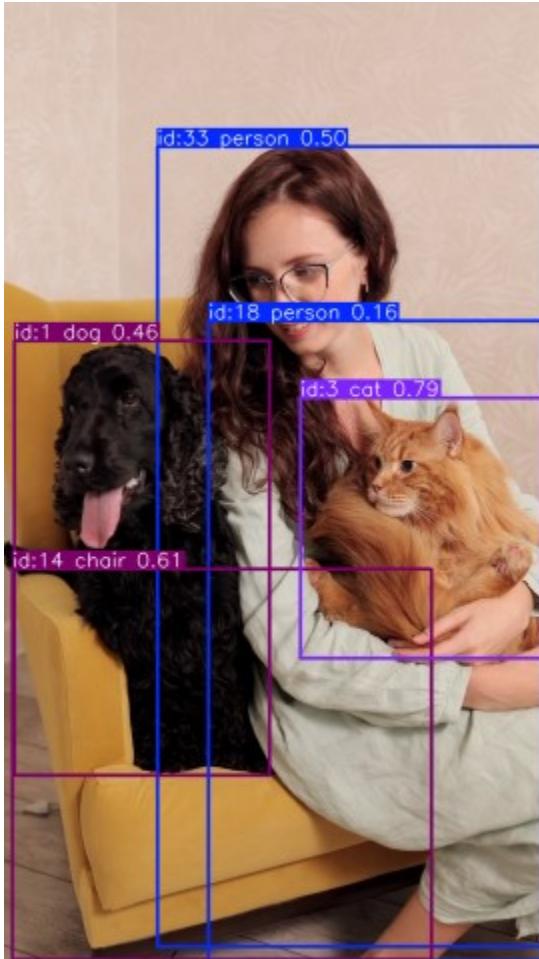
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 194.6ms

Speed: 5.5ms preprocess, 194.6ms inference, 0.5ms postprocess per image at shape (1,



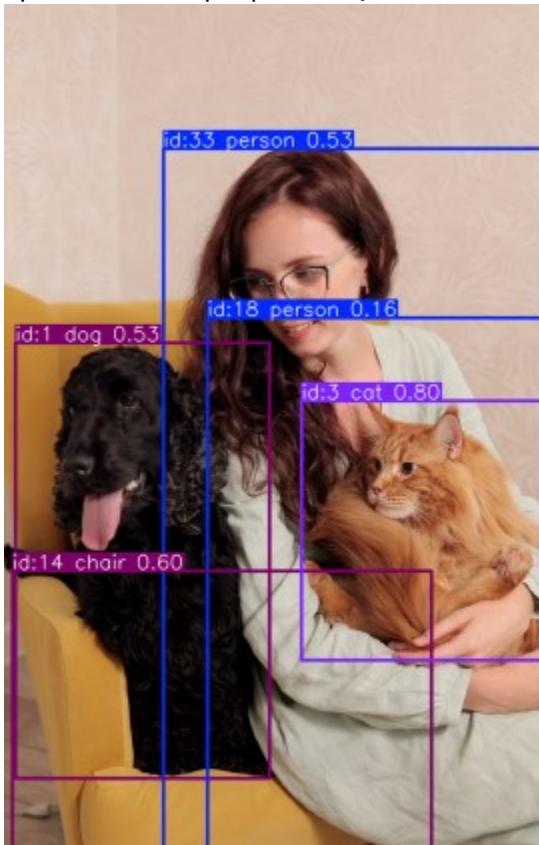
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 181.1ms

Speed: 5.2ms preprocess, 181.1ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 179.0ms

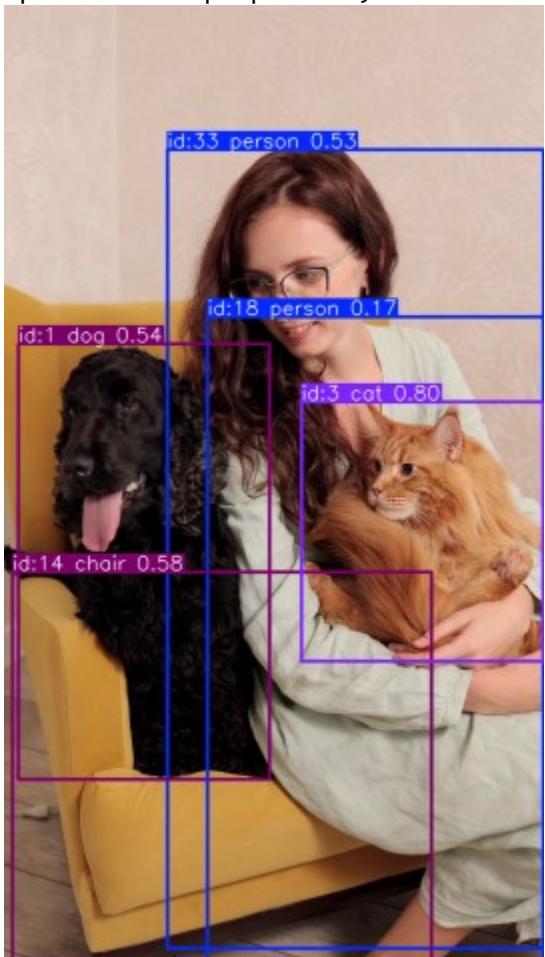
Speed: 5.4ms preprocess, 179.0ms inference, 0.4ms postprocess per image at shape (1,





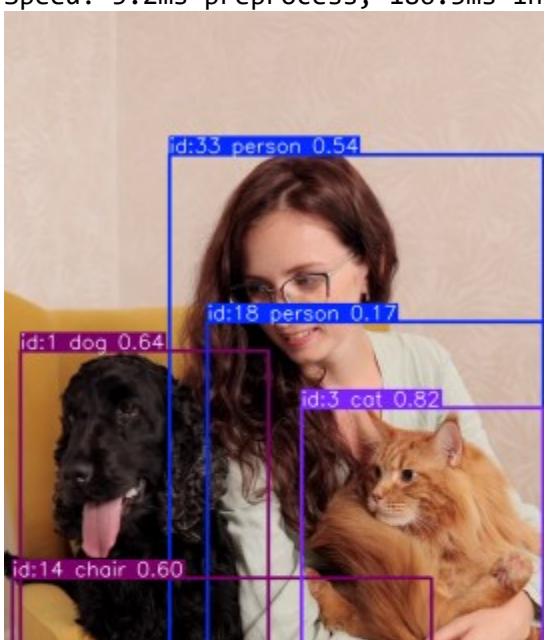
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 180.1ms

Speed: 5.3ms preprocess, 180.1ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 186.3ms

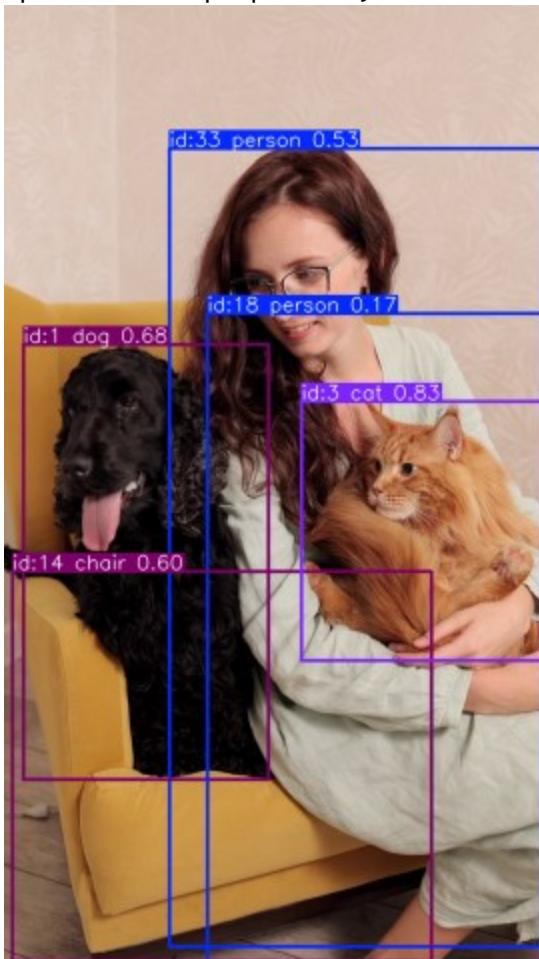
Speed: 5.2ms preprocess, 186.3ms inference, 0.4ms postprocess per image at shape (1,





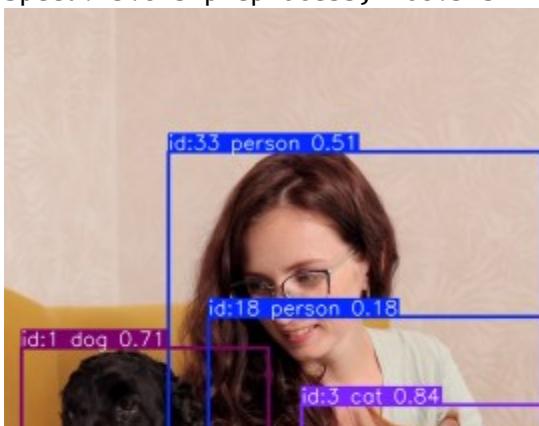
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 177.3ms

Speed: 5.2ms preprocess, 177.3ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 168.3ms

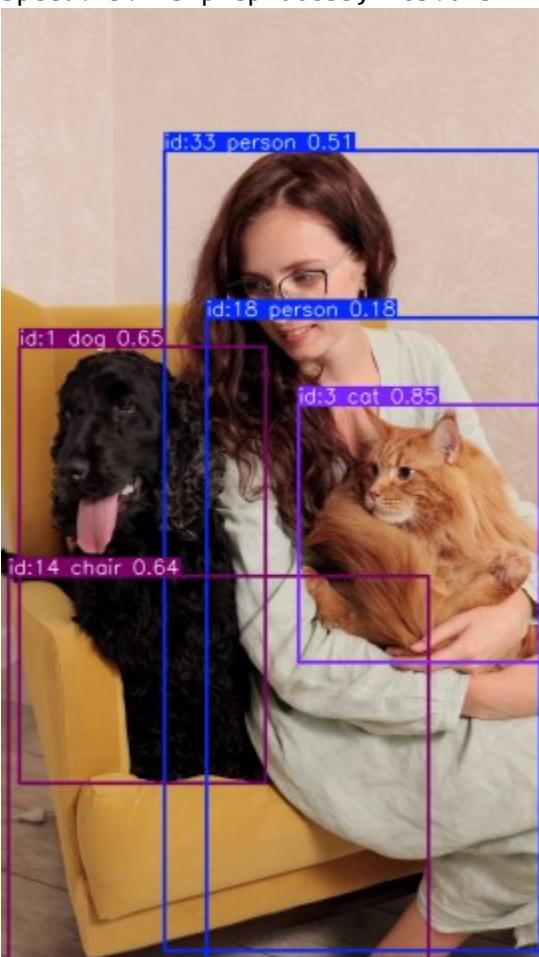
Speed: 3.8ms preprocess, 168.3ms inference, 0.4ms postprocess per image at shape (1,





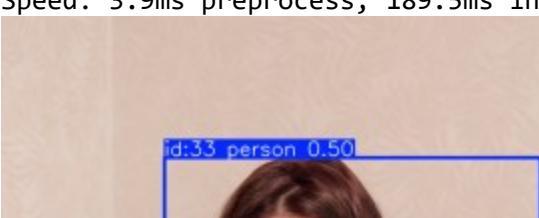
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 185.0ms

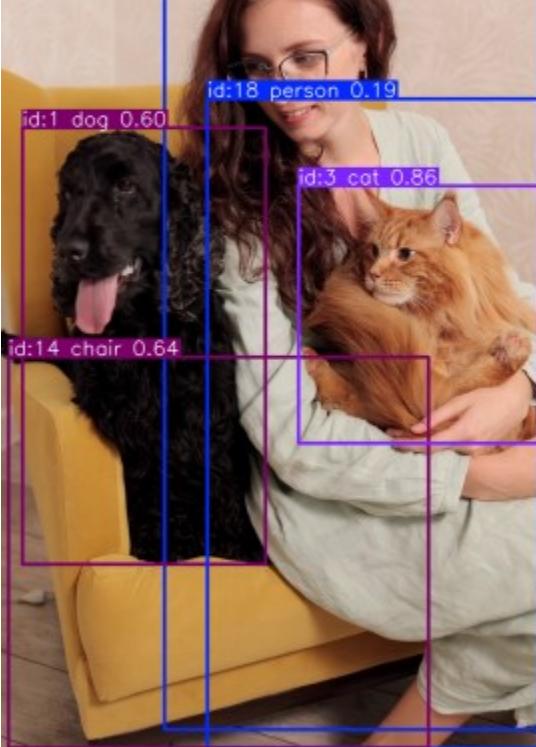
Speed: 3.9ms preprocess, 185.0ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 189.5ms

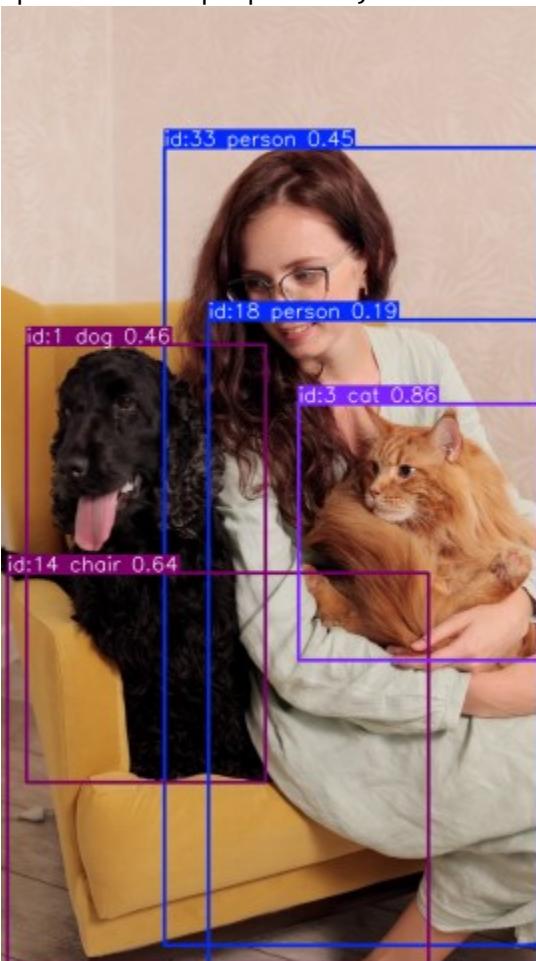
Speed: 3.9ms preprocess, 189.5ms inference, 0.4ms postprocess per image at shape (1,





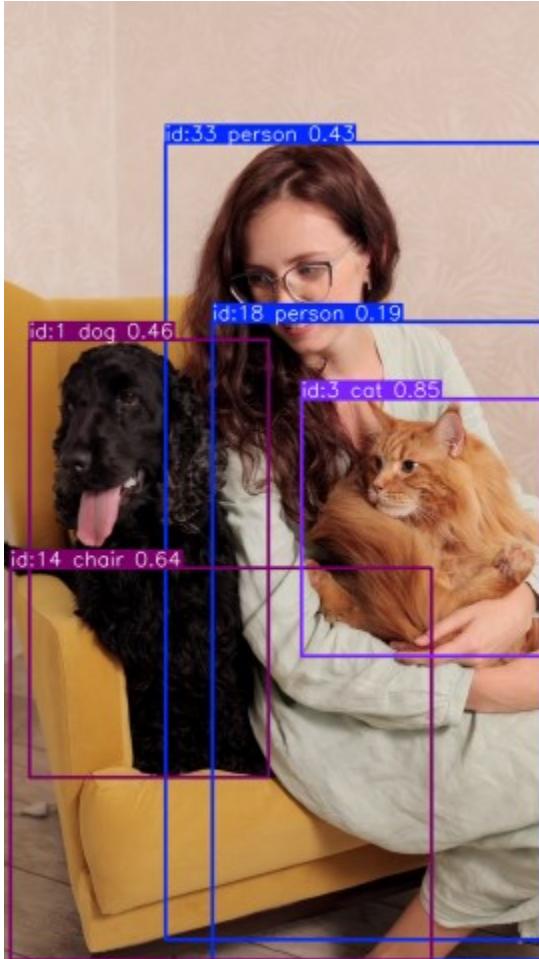
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 190.1ms

Speed: 5.2ms preprocess, 190.1ms inference, 0.4ms postprocess per image at shape (1,



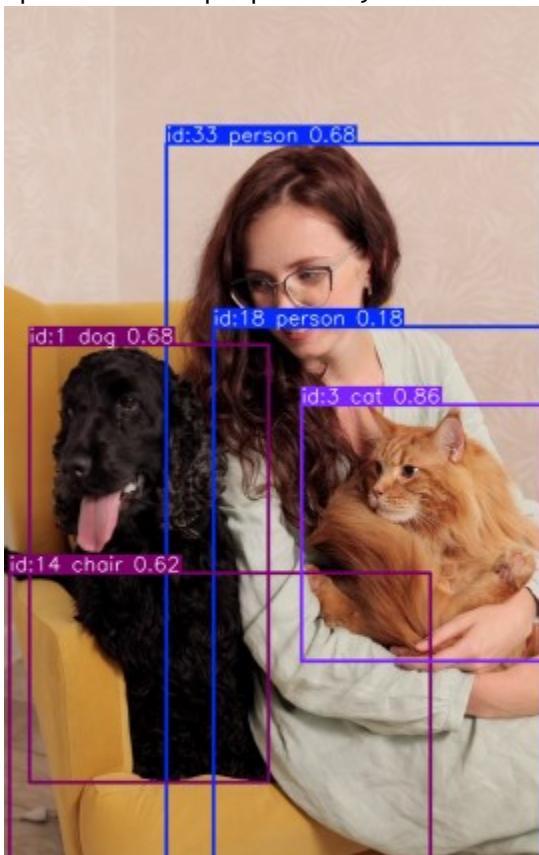
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 200.8ms

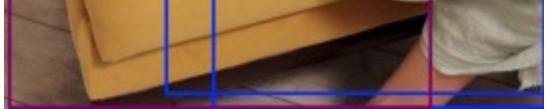
Speed: 7.7ms preprocess, 200.8ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 192.0ms

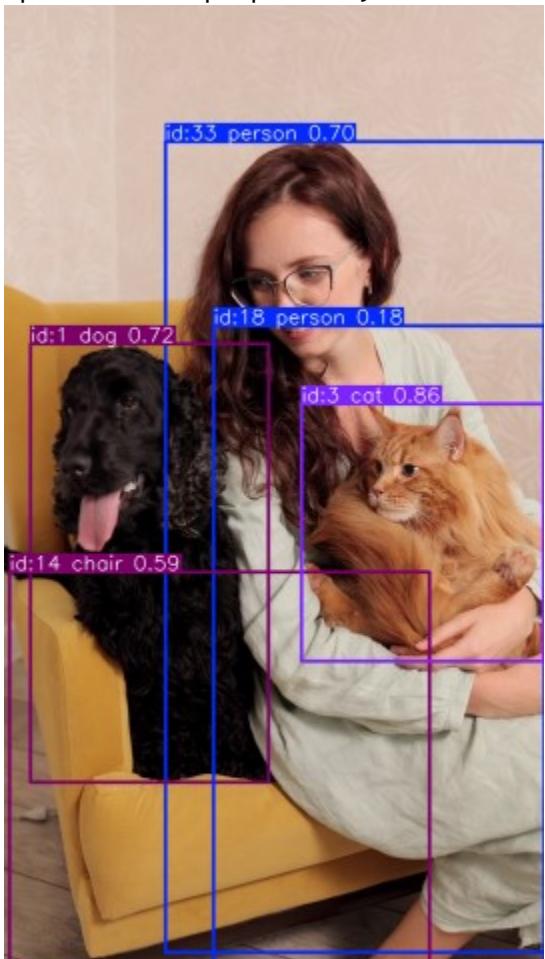
Speed: 5.1ms preprocess, 192.0ms inference, 0.6ms postprocess per image at shape (1,





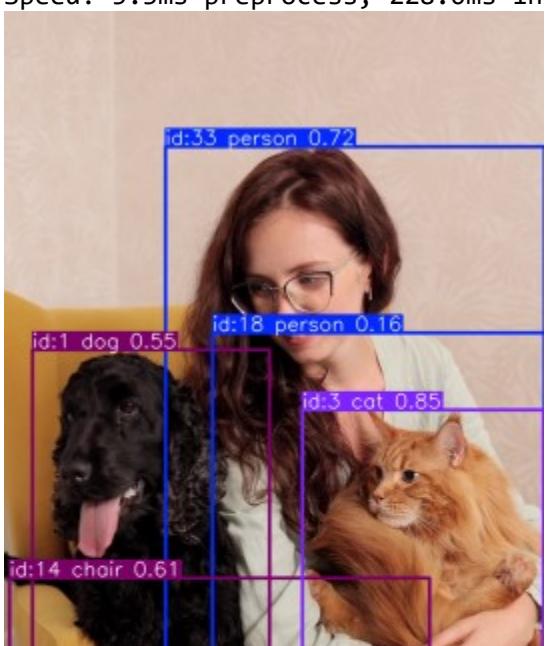
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 191.1ms

Speed: 3.8ms preprocess, 191.1ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 228.0ms

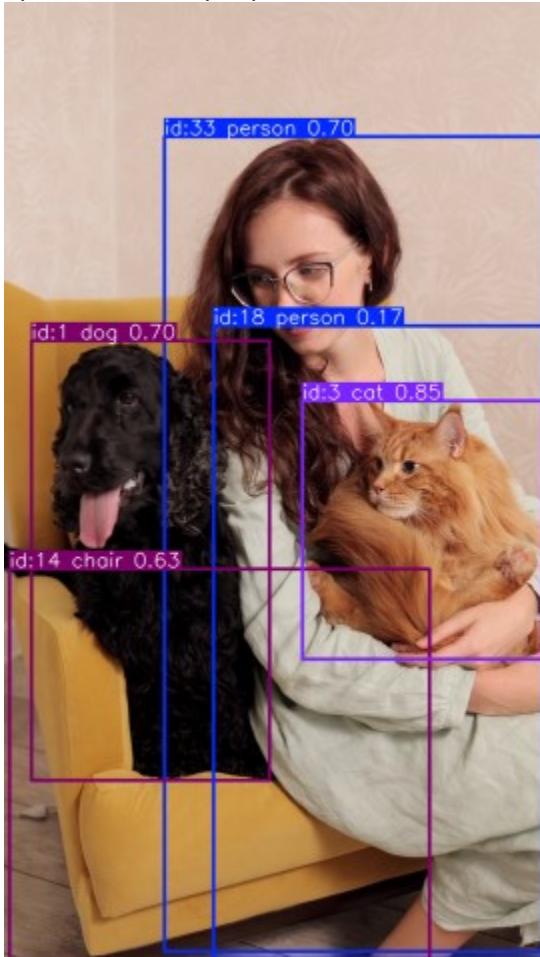
Speed: 5.3ms preprocess, 228.0ms inference, 0.4ms postprocess per image at shape (1,





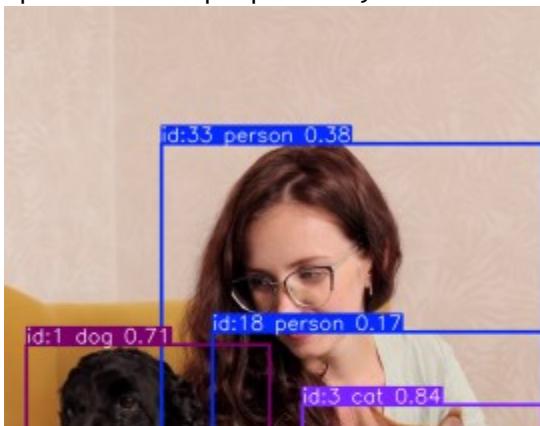
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 182.8ms

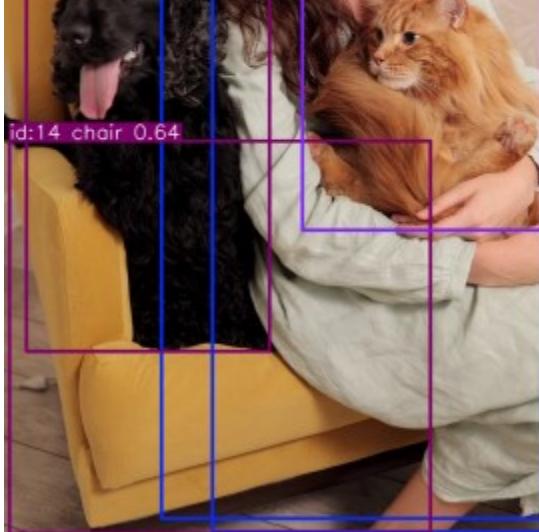
Speed: 5.1ms preprocess, 182.8ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 182.2ms

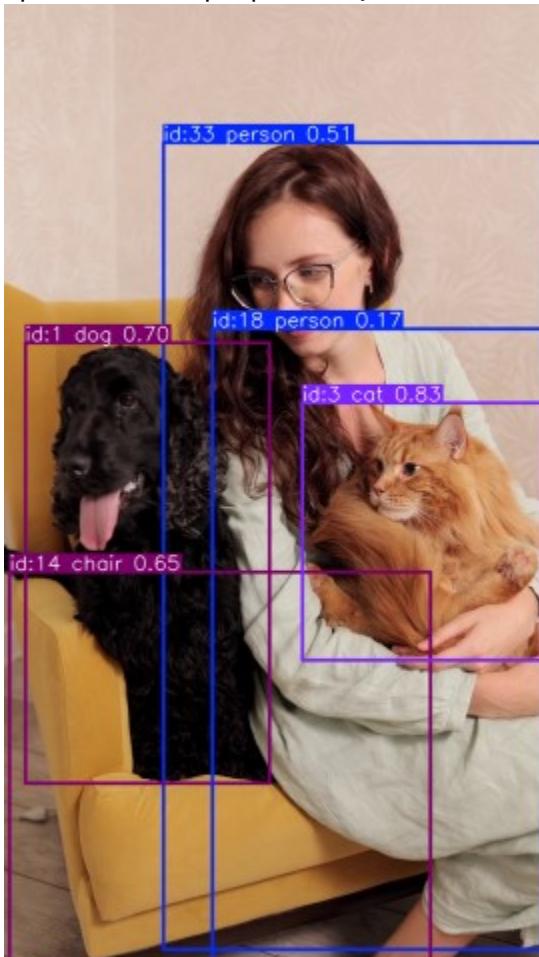
Speed: 5.2ms preprocess, 182.2ms inference, 0.4ms postprocess per image at shape (1,





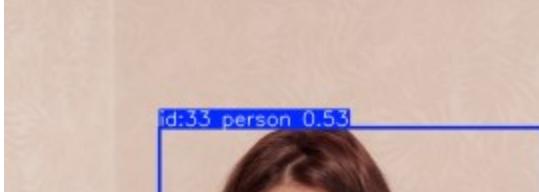
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 186.3ms

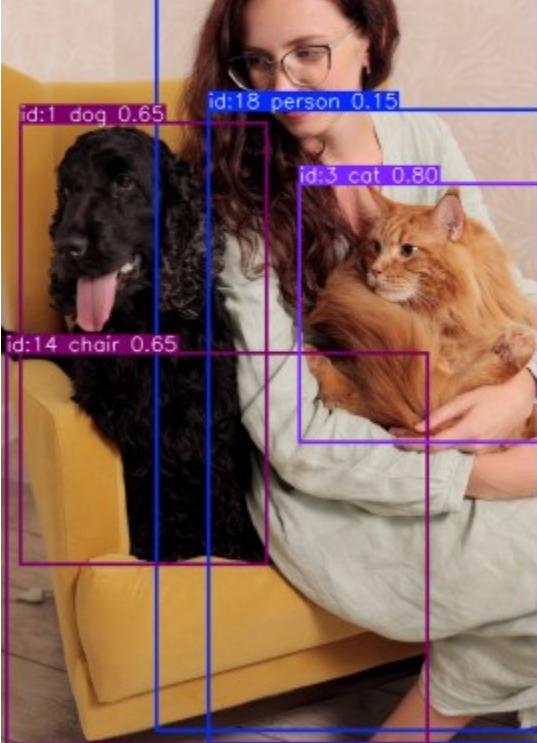
Speed: 7.8ms preprocess, 186.3ms inference, 0.5ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 178.8ms

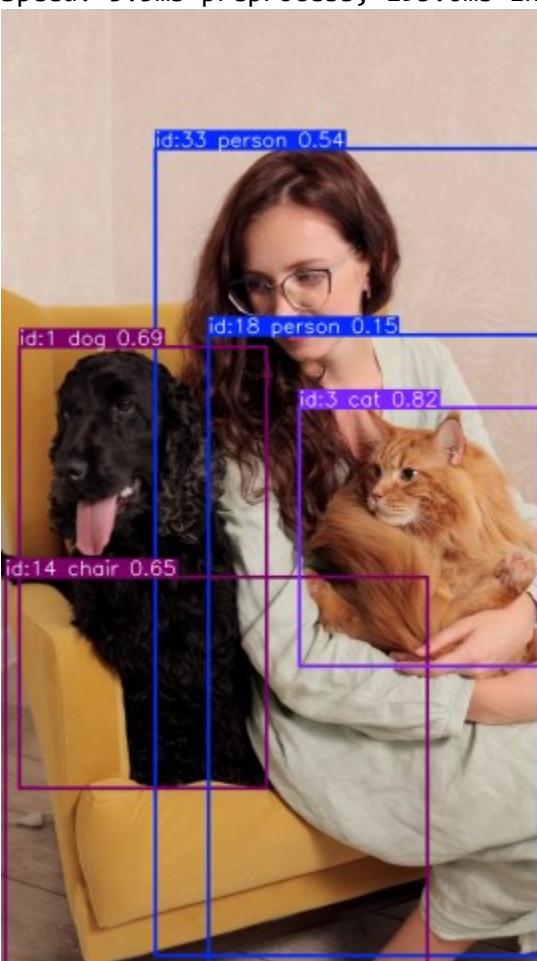
Speed: 5.5ms preprocess, 178.8ms inference, 0.4ms postprocess per image at shape (1,





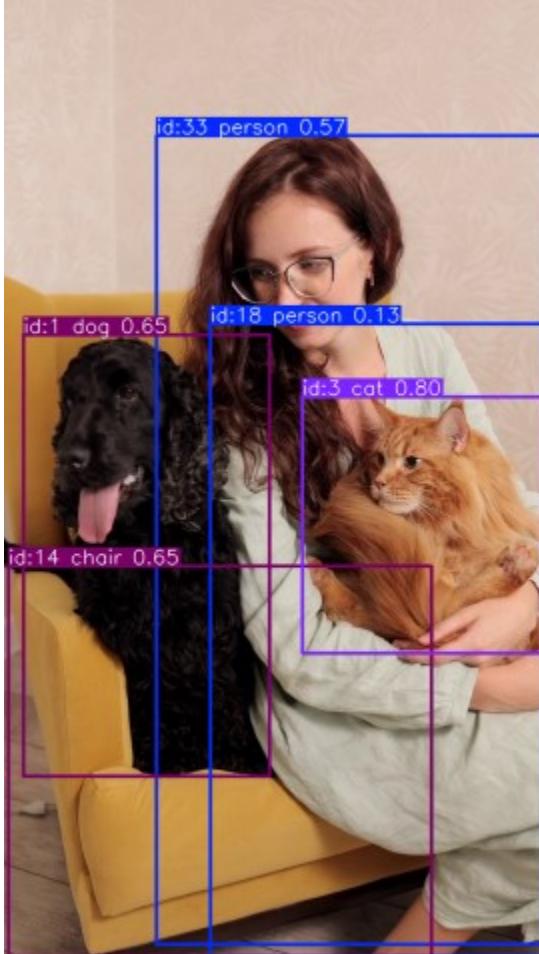
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 193.6ms

Speed: 5.5ms preprocess, 193.6ms inference, 0.4ms postprocess per image at shape (1,



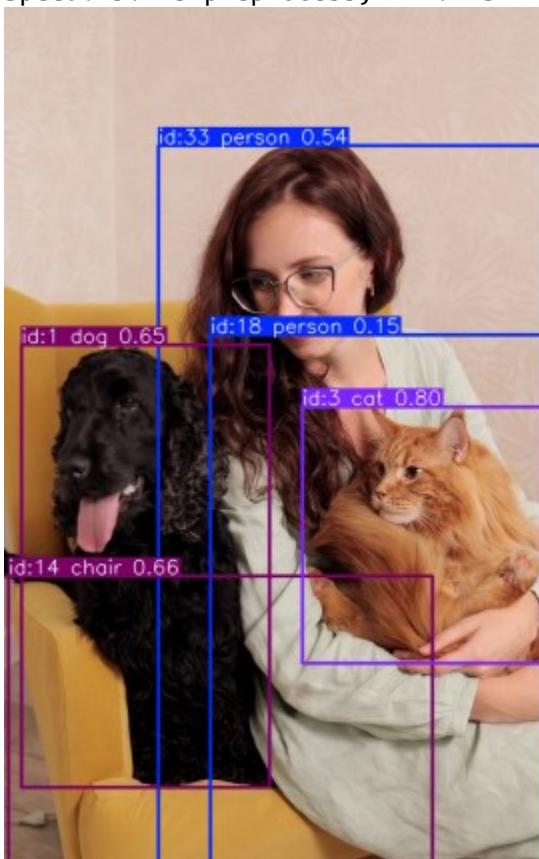
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 212.1ms

Speed: 11.2ms preprocess, 212.1ms inference, 0.6ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 214.1ms

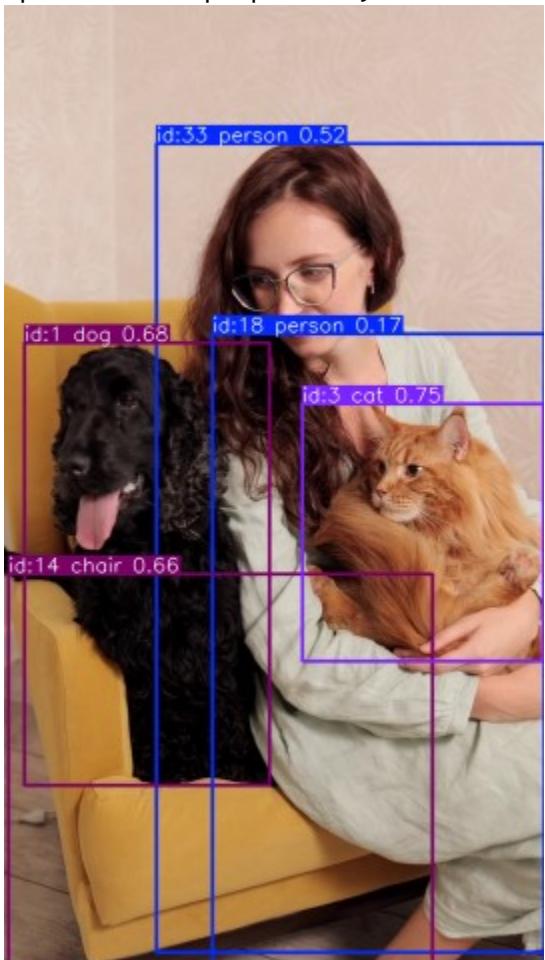
Speed: 5.1ms preprocess, 214.1ms inference, 0.6ms postprocess per image at shape (1,





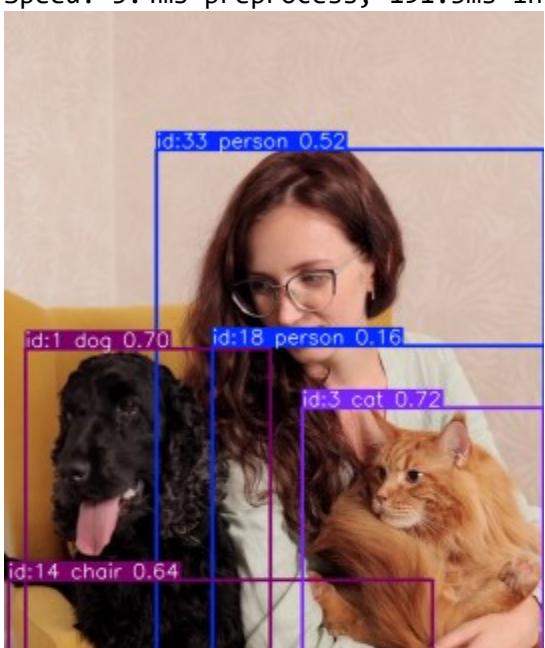
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 225.5ms

Speed: 5.3ms preprocess, 225.5ms inference, 0.5ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 191.3ms

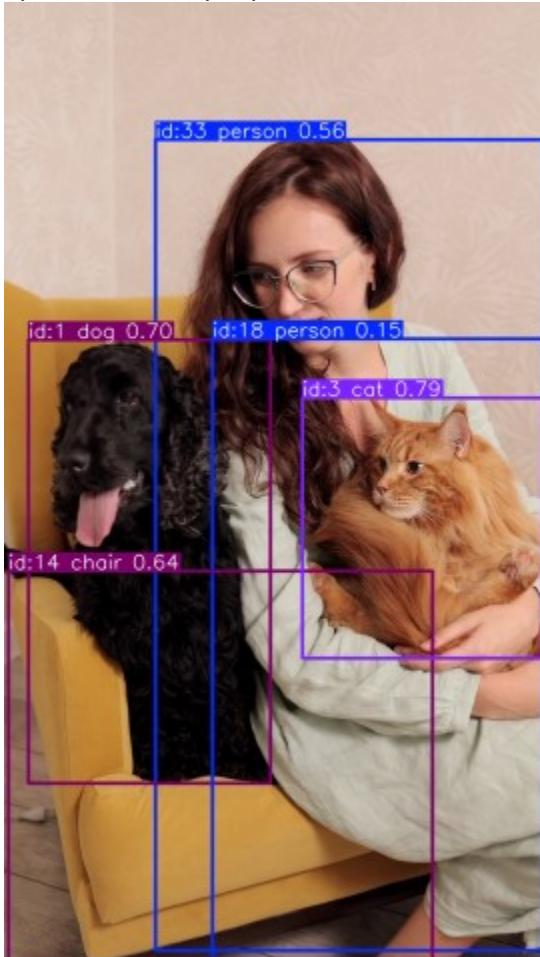
Speed: 5.4ms preprocess, 191.3ms inference, 0.4ms postprocess per image at shape (1,





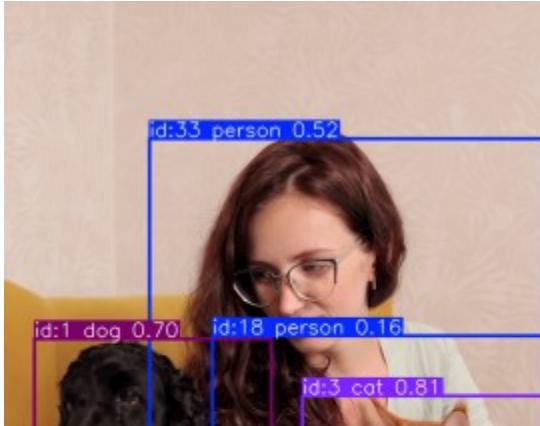
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 234.5ms

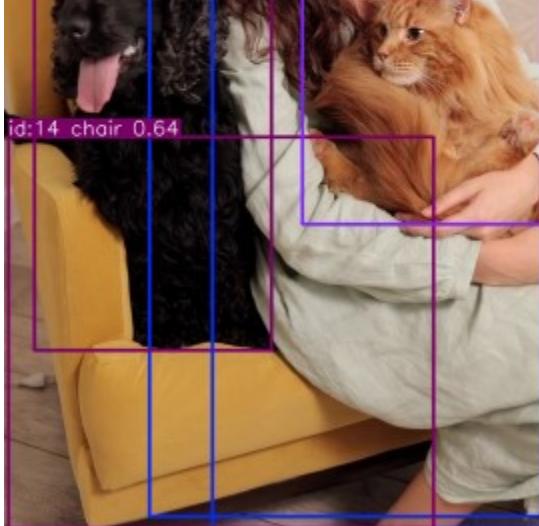
Speed: 5.0ms preprocess, 234.5ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 195.2ms

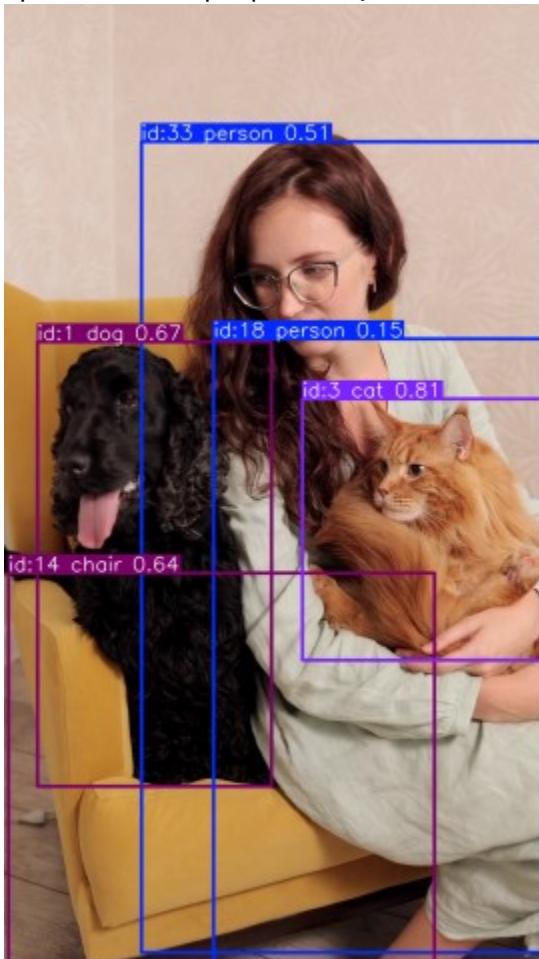
Speed: 5.5ms preprocess, 195.2ms inference, 0.4ms postprocess per image at shape (1,





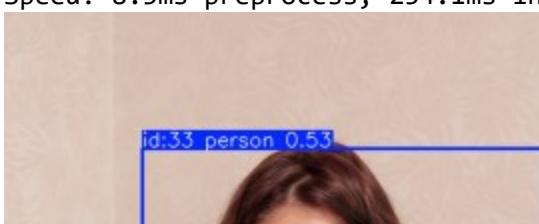
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 209.4ms

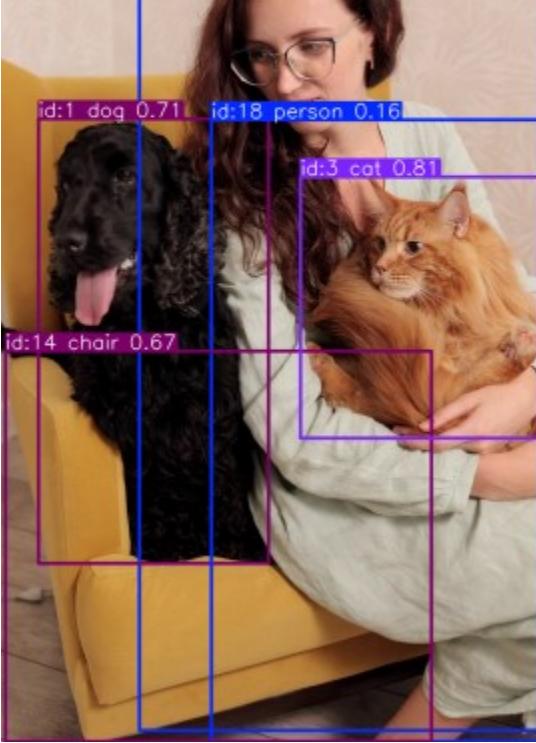
Speed: 5.0ms preprocess, 209.4ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 254.1ms

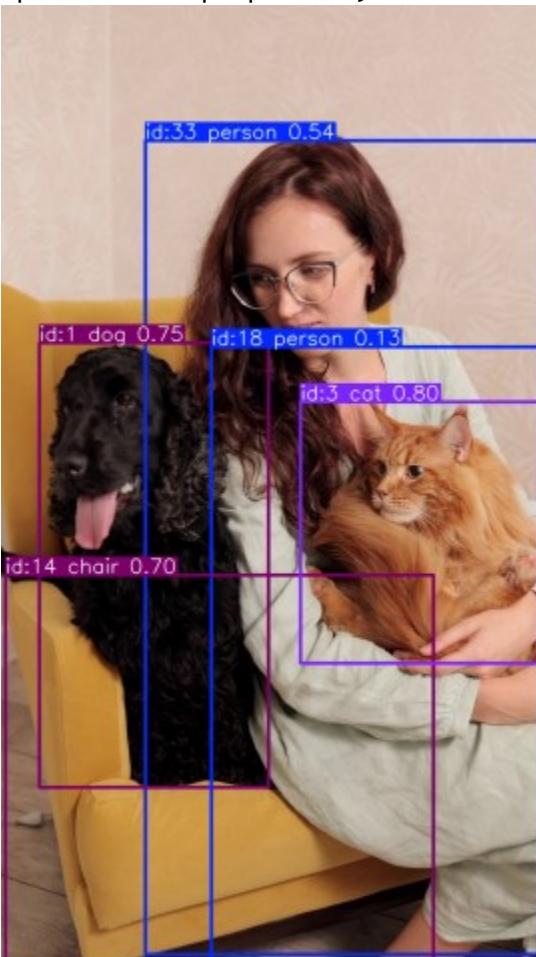
Speed: 8.5ms preprocess, 254.1ms inference, 0.4ms postprocess per image at shape (1,





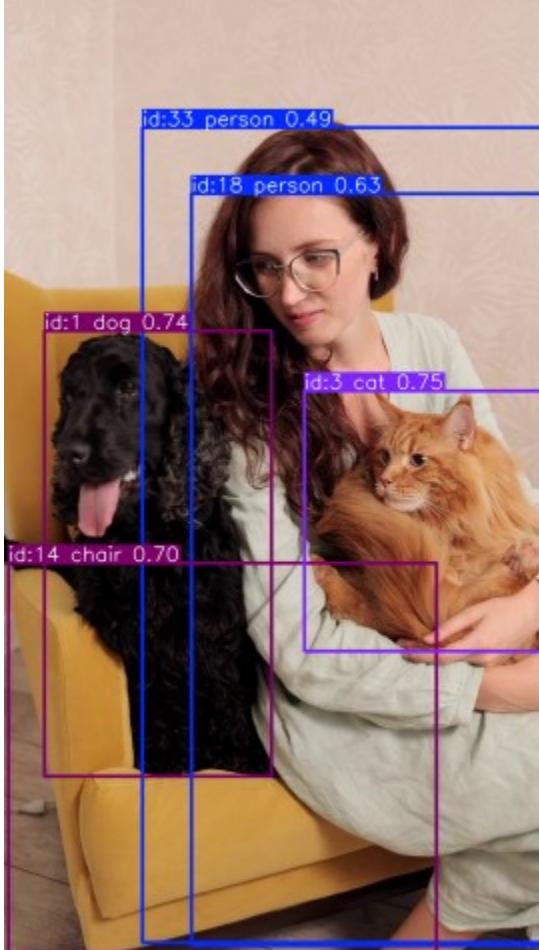
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 177.4ms

Speed: 6.6ms preprocess, 177.4ms inference, 0.4ms postprocess per image at shape (1,



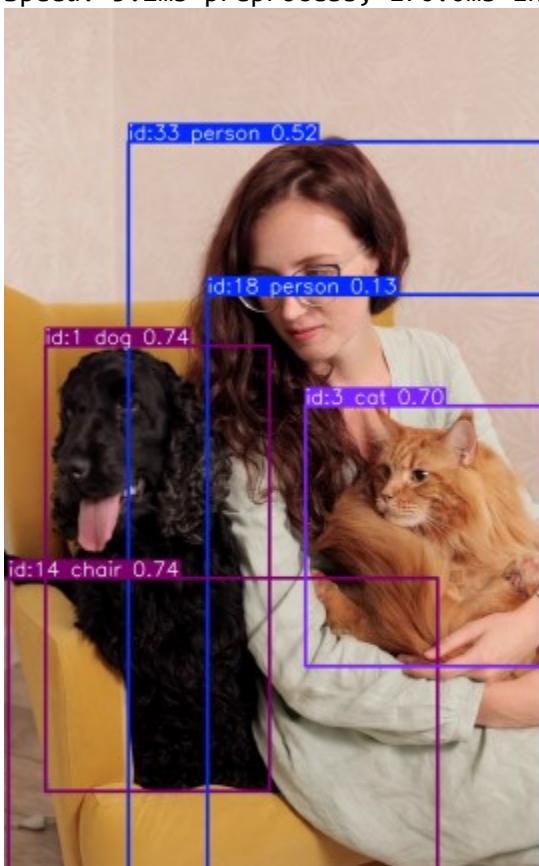
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 180.7ms

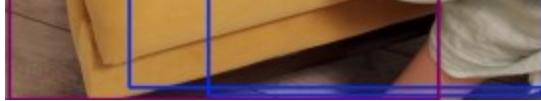
Speed: 5.1ms preprocess, 180.7ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 170.0ms

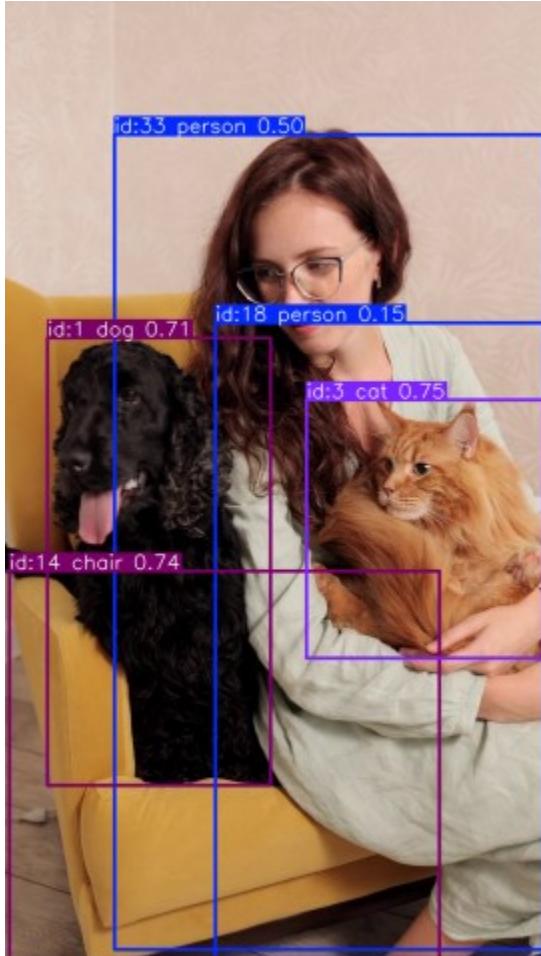
Speed: 5.2ms preprocess, 170.0ms inference, 0.5ms postprocess per image at shape (1,





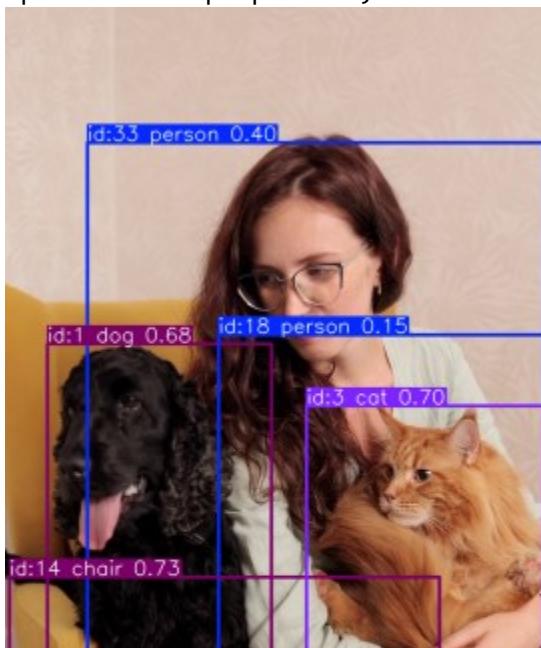
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 196.8ms

Speed: 5.4ms preprocess, 196.8ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 172.0ms

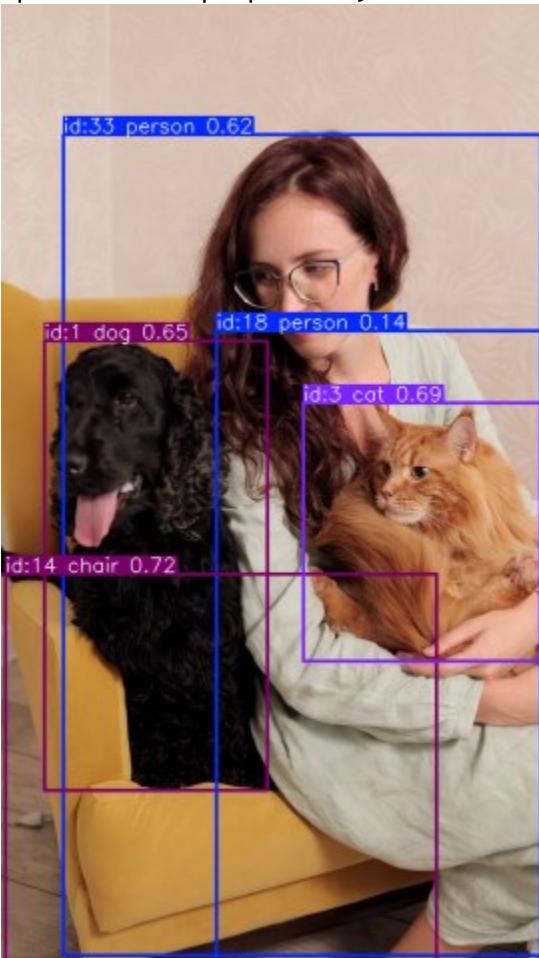
Speed: 5.4ms preprocess, 172.0ms inference, 0.4ms postprocess per image at shape (1,





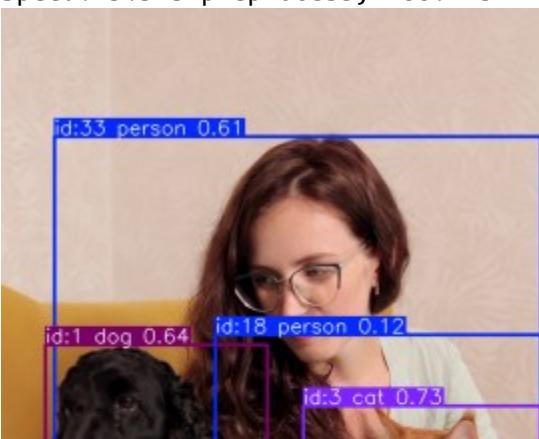
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 182.4ms

Speed: 5.3ms preprocess, 182.4ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 188.9ms

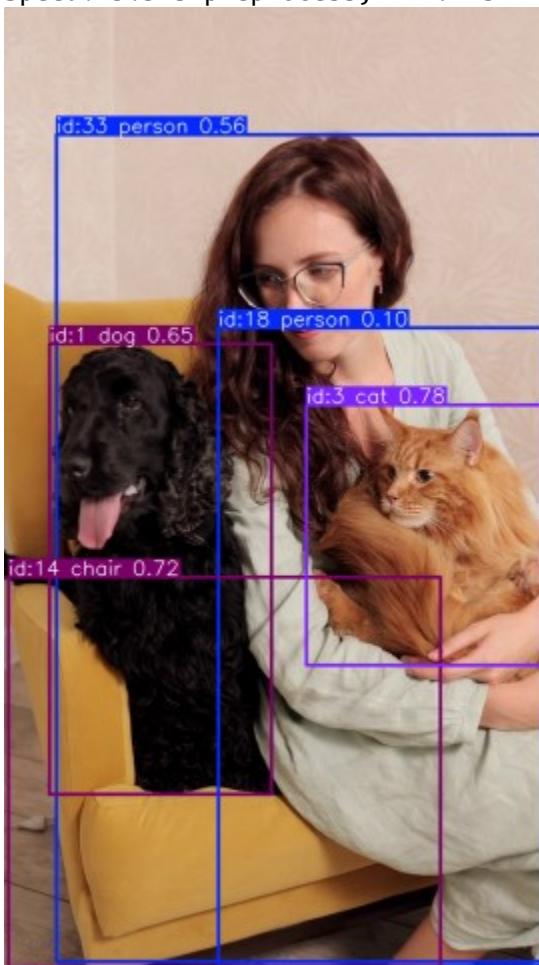
Speed: 5.5ms preprocess, 188.9ms inference, 0.4ms postprocess per image at shape (1,





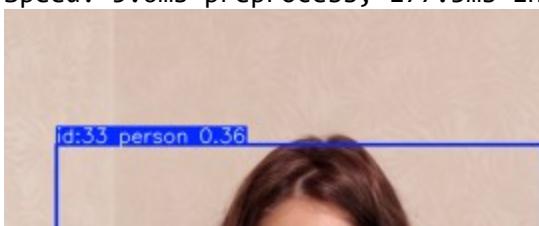
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 214.7ms

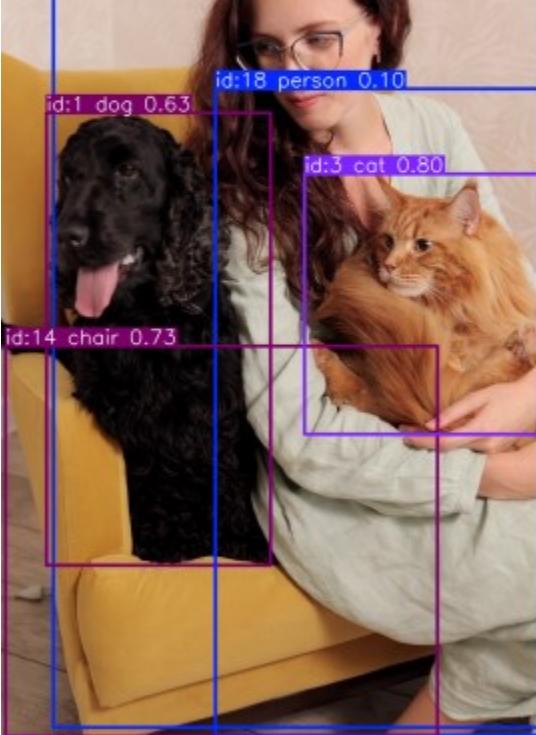
Speed: 5.3ms preprocess, 214.7ms inference, 0.5ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 177.3ms

Speed: 5.6ms preprocess, 177.3ms inference, 0.4ms postprocess per image at shape (1,





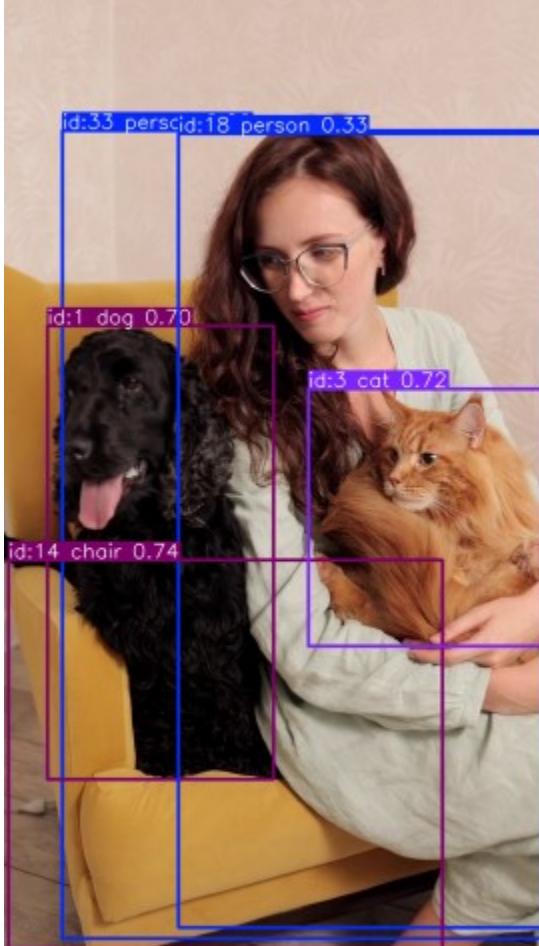
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 183.9ms

Speed: 5.2ms preprocess, 183.9ms inference, 0.4ms postprocess per image at shape (1,



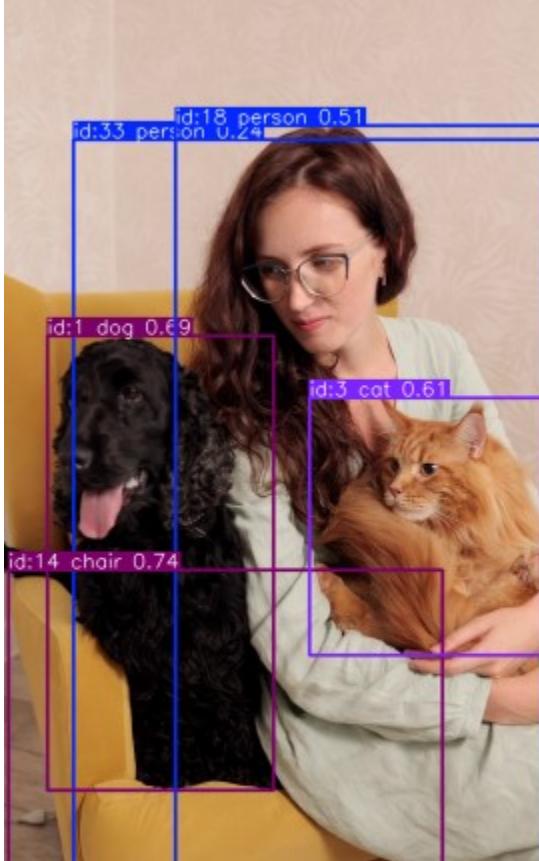
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 184.0ms

Speed: 8.9ms preprocess, 184.0ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 189.3ms

Speed: 10.4ms preprocess, 189.3ms inference, 0.4ms postprocess per image at shape (1,





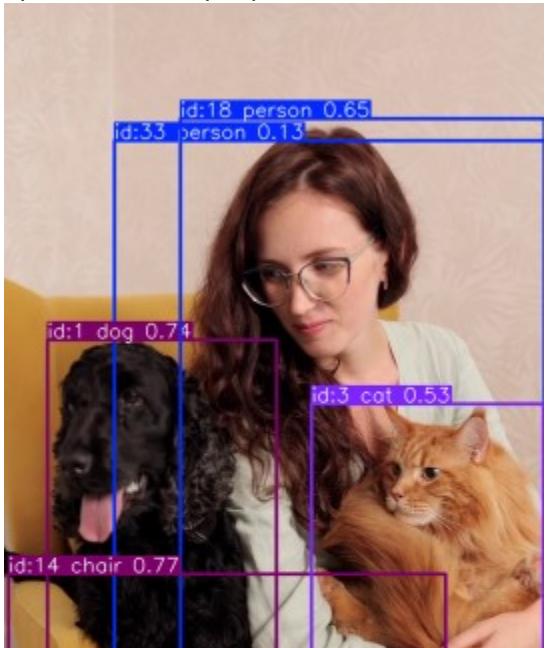
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 179.1ms

Speed: 5.2ms preprocess, 179.1ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 184.5ms

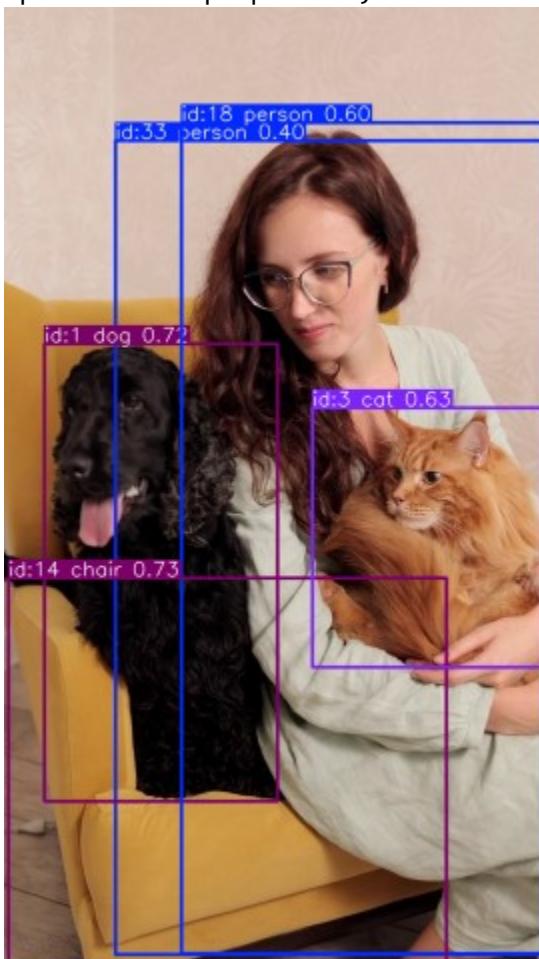
Speed: 5.4ms preprocess, 184.5ms inference, 0.4ms postprocess per image at shape (1,





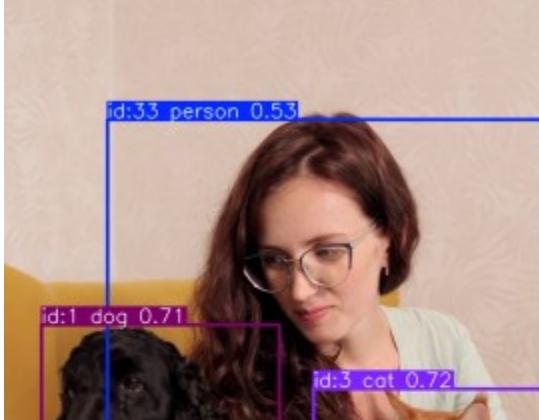
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 181.5ms

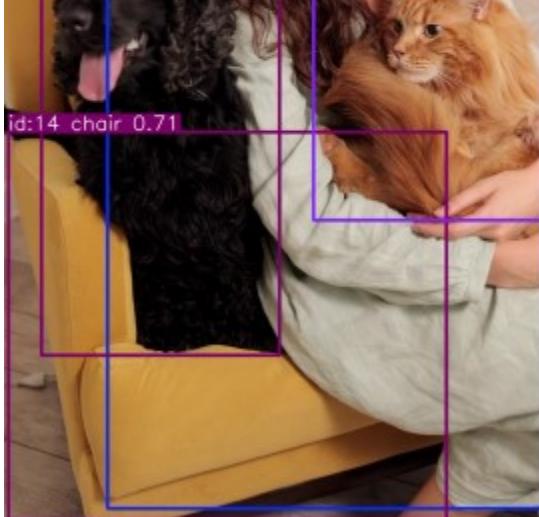
Speed: 5.4ms preprocess, 181.5ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 189.1ms

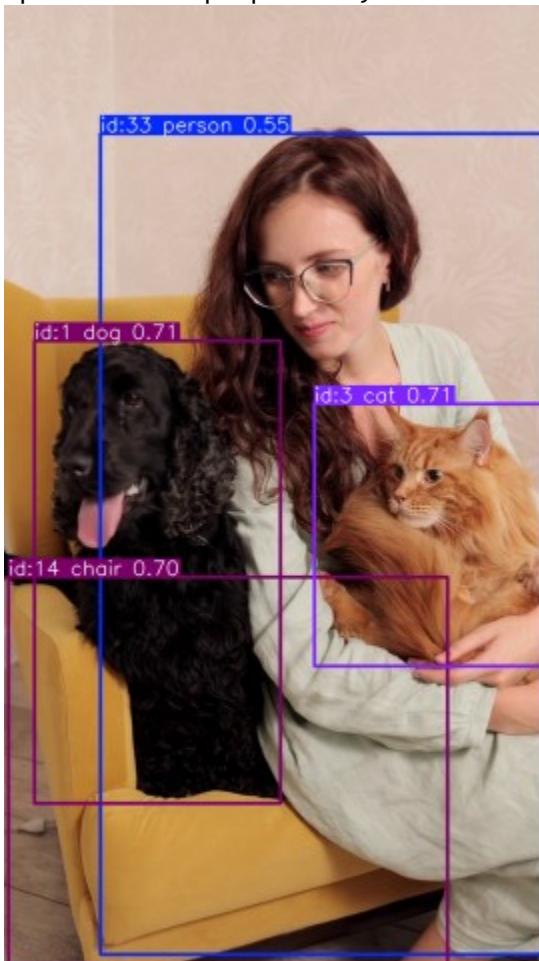
Speed: 5.2ms preprocess, 189.1ms inference, 0.4ms postprocess per image at shape (1,





0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 182.6ms

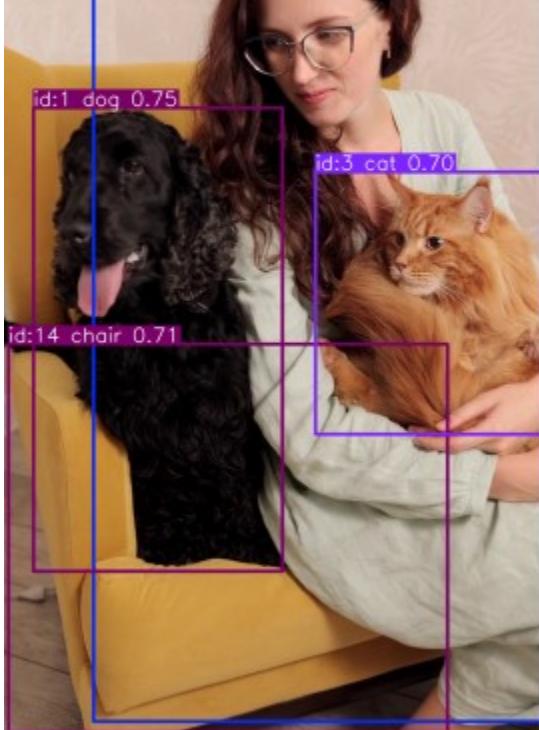
Speed: 4.9ms preprocess, 182.6ms inference, 0.5ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 181.0ms

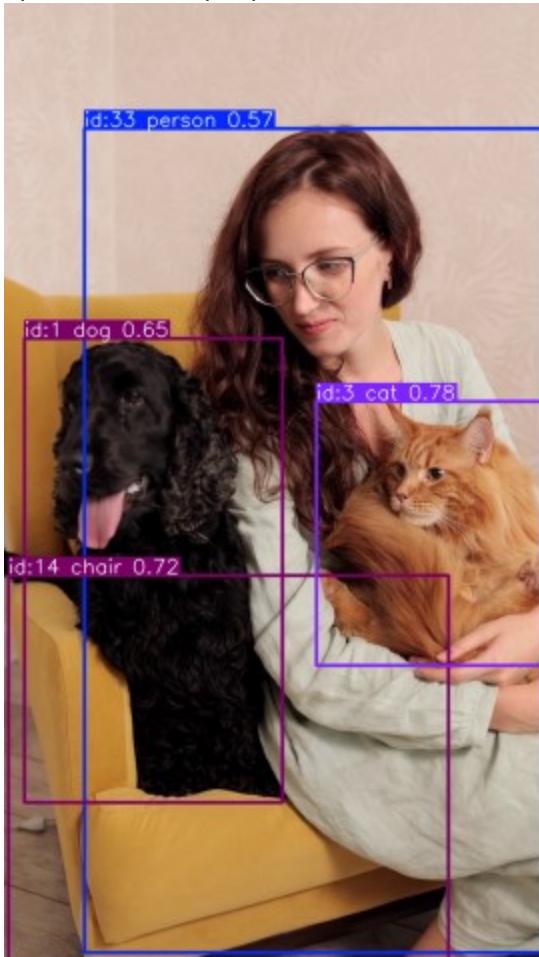
Speed: 5.1ms preprocess, 181.0ms inference, 0.4ms postprocess per image at shape (1,





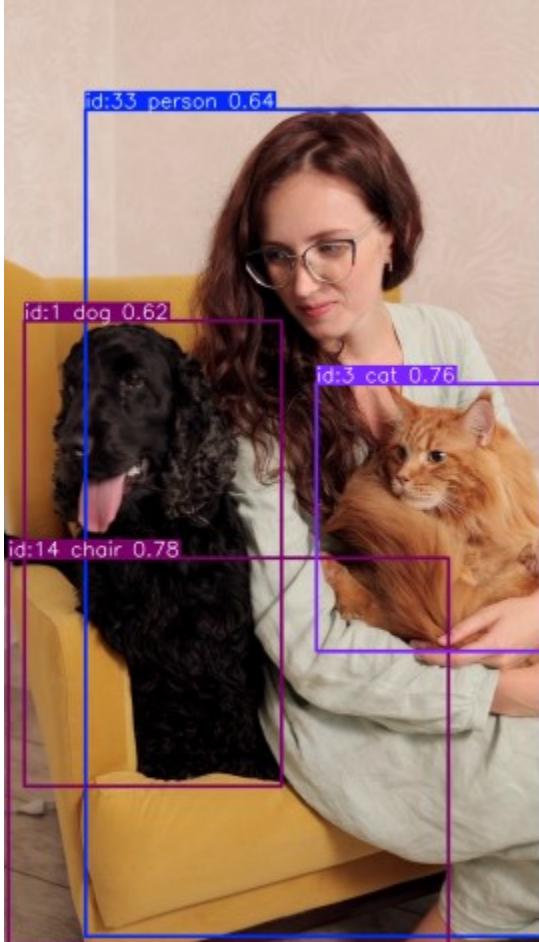
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 192.8ms

Speed: 5.4ms preprocess, 192.8ms inference, 0.4ms postprocess per image at shape (1,



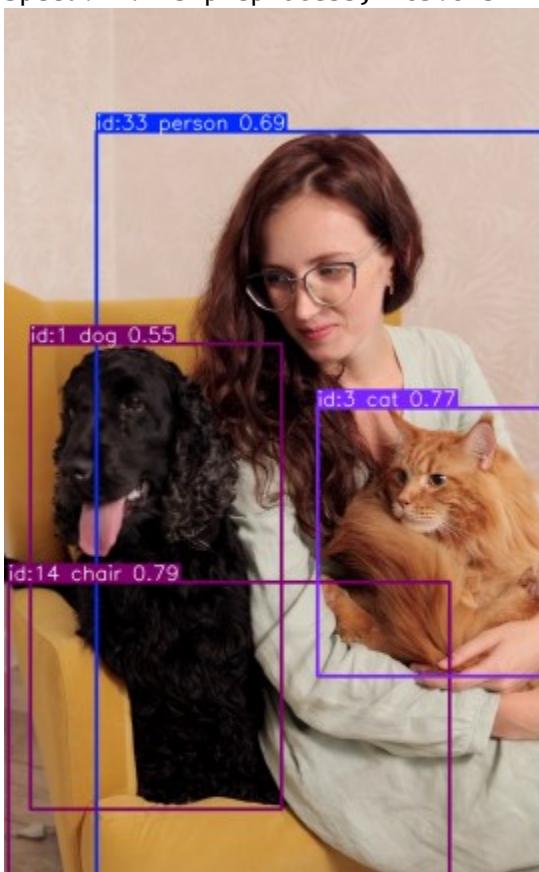
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 184.4ms

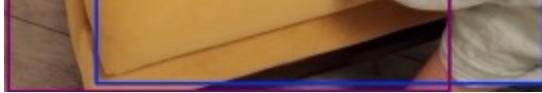
Speed: 3.5ms preprocess, 184.4ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 185.8ms

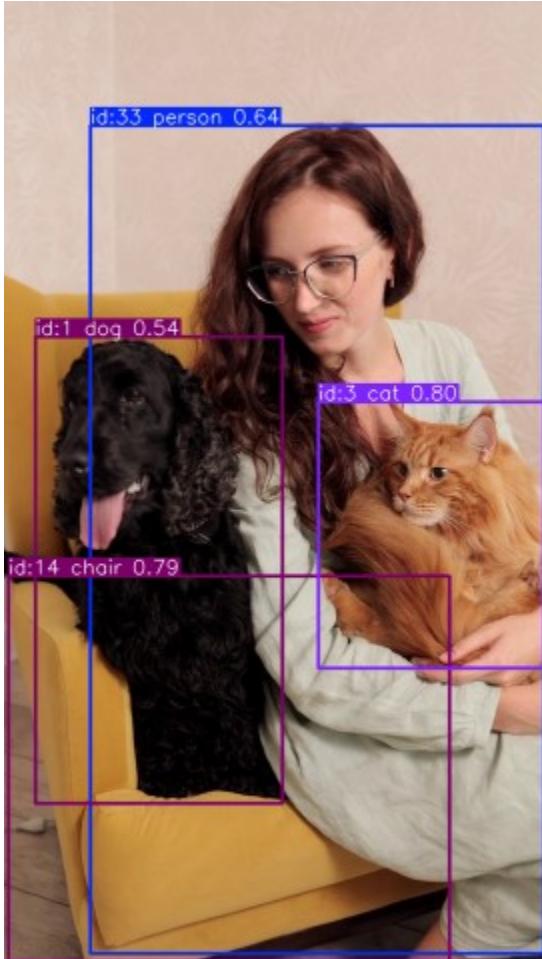
Speed: 4.4ms preprocess, 185.8ms inference, 0.4ms postprocess per image at shape (1,





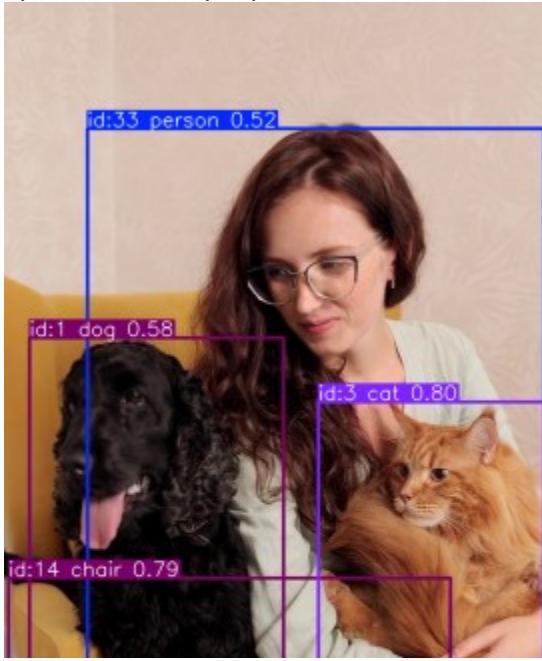
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 187.7ms

Speed: 3.8ms preprocess, 187.7ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 199.6ms

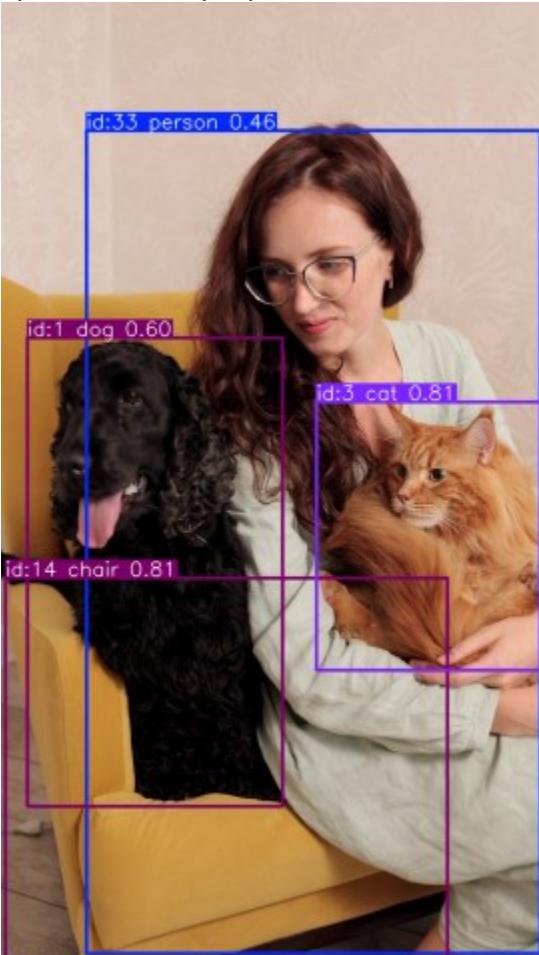
Speed: 5.3ms preprocess, 199.6ms inference, 0.4ms postprocess per image at shape (1,





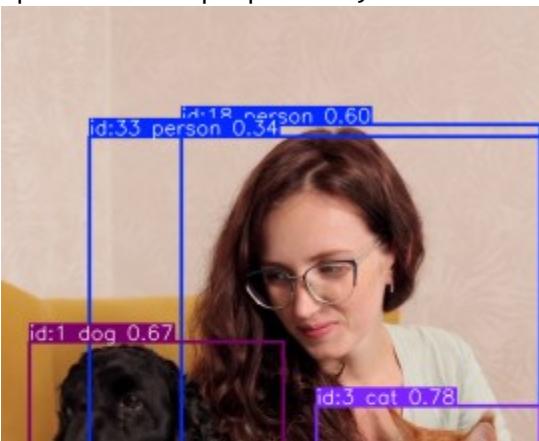
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 181.4ms

Speed: 5.0ms preprocess, 181.4ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 182.0ms

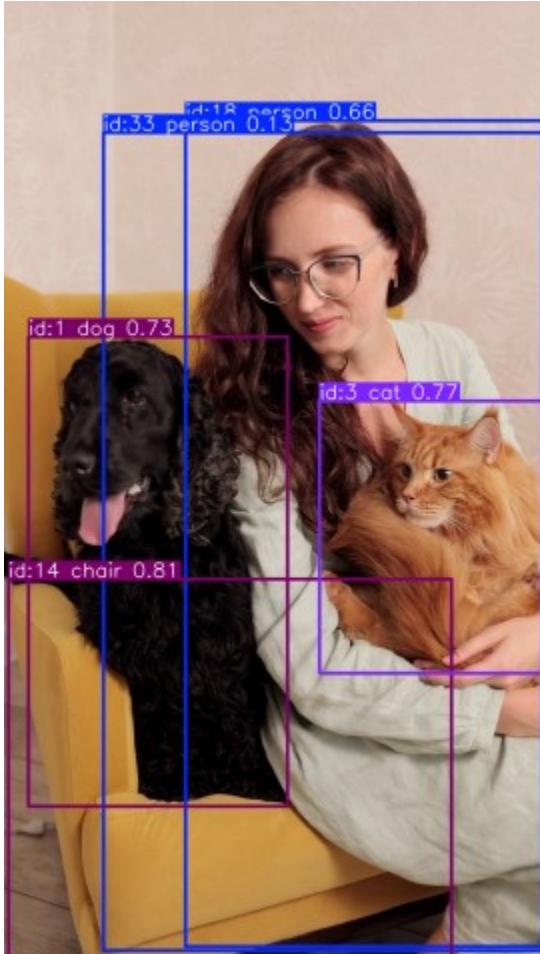
Speed: 5.7ms preprocess, 182.0ms inference, 0.4ms postprocess per image at shape (1,





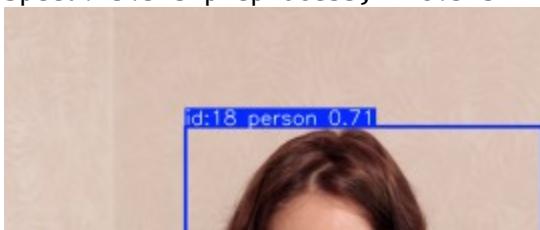
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 177.2ms

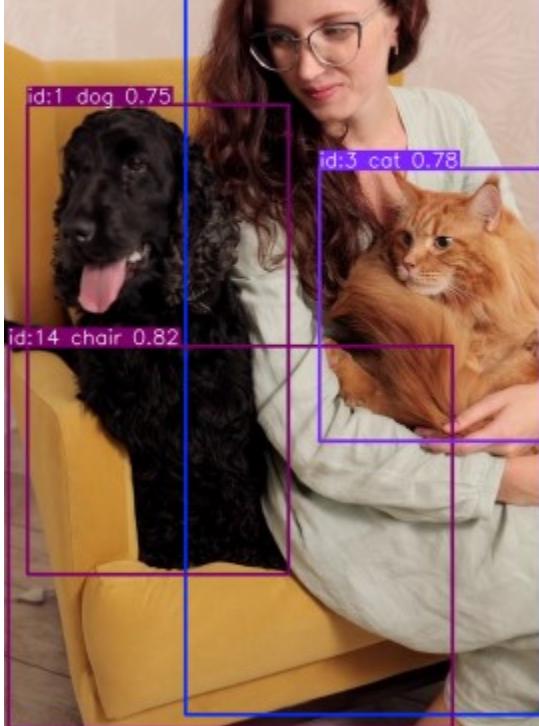
Speed: 5.1ms preprocess, 177.2ms inference, 0.5ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 198.3ms

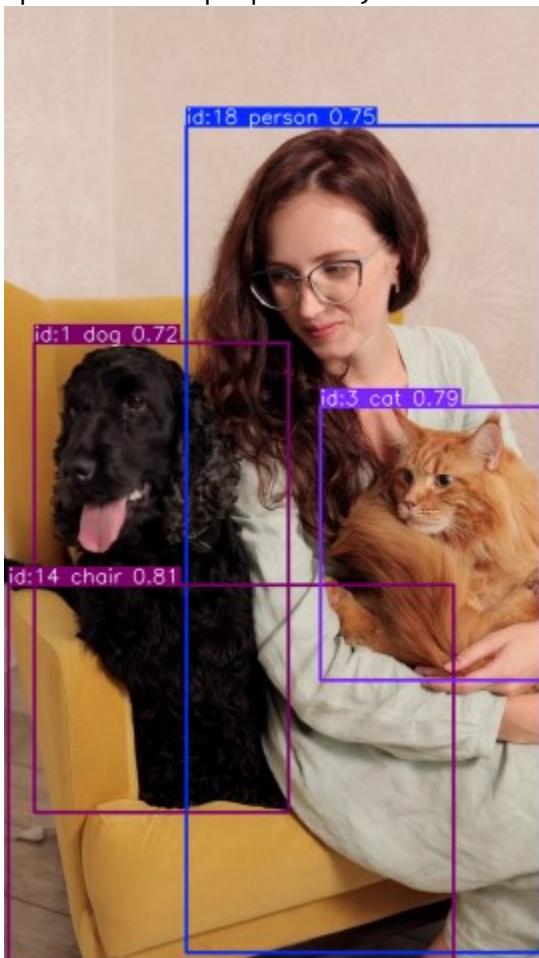
Speed: 5.3ms preprocess, 198.3ms inference, 0.5ms postprocess per image at shape (1,





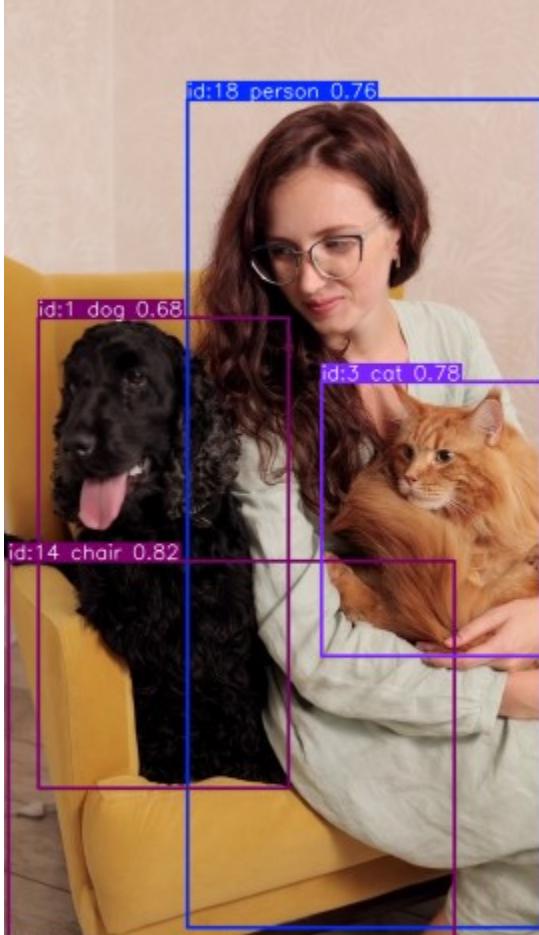
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 174.9ms

Speed: 5.1ms preprocess, 174.9ms inference, 0.4ms postprocess per image at shape (1,



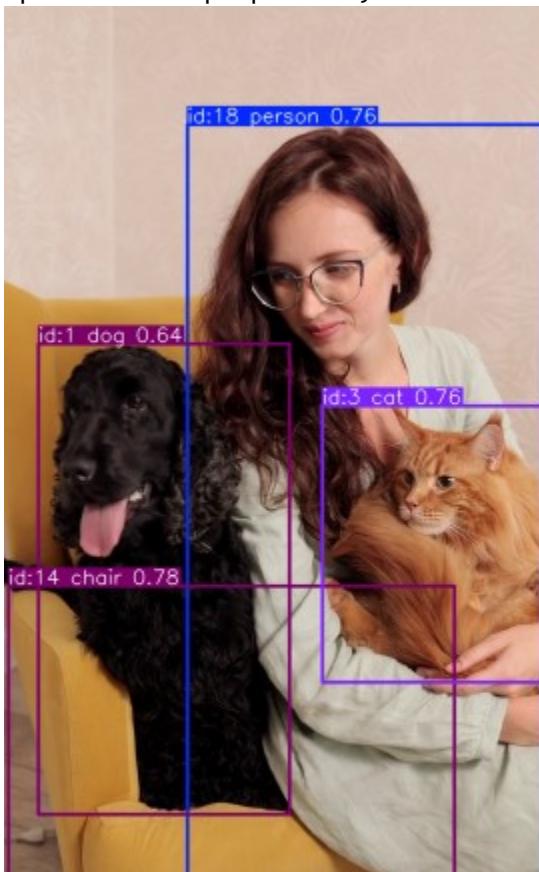
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 189.7ms

Speed: 5.4ms preprocess, 189.7ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 185.9ms

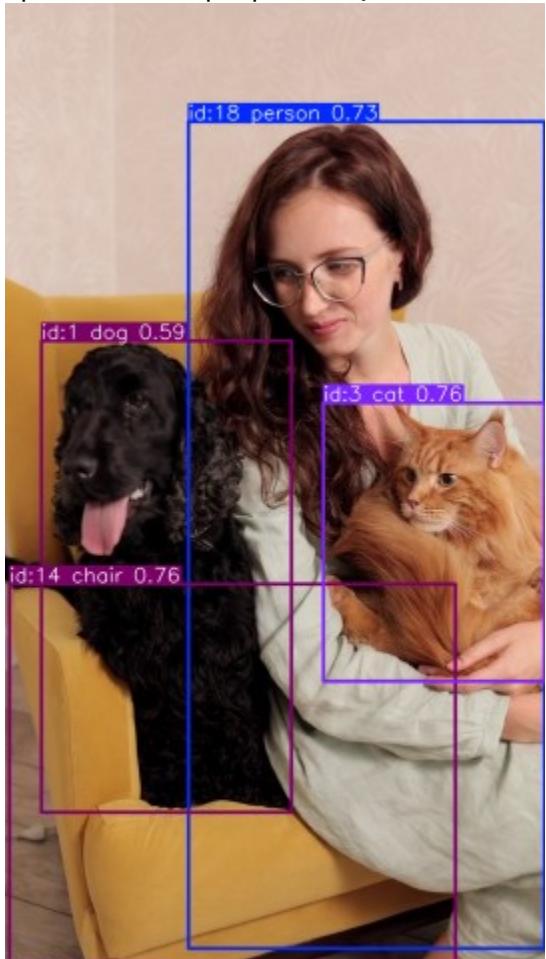
Speed: 9.2ms preprocess, 185.9ms inference, 0.4ms postprocess per image at shape (1,





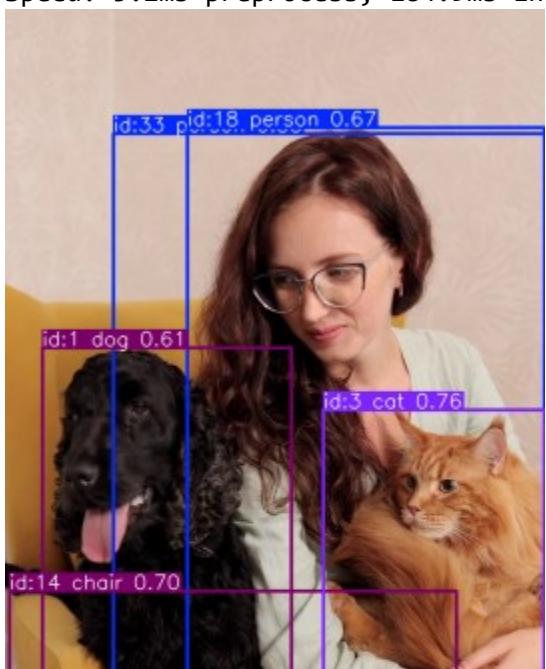
0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 214.1ms

Speed: 4.0ms preprocess, 214.1ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 184.9ms

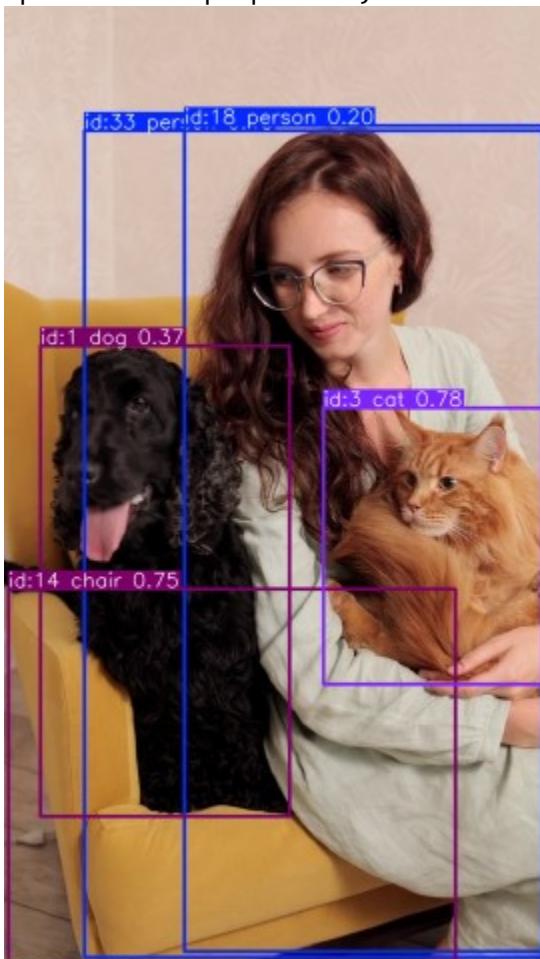
Speed: 5.2ms preprocess, 184.9ms inference, 0.4ms postprocess per image at shape (1,





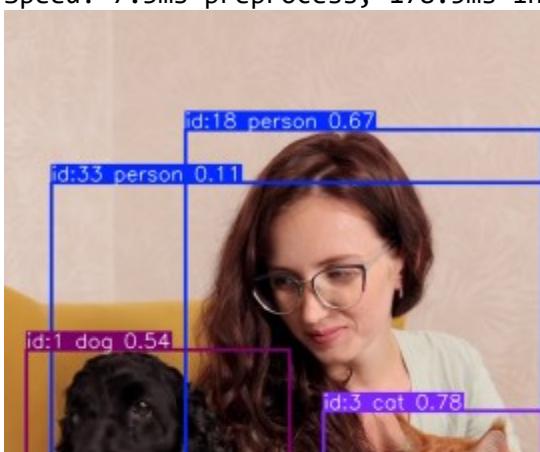
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 172.0ms

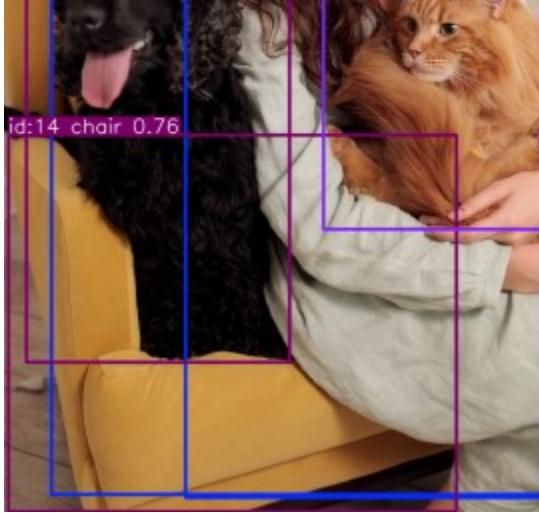
Speed: 5.3ms preprocess, 172.0ms inference, 0.4ms postprocess per image at shape (1,



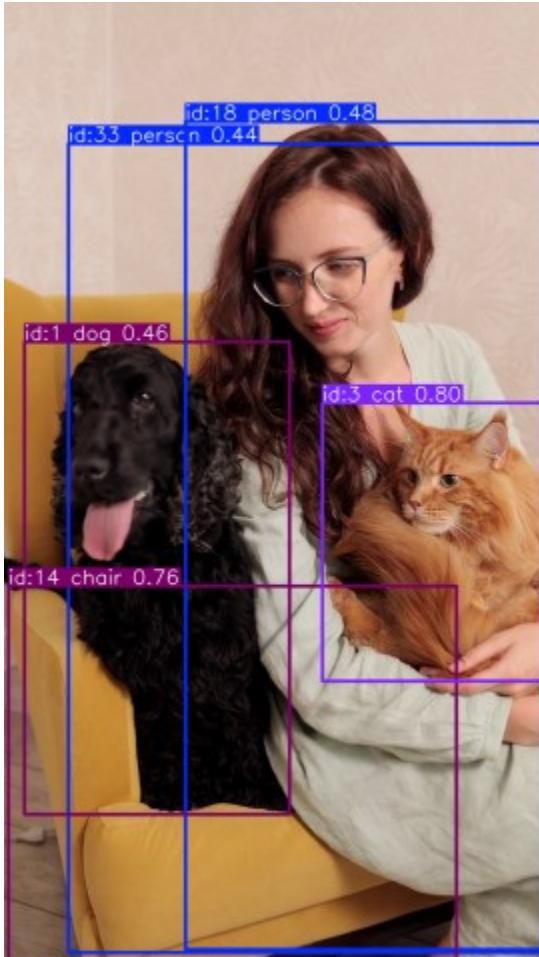
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 178.5ms

Speed: 7.3ms preprocess, 178.5ms inference, 0.4ms postprocess per image at shape (1,

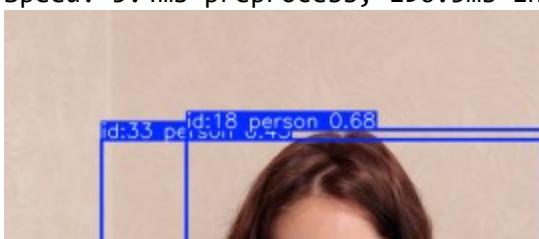


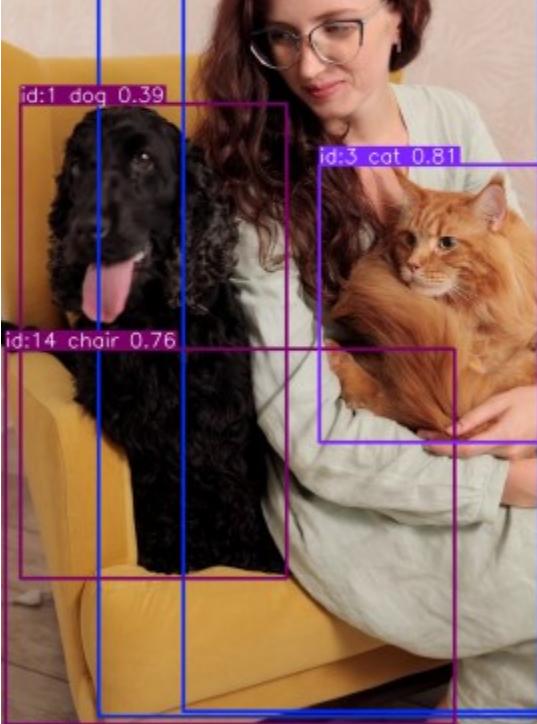


0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 194.0ms
Speed: 5.0ms preprocess, 194.0ms inference, 0.5ms postprocess per image at shape (1,



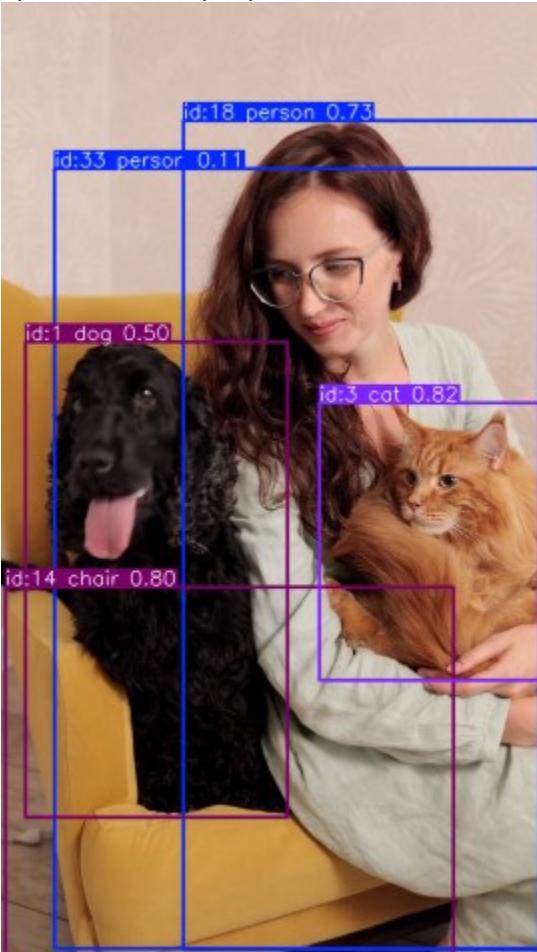
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 196.5ms
Speed: 5.4ms preprocess, 196.5ms inference, 0.4ms postprocess per image at shape (1,





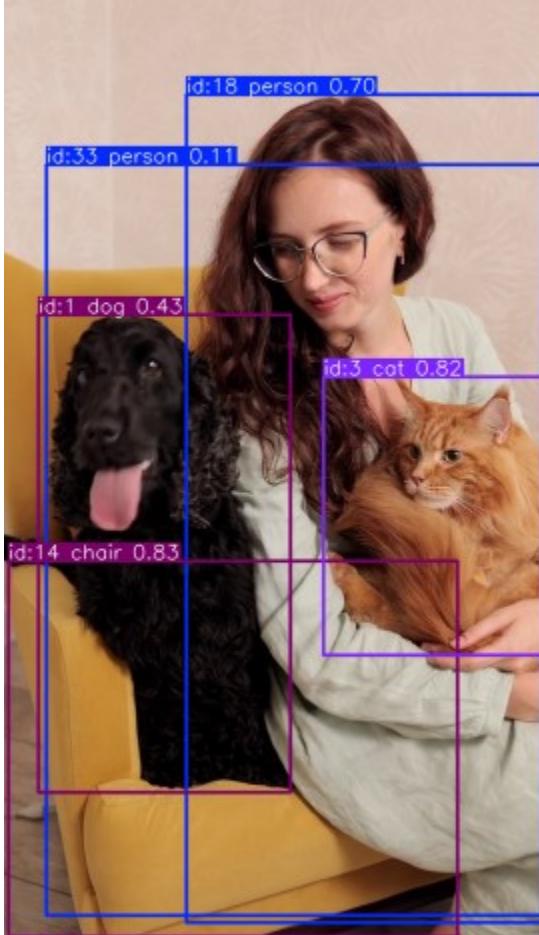
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 201.9ms

Speed: 5.2ms preprocess, 201.9ms inference, 0.4ms postprocess per image at shape (1,

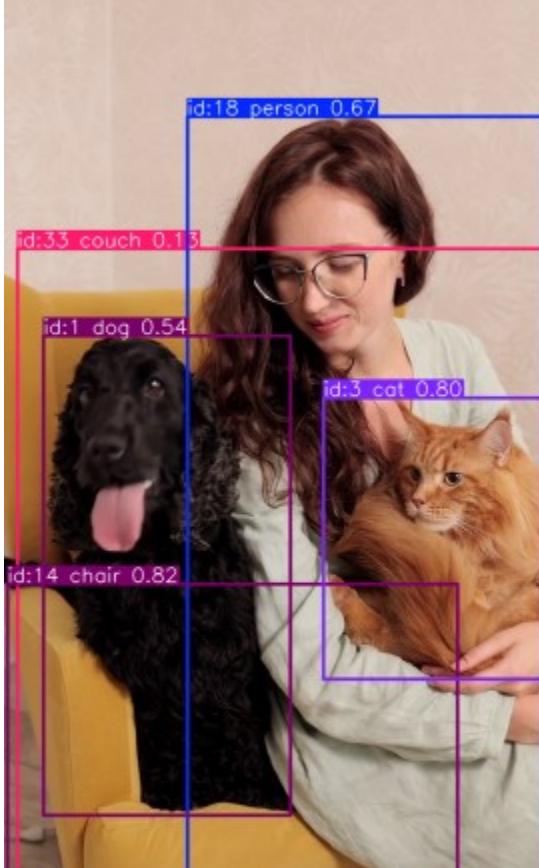


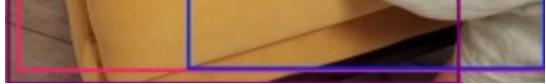
0: 640x384 2 persons, 1 cat, 1 dog, 1 chair, 391.7ms

Speed: 7.2ms preprocess, 391.7ms inference, 0.4ms postprocess per image at shape (1,

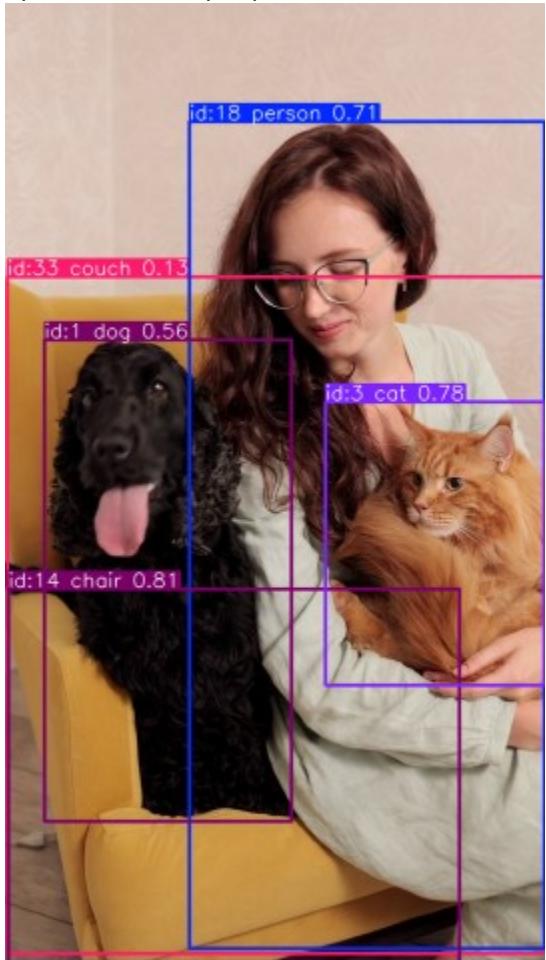


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 1 couch, 194.5ms
Speed: 5.0ms preprocess, 194.5ms inference, 0.4ms postprocess per image at shape (1,

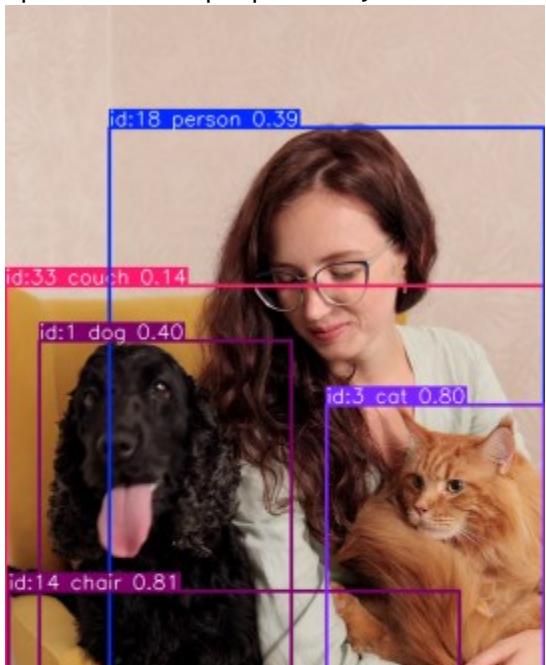




0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 1 couch, 182.9ms
Speed: 5.4ms preprocess, 182.9ms inference, 0.4ms postprocess per image at shape (1,

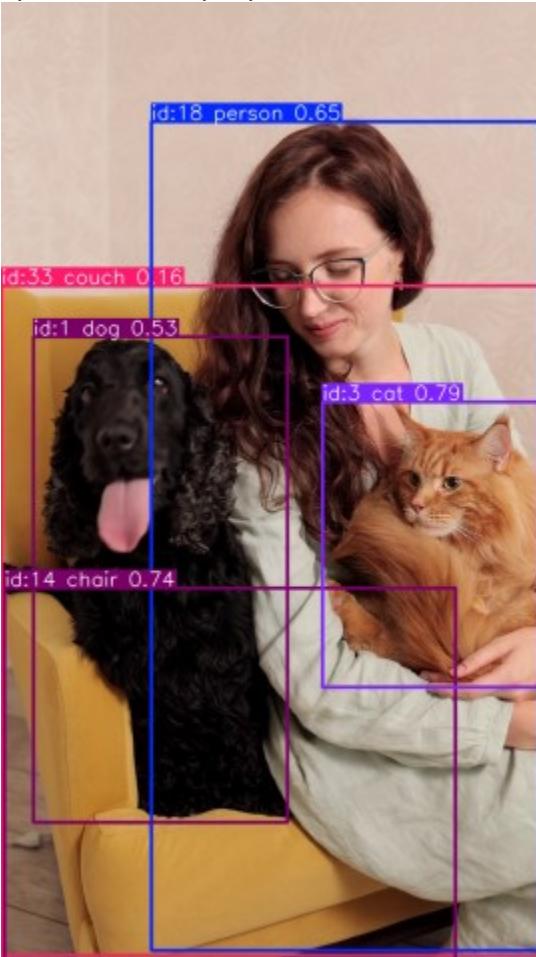


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 1 couch, 199.1ms
Speed: 3.5ms preprocess, 199.1ms inference, 0.4ms postprocess per image at shape (1,

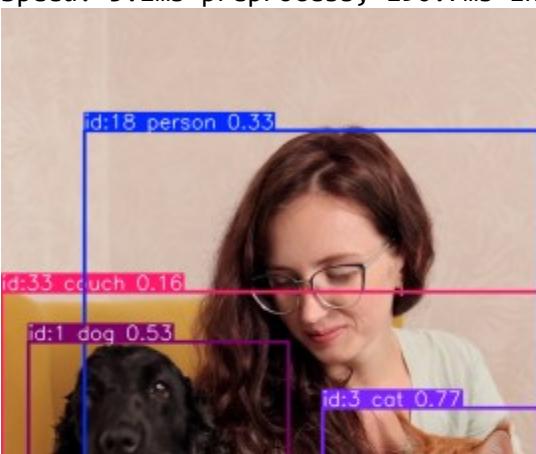


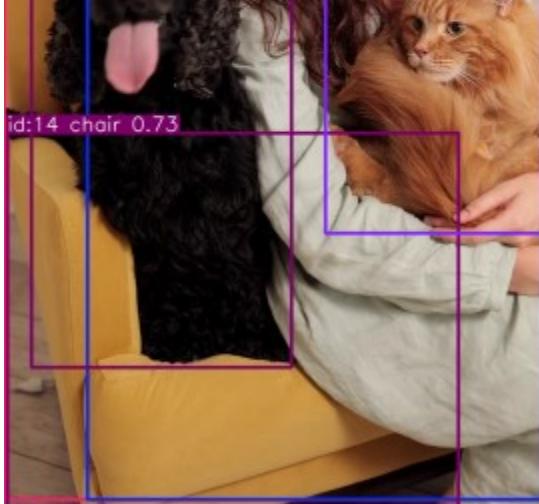


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 1 couch, 186.8ms
Speed: 5.1ms preprocess, 186.8ms inference, 0.4ms postprocess per image at shape (1,

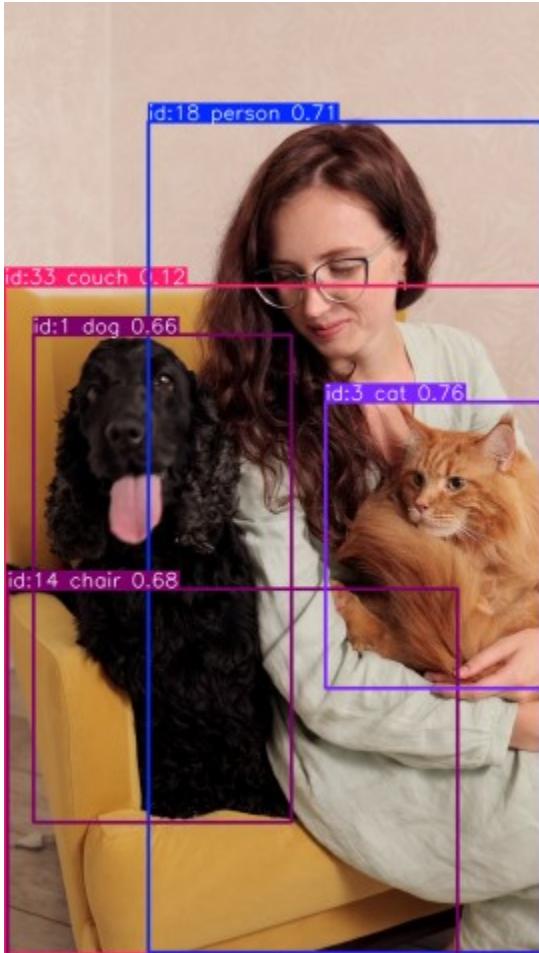


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 1 couch, 190.7ms
Speed: 5.1ms preprocess, 190.7ms inference, 0.4ms postprocess per image at shape (1,

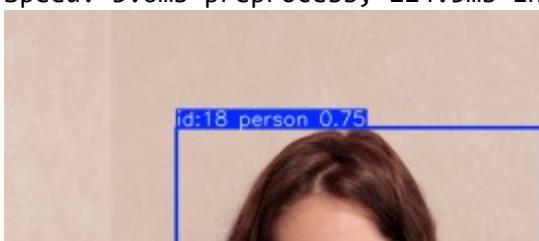


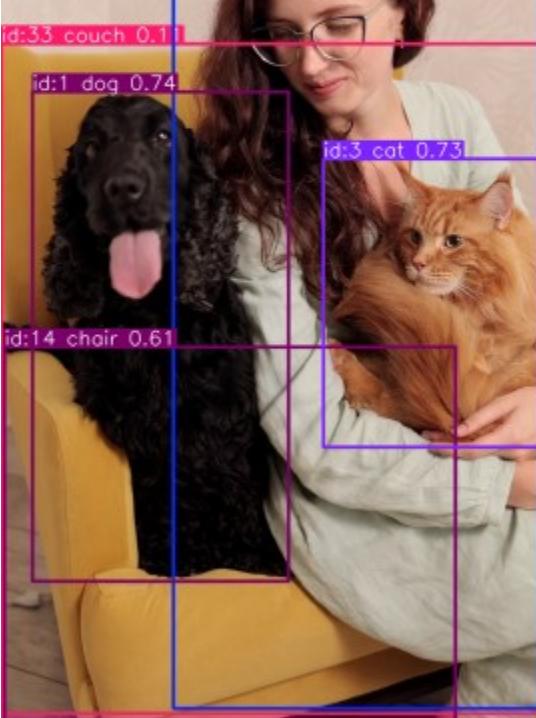


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 1 couch, 202.3ms
Speed: 5.2ms preprocess, 202.3ms inference, 0.4ms postprocess per image at shape (1,

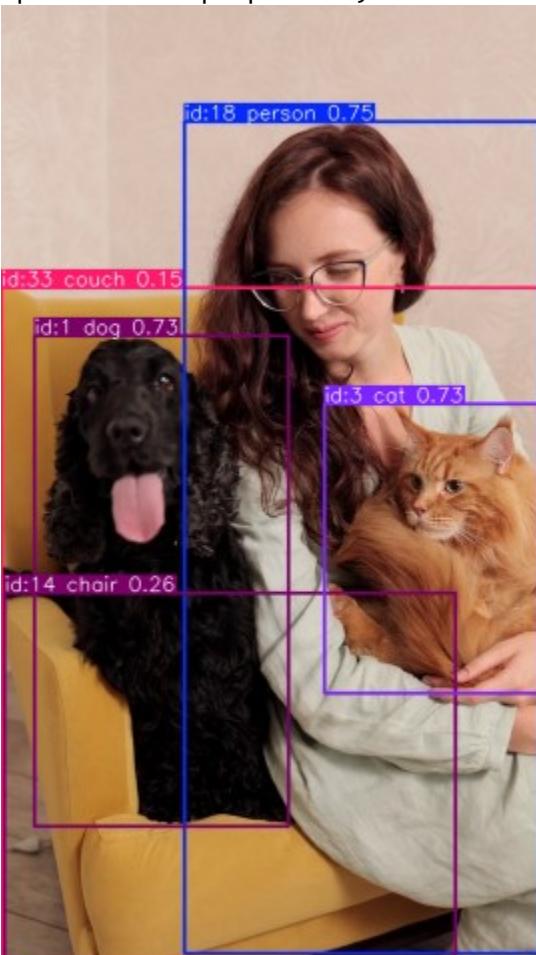


0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 1 couch, 224.5ms
Speed: 3.6ms preprocess, 224.5ms inference, 0.4ms postprocess per image at shape (1,

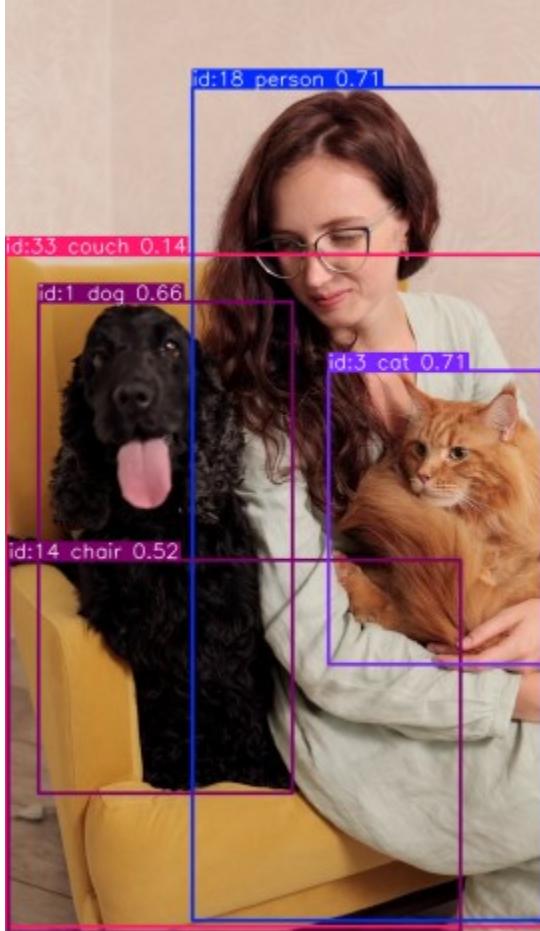




0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 1 couch, 177.9ms
Speed: 5.2ms preprocess, 177.9ms inference, 0.4ms postprocess per image at shape (1,



0: 640x384 1 person, 1 cat, 1 dog, 1 chair, 1 couch, 215.7ms
Speed: 3.6ms preprocess, 215.7ms inference, 0.4ms postprocess per image at shape (1,



Storing the detections in json file

```
with open("detections.json", "w") as f:  
    json.dump(all_detections, f, indent=2)
```

Determining and printing the frame with maximum diversity of objects

```
most_diverse_frame = max(diversity_per_frame, key=lambda x: x[1])  
  
print("Frame with max class diversity:", most_diverse_frame[0],  
      "\nClasses in this frame:", most_diverse_frame[1])  
  
Frame with max class diversity: 175  
Classes in this frame: 4
```

Creating video file for every fifth frame, upto the last frame

```
fourcc = cv2.VideoWriter_fourcc(*'XVID')  
video = cv2.VideoWriter('/content/Detection_Summary_Engine/output_video/video.avi',  
                      fourcc, 30, (new_width, new_height))
```

```

for j in range(0,frame_index):
    if (j-1) % frame_skip == 0:
        path = "/content/Detection_Summary_Engine/output_images/frame_" + str(j-1) + ".jp
        path = str(path)
        if path is None:
            break
        img = cv2.imread(path)
        video.write(img)

```

Releasing video windows

```

video.release()
cap.release()
cv2.destroyAllWindows()

```

Assigning detected objects on x-axis, with overall frequency on y-axis of one plot and per-frame frequency on second plot

```

x= freq.keys()
y= freq.values()
y_list = list(y)                                     # converting
y_perframe = [f / len(all_detections) for f in y_list]

```

Plotting the two graphs, one with overall frequency of objects and the other with frequency per frame of objects

```

# Creating 1 row, 2 column subplot
fig, (ax1, ax2) = plt.subplots(1, 2, figsize=(12, 5))

# Plotting on the first subplot
ax1.bar(x, y, color='skyblue')
ax1.set_title('Plot 1: Frequency of Objects')
ax1.set_xlabel('Class')
ax1.set_ylabel('Count')

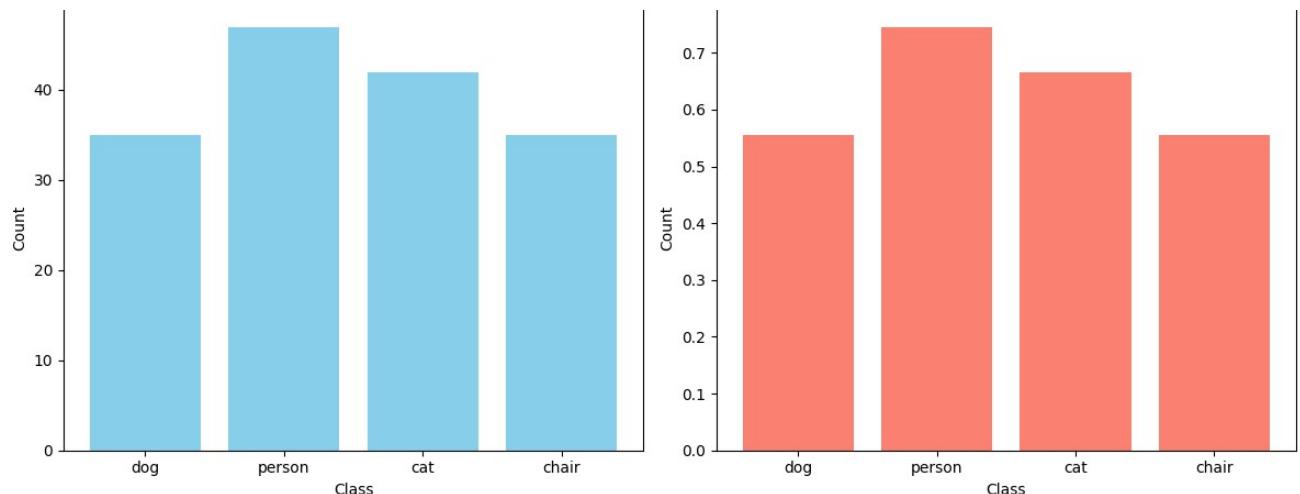
# Plotting on the second subplot
ax2.bar(x, y_perframe, color='salmon')
ax2.set_title('Plot 2: Frequency of Objects per frame')
ax2.set_xlabel('Class')
ax2.set_ylabel('Count')

plt.tight_layout()
plt.show()

```

Plot 1: Frequency of Objects

Plot 2: Frequency of Objects per frame



The annotated frames are stored in the folder 'output_images', and the annotated video is stored in the folder 'output_video'. And thats it! Check out my github :- <https://github.com/El2ra2>