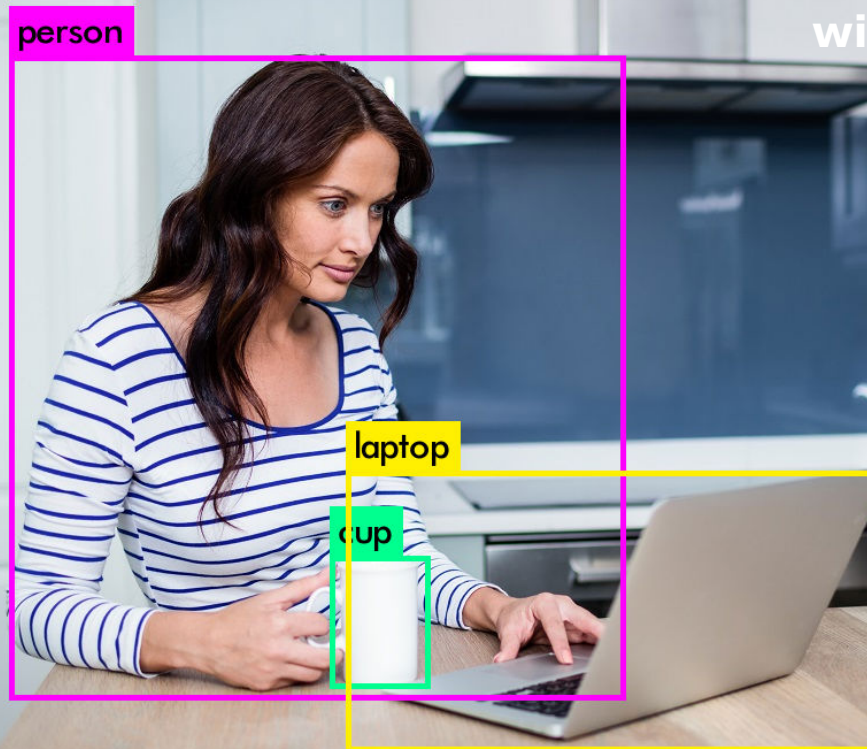


# Training YOLO v3 for Objects Detection with Custom Data

*Running training process*



## Running training process in Darknet framework

To start training process in *Darknet framework*, navigate to the directory with executable file and type in *Terminal* or *command line* specific command as described below. In order to switch off *Loss Window* while training, add argument at the end of command: `-dont_show`

### Training on Traffic Signs dataset

- **For Linux and MacOS** navigate to root directory where *Darknet framework* was installed and type in following command:

```
./darknet detector train cfg/ts_data.data cfg/yolov3_ts_train.cfg weights/darknet53.conv.74
```

- **For Windows** navigate to `darknet\build\darknet\x64` and type in following command:

```
darknet.exe detector train cfg\ts_data.data cfg\yolov3_ts_train.cfg weights\darknet53.conv.74
```

### Training on Custom dataset with Car, Bicycle wheel and Bus

- **For Linux and MacOS** navigate to root directory where *Darknet framework* was installed and type in following command:

```
./darknet detector train cfg/custom_data.data cfg/yolov3_custom_train.cfg weights/darknet53.conv.74
```

- **For Windows** navigate to `darknet\build\darknet\x64` and type in following command:

```
darknet.exe detector train cfg\custom_data.data cfg\yolov3_custom_train.cfg weights\darknet53.conv.74
```

After sometime, depending on the capacity of machine you use, you will find *trained weights* in the folder *backup*. Weights are saved every *100 iterations*.

```
darknet/  
  backup/  
    yolo-obj_last.weights  
    ...  
    yolo-obj_1000.weights  
    ...  
    yolo-obj_2000.weights  
    ...  
    yolo-obj_final.weights
```

### Continue training with saved weights after 1000 iterations

It is possible to stop training, for example, after 1000 iteration and continue later by using already saved weights. In order to continue training just specify at the end of command location of needed weights to continue training from.

- **For Linux and MacOS** navigate to root directory where *Darknet framework* was installed and type in following command:

```
./darknet detector train cfg/ts_data.data cfg/yolov3_ts_train.cfg backup/yolo-obj_1000.weights
```

- **For Windows** navigate to *darknet\build\darknet\x64* and type in following command:

```
darknet.exe detector train cfg/ts_data.data cfg/yolov3_ts_train.cfg backup/yolo-obj_1000.weights
```