



Training YOLO v3 for Objects Detection with Custom Data

*Installing
OIDv4 toolkit*

Installing OIDv4 toolkit for downloading images

It takes just few steps to install *OIDv4 toolkit*. The preferred one is by using separated environment, created by `conda`. Choose one of the option for *Step 2* that works for you.

Step 1: Clone repository

The first step to implement is *cloning repository*. Run following command in *Terminal* (or *Anaconda Prompt*):

```
git clone https://github.com/EscVM/OIDv4_ToolKit.git
```

If you don't have *git* been installed, run following command in *Terminal* (or *Anaconda Prompt*):

```
conda install git
```

Step 2: Installing requirements inside existing environment

Activate your Python v3 environment and navigate to the directory with cloned *OIDv4 toolkit*. You can list all available sub-directories in the current directory by using following command in *Terminal* (or *Anaconda Prompt*):

```
dir
```

It will show all sub-directories you can go in, including **OIDv4_ToolKit**.

Go inside this directory by using following command in *Terminal* (or *Anaconda Prompt*):

```
cd OIDv4_ToolKit
```

Pay attention! Letter **K** in the name of directory is capital.

Then, run following command in *Terminal* (or *Anaconda Prompt*):

```
pip3 install -r requirements.txt
```

or:

```
pip install -r requirements.txt
```

Step 2: Installing requirements inside new environment

If there are any issues with installation (e.g. incompatibility issues), then create separate environment by conda and install *OIDv4 toolkit* inside it.

To create new environment, use following command (change name "test" to desired one):

```
conda create -n test python=3.6
```

Then, activate environment:

```
conda activate test
```

Then, navigate to the directory with cloned *OIDv4 toolkit* (as described above) and run following command in *Terminal* (or *Anaconda Prompt*):

```
pip3 install -r requirements.txt
```

or:

```
pip install -r requirements.txt
```

Step 3: Verify

In order to verify installation, simply launch *OIDv4 toolkit* to check available options. Inside the directory **OIDv4_ToolKit** (if you went outside, simply come back again by using steps described above) run following command in *Terminal* (or *Anaconda Prompt*):

```
python3 main.py
```

or:

```
python main.py
```

or following for more detailed information:

```
python3 main.py -h
```

or:

```
python main.py -h
```

Find all possible *installation options* for all Operating Systems (*Windows, Linux, Mac*) on official resource by the link below.

Find *possible solutions* in the *Tab "issues"* on official resource by the link below.

Useful Links

Check out these links with official resources for installation and using *OIDv4 toolkit* as well as the link to *Open Images Dataset*:

- [1] [OIDv4 ToolKit](#) – official resource with full description
- [2] ["Issues" Tab on OIDv4 ToolKit](#) – official resource with solutions for issues
- [3] [Open Images Dataset](#) – publicly available huge dataset with labelled images from 600 classes
- [4] [Cars from Open Images Dataset](#) – explore labelled by bounding boxes images of *cars* in *Open Image* dataset (use options to tick or untick extra information)