

The “3DROM” folder is the program folder.

Dependencies

The programme uses the following libraries:

python 3.7+

pytorch 1.4+ & torchvision

numpy

matplotlib

pillow

opencv-python

kornia

matlab & matlabengine

Data Preparation

The datasets need to be downloaded from their official websites before running the program.

Wildtrack: <https://www.epfl.ch/labs/cvlab/data/data-wildtrack/>

Multiviewx: <https://github.com/hou-yz/MVDet/>

Terrace: <https://www.epfl.ch/labs/cvlab/data-pom-index-php/>

By default, all datasets are put in ~/Data/. The ~/Data/ folder should look like this

Data

```
|—— MultiviewX/
|   |—— ...
|—— Wildtrack/
|   |—— ...
|—— Terrace/
|   |—— ...
```

Training

For training, please run the programme as follows:

python main.py -d Wildtrack or python main.py -d multiviewx or python main.py -d terrace

Pre-Trained Models

The pre-trained models can be download from:

https://drive.google.com/file/d/1iwFQH05vpx_I3vnrouiCoWOnhiHHyNFA/view?usp=sharing

The programme can be run with the pre-trained models for testing:

```
python main.py -d wildtrack --resume PATH or python main.py -d multiviewx --resume  
PATH or python main.py -d terrace --resume PATH
```

The “PATH” is the path of a pre-trained model.

The GPU Requirements

The RTX3090 is recommended for the training to ensure sufficient GPU memory.