Dependencies

The programme uses the following libraries:
python 3.7+
pytorch 1.4+ & tochvision
numpy
matplotlib
pillow
opencv-python
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/

By default, all datasets are put in ~/Data/. The ~/Data/ folder should look like this Data
├───── MultiviewX/
│   └─── …
└───── Wildtrack/

Training

For training, please run the programme as follows:
python main.py -d Wildtrack or python main.py -d multiviewx

Pre-Trained Models

The pre-trained models can be downloaded from https://drive.google.com/file/d/1YdF1RbU816JkuT4FYrzleog559PnAjub/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
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.