This is the code for the paper **PMSGCN: parallel multi-scale graph convolution network for estimating perceptually similar 3D human poses from monocular images** in Pytorch.

Dependencies:

* cuda 9.0
* Python 3.6
* Pytorch 0.4.1.
* matplotlib==3.1.1
* opencv-python==4.1.1.26
* tqdm==4.46.0

Argument adjustment in opt1.py:

* --root\_path: change to the path where this project is stored on the server
* --input\_inverse\_intrinsic：If decoupling the camera intrinsic parameters from PMSGCN, it equals to True and corresponding --in\_channels equals to 3; If not decoupling the parameters, it is false and corresponding --in\_channels equals to 2.
* --use\_projected\_2dgt：default value is False. If it is True, then PMSGCN uses the 2D poses projected from the 3D labels as the network input.

Dataset setup:

2D pose detections and corresponding 3D labels are put in data/dataset

To train the PMSGCN, run:

python main\_graph.py --show\_protocol2

To test the PMSGCN, run:

python main\_graph.py --pro\_train 0 --show\_protocol2 --stgcn\_reload 1 --previous\_dir ‘/PMSGCN\_SSE/PMSGCN/results/pms\_gcn/no\_pose\_refine/ --stgcn\_model 'model\_pms\_gcn\_xx\_eva\_post\_xxxx.pth’