```
C:\Users\Lenovo\anaconda3\envs\VideoPose\python.exe D:\VideoPose3D\main.py
Namespace(dataset='h36m', keypoints='cpn_ft_h36m_dbb', subjects_train='S1,S5,S6,S7,S8',
subjects_test='S9,S11', subjects_unlabeled='', actions='*', checkpoint='checkpoint', checkpoint_frequency=10,
resume='', evaluate='', render=False, by_subject=False, export_training_curves=False, stride=1, epochs=60,
batch_size=1024, dropout=0.25, learning_rate=0.001, lr_decay=0.95, data_augmentation=True,
test_time_augmentation=True, architecture='3,3,3', causal=False, channels=1024, subset=1, downsample=1,
warmup=1, no_eval=False, dense=False, disable_optimizations=False, linear_projection=False,
bone_length_term=True, no_proj=False, viz_subject=None, viz_action=None, viz_camera=0, viz_video=None,
viz_skip=0, viz_output=None, viz_export=None, viz_bitrate=3000, viz_no_ground_truth=False, viz_limit=-1,
viz_downsample=1, viz_size=5)
Loading dataset...
Preparing data...
Loading 2D detections...
INFO: Receptive field: 27 frames
INFO: Trainable parameter count: 8555571
INFO: Testing on 543344 frames
INFO: Training on 1559752 frames
** Note: reported losses are averaged over all frames and test-time augmentation is not used here.
** The final evaluation will be carried out after the last training epoch.
[1] time 1.96 lr 0.001000 3d_train 99.446615 3d_eval 48.523162 3d_valid 64.161272
[2] time 2.01 lr 0.000950 3d_train 49.253345 3d_eval 37.873763 3d_valid 56.371555
[3] time 1.92 lr 0.000902 3d_train 43.322269 3d_eval 33.756832 3d_valid 55.559838
[4] time 1.95 lr 0.000857 3d_train 40.103581 3d_eval 31.058914 3d_valid 55.009125
[5] time 1.97 lr 0.000815 3d_train 38.151818 3d_eval 30.239148 3d_valid 52.547987
[6] time 2.00 lr 0.000774 3d_train 36.674724 3d_eval 28.314806 3d_valid 51.522357
[7] time 2.02 lr 0.000735 3d_train 35.626773 3d_eval 26.765846 3d_valid 53.018869
[8] time 2.03 lr 0.000698 3d_train 34.709847 3d_eval 26.434321 3d_valid 52.256734
[9] time 2.02 lr 0.000663 3d_train 33.996807 3d_eval 25.467177 3d_valid 51.377550
[10] time 2.03 lr 0.000630 3d_train 33.437805 3d_eval 24.887322 3d_valid 51.206247
Saving checkpoint to checkpoint\epoch_10.bin
[11] time 2.06 lr 0.000599 3d_train 33.010516 3d_eval 24.300911 3d_valid 51.445476
[12] time 2.04 lr 0.000569 3d_train 32.497915 3d_eval 24.399067 3d_valid 51.266582
[13] time 2.04 lr 0.000540 3d_train 32.142222 3d_eval 23.075008 3d_valid 51.521235
[14] time 2.02 lr 0.000513 3d_train 31.817227 3d_eval 23.015587 3d_valid 51.712714
[15] time 2.05 lr 0.000488 3d_train 31.499744 3d_eval 22.377765 3d_valid 51.690608
[16] time 2.09 lr 0.000463 3d_train 31.277080 3d_eval 22.497882 3d_valid 50.766154
[17] time 2.06 lr 0.000440 3d_train 31.042959 3d_eval 22.384055 3d_valid 51.365871
[18] time 2.05 lr 0.000418 3d_train 30.810516 3d_eval 21.613894 3d_valid 50.448242
[19] time 2.05 lr 0.000397 3d_train 30.615281 3d_eval 21.822066 3d_valid 51.055399
[20] time 2.04 lr 0.000377 3d_train 30.453932 3d_eval 21.366298 3d_valid 51.283123
Saving checkpoint to checkpoint\epoch_20.bin
[21] time 2.08 lr 0.000358 3d_train 30.276985 3d_eval 21.403760 3d_valid 50.437445
[22] time 2.05 lr 0.000341 3d_train 30.147789 3d_eval 21.104132 3d_valid 51.481607
[23] time 2.05 lr 0.000324 3d_train 29.986234 3d_eval 20.728528 3d_valid 51.235898
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[24] time 2.05 lr 0.000307 3d_train 29.853578 3d_eval 20.713676 3d_valid 50.449164
[25] time 2.04 lr 0.000292 3d_train 29.731922 3d_eval 20.249459 3d_valid 50.260063
[26] time 2.05 lr 0.000277 3d_train 29.611541 3d_eval 20.240366 3d_valid 50.541775
[27] time 2.05 lr 0.000264 3d_train 29.518687 3d_eval 20.337805 3d_valid 50.484051
[28] time 2.04 lr 0.000250 3d_train 29.428018 3d_eval 20.191740 3d_valid 50.487490
[29] time 2.04 lr 0.000238 3d_train 29.303826 3d_eval 20.267744 3d_valid 50.562857
[30] time 2.04 lr 0.000226 3d_train 29.251772 3d_eval 20.089568 3d_valid 50.616005
Saving checkpoint to checkpoint\epoch_30.bin
[31] time 2.06 lr 0.000215 3d_train 29.147766 3d_eval 19.875022 3d_valid 50.341036
[32] time 2.06 lr 0.000204 3d_train 29.080055 3d_eval 19.787971 3d_valid 50.226950
[33] time 2.04 lr 0.000194 3d_train 29.023900 3d_eval 19.916825 3d_valid 50.871558
[34] time 2.05 lr 0.000184 3d_train 28.956835 3d_eval 19.527923 3d_valid 50.783906
[35] time 2.04 lr 0.000175 3d_train 28.884549 3d_eval 19.359540 3d_valid 50.549313
[36] time 2.05 lr 0.000166 3d_train 28.821521 3d_eval 19.441447 3d_valid 50.348245
[37] time 2.04 lr 0.000158 3d_train 28.758868 3d_eval 19.425524 3d_valid 49.943102
[38] time 2.04 lr 0.000150 3d_train 28.708269 3d_eval 19.358166 3d_valid 50.065387
[39] time 2.04 lr 0.000142 3d_train 28.659348 3d_eval 19.132839 3d_valid 50.176314
[40] time 2.04 lr 0.000135 3d_train 28.608579 3d_eval 19.109339 3d_valid 50.082479
Saving checkpoint to checkpoint\epoch_40.bin
[41] time 2.07 lr 0.000129 3d_train 28.570206 3d_eval 19.008199 3d_valid 50.080852
[42] time 2.04 lr 0.000122 3d_train 28.533704 3d_eval 19.144574 3d_valid 50.247628
[43] time 2.00 lr 0.000116 3d_train 28.464906 3d_eval 19.005319 3d_valid 50.356960
[44] time 2.03 lr 0.000110 3d_train 28.439718 3d_eval 18.954874 3d_valid 50.228901
[45] time 1.99 lr 0.000105 3d_train 28.404982 3d_eval 18.956082 3d_valid 50.295363
[46] time 2.00 lr 0.000099 3d_train 28.369887 3d_eval 18.850825 3d_valid 49.980308
[47] time 2.00 lr 0.000094 3d_train 28.342877 3d_eval 18.771577 3d_valid 50.345319
[48] time 2.08 lr 0.000090 3d_train 28.306629 3d_eval 18.781545 3d_valid 50.015454
[49] time 2.14 lr 0.000085 3d_train 28.282622 3d_eval 18.720332 3d_valid 50.235472
[50] time 2.07 lr 0.000081 3d_train 28.248770 3d_eval 18.698187 3d_valid 49.965474
Saving checkpoint to checkpoint\epoch_50.bin
[51] time 2.17 lr 0.000077 3d_train 28.215322 3d_eval 18.761638 3d_valid 50.228693
[52] time 2.43 lr 0.000073 3d_train 28.205928 3d_eval 18.521216 3d_valid 50.168932
[53] time 2.26 lr 0.000069 3d_train 28.175626 3d_eval 18.669232 3d_valid 49.848664
[54] time 2.42 lr 0.000066 3d_train 28.143352 3d_eval 18.562452 3d_valid 49.906620
[55] time 2.26 lr 0.000063 3d_train 28.138791 3d_eval 18.616415 3d_valid 49.993626
[56] time 2.21 lr 0.000060 3d_train 28.117909 3d_eval 18.505818 3d_valid 49.919249
[57] time 2.18 lr 0.000057 3d_train 28.085886 3d_eval 18.523011 3d_valid 50.029322
[58] time 2.15 lr 0.000054 3d_train 28.061873 3d_eval 18.480205 3d_valid 50.179967
[59] time 2.16 lr 0.000051 3d_train 28.058197 3d_eval 18.418576 3d_valid 50.193924
[60] time 2.17 lr 0.000048 3d_train 28.040970 3d_eval 18.379041 3d_valid 50.004298
Saving checkpoint to checkpoint\epoch_60.bin
Evaluating...
----Directions----
Test time augmentation: True
```

```
Protocol #1 Error (MPJPE): 46.36668177980964 mm

Protocol #2 Error (P-MPJPE): 34.858453281187685 mm

Protocol #3 Error (N-MPJPE): 43.73574228648593 mm

Velocity Error (MPJVE): 3.382228812156929 mm

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----Discussion----

Test time augmentation: True

Protocol #1 Error (MPJPE): 48.24627897905168 mm

Protocol #2 Error (P-MPJPE): 37.51619071189107 mm

Protocol #3 Error (N-MPJPE): 46.90538840639188 mm

Velocity Error (MPJVE): 3.5007093778588323 mm

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----Eating----

Test time augmentation: True

Protocol #1 Error (MPJPE): 45.31219170476293 mm

Protocol #2 Error (P-MPJPE): 35.78898136759784 mm

Protocol #3 Error (N-MPJPE): 43.702882915580574 mm

Velocity Error (MPJVE): 2.6961344422452576 mm

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----Greeting----

Test time augmentation: True

Protocol #1 Error (MPJPE): 47.59778107437814 mm

Protocol #2 Error (P-MPJPE): 38.4705278012479 mm

Protocol #3 Error (N-MPJPE): 46.28422967625196 mm

Velocity Error (MPJVE): 3.862468094836129 mm

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----Phoning----

Test time augmentation: True

Protocol #1 Error (MPJPE): 50.04111822586145 mm

Protocol #2 Error (P-MPJPE): 38.58085348537969 mm

Protocol #3 Error (N-MPJPE): 47.923236317011245 mm

Velocity Error (MPJVE): 2.718604853707312 mm

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----Photo----

Test time augmentation: True

Protocol #1 Error (MPJPE): 57.84718603769884 mm

Protocol #2 Error (P-MPJPE): 44.10879945809385 mm

Protocol #3 Error (N-MPJPE): 55.355888002489834 mm

Velocity Error (MPJVE): 3.115926986319771 mm

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----Posing----

Test time augmentation: True

Protocol #1 Error (MPJPE): 46.73564998689722 mm

Protocol #2 Error (P-MPJPE): 35.524616589157944 mm
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Protocol #3 Error (N-MPJPE): 45.180172686495126 mm

Velocity Error (MPJVE): 3.0643868495049937 mm

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----Purchases----

Test time augmentation: True

Protocol #1 Error (MPJPE): 45.343716144159956 mm

Protocol #2 Error (P-MPJPE): 34.41426314582001 mm

Protocol #3 Error (N-MPJPE): 43.50504356447443 mm

Velocity Error (MPJVE): 3.4536157017606555 mm

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----Sitting----

Test time augmentation: True

Protocol #1 Error (MPJPE): 57.52144756883513 mm

Protocol #2 Error (P-MPJPE): 46.18512390200661 mm

Protocol #3 Error (N-MPJPE): 55.58858717261653 mm

Velocity Error (MPJVE): 2.529010650777342 mm

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----SittingDown----

Test time augmentation: True

Protocol #1 Error (MPJPE): 65.61641965724117 mm

Protocol #2 Error (P-MPJPE): 52.3569537937067 mm

Protocol #3 Error (N-MPJPE): 62.80861340824019 mm

Velocity Error (MPJVE): 3.335008171358566 mm

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----Smoking----

Test time augmentation: True

Protocol #1 Error (MPJPE): 49.11427119898895 mm

Protocol #2 Error (P-MPJPE): 39.19835537284439 mm

Protocol #3 Error (N-MPJPE): 47.393083522361295 mm

Velocity Error (MPJVE): 2.7709474775984173 mm

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----Waiting----

Test time augmentation: True

Protocol #1 Error (MPJPE): 45.727370384771255 mm

Protocol #2 Error (P-MPJPE): 34.72540690568538 mm

Protocol #3 Error (N-MPJPE): 44.37626246284216 mm

Velocity Error (MPJVE): 2.866475855252874 mm

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----WalkDog----

Test time augmentation: True

Protocol #1 Error (MPJPE): 51.23905252024043 mm

Protocol #2 Error (P-MPJPE): 40.10706036254225 mm

Protocol #3 Error (N-MPJPE): 49.12820998252853 mm

Velocity Error (MPJVE): 4.153736157997521 mm
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----Walking----
Test time augmentation: True
Protocol #1 Error (MPJPE): 36.28411685327142 mm
Protocol #2 Error (P-MPJPE): 27.694832924025274 mm
Protocol #3 Error (N-MPJPE): 34.760991696593194 mm
Velocity Error (MPJVE): 3.6097831530637148 mm
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----WalkTogether----
Test time augmentation: True
Protocol #1 Error (MPJPE): 38.21465582113404 mm
Protocol #2 Error (P-MPJPE): 31.108397803517214 mm
Protocol #3 Error (N-MPJPE): 36.21344092522574 mm
Velocity Error (MPJVE): 3.305699531107607 mm
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Protocol #1   (MPJPE) action-wise average: 48.7 mm
Protocol #2 (P-MPJPE) action-wise average: 38.0 mm
Protocol #3 (N-MPJPE) action-wise average: 46.9 mm
Velocity     (MPJVE) action-wise average: 3.22 mm
Finished run.py
```