On Coordinate Decoding for Keypoint Estimation Tasks

The purpose of this document is to provide detailed instructions for running the experiments reported in the reproducibility report.

Training scripts

Requirements

- Install moai (https://github.com/ai-in-motion/moai)
- Download the public dataset.

The required configuration files to reproduce the reported experiments are provided to the readers. The command that starts an experiment is the following.

```
moai train {experiment_config) --config-dir .
           H4D_train_split={train_data_path}
           H4D_test_split={test_data_path}
           H4D_val_split={val_data_path}
```

where {*_data_path} is the root path of the HUMAN4D dataset split, and {experiment_config} the configuration file for the experiment to be conducted.

Interactive plots

For several experiments, a tool for easy inspection and filtering across them is necessary. To that end, we provide interactive plots (Figure 1) in html format, by leveraging HiPlot.

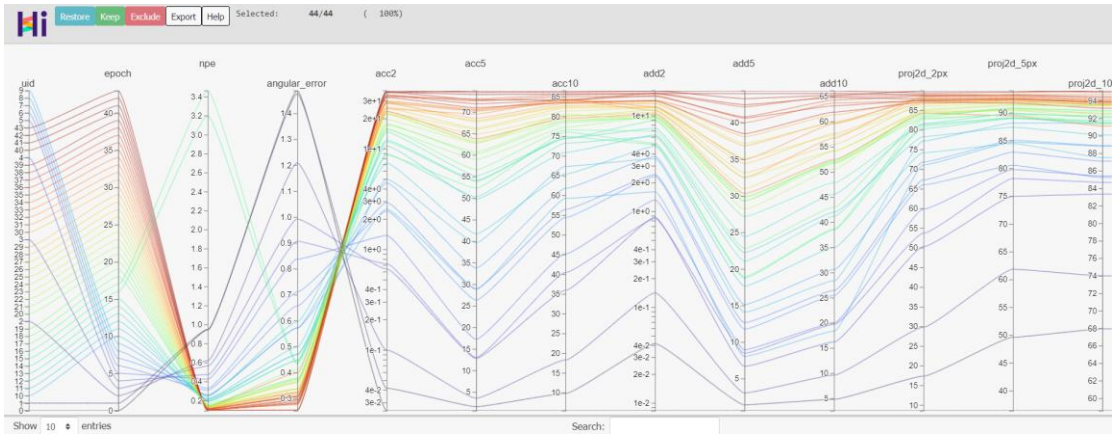

Figure 1: HiPlot screenshot showing the performance of different methods in the validation set

We have generated these plots for all trained models, being available in the following folder *".\actions\plot\2021-01-30"*.

However, we provide the source files used for generating these plots and readers will be able to reproduce them by running the below commands:

```
moai plot "+experiment.name=H4D_pose_regression_hrnet_quant_eval_dark"
          "root= .\ validation_files "
          "metrics_options.epoch_value=[0,33]"
          "monads=false"
```