

Grey Box Model Extraction on MoViNet

Team 17

A. Training

Setup

- Download the entire folder on your local drive.
- Navigate to the folder directory, and setup the virtual environment as:

```
python -m venv v1
```

```
source v1/bin/activate
```

```
- Install necessary dependencies
```

```
pip install -U torch==1.8.0+cu101 torchvision==0.9.0+cu101 torchtex==0.9.0  
torchaudio==0.8.0 -f https://download.pytorch.org/whl/torch\_stable.html
```

```
pip install mmdcv-full==1.4.0 -f  
https://download.openmmlab.com/mmdcv/dist/cu101/torch1.8.0/index.html
```

```
pip install av
```

```
pip install git+https://github.com/wilson1yan/VideoGPT.git
```

Note that the above versions have been chosen corresponding to the CUDA version on our device (=CUDA 11.2).

```
- Run `generate_samples.py` script to generate samples for training the extracted  
model.
```

```
- Run `train.py` script to train the model on the sampled dataset generated in the  
previous step. The checkpoints will be stored in the folder `checkpoint` in the base  
directory
```

Training was done on a Linux server equipped with NVIDIA Tesla V100 32GB.