question ☆ **34** views

How to monitor training via tensorboard

In the instruction, it indicates that we could monitor the training via Tensorboard. But the Tensorflow server would only starts after it finishes the training. So how exactly could we monitor the training with Tensorboard?

hw3

~ An instructor (Chen Liang) thinks this is a good question ~

Updated 2 days ago by Anonymous

the students' answer, *where students collectively construct a single answer*

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the instructors' answer, *where instructors collectively construct a single answer*

You just need to put the experiment code and visualization code into two separate shell script and run them in two separate screen session.

For example, put the training part:

```
python train.py \
       --data_file=data/eecs349-data.txt \
       --num_epochs=50 \
       --hidden_size=256 \
       --num_layers=1 \
       --model="rnn" \
       --batch_size=64 \
       --output_dir=large \
```

into a shell script file, for example, "experiment.sh". And run it in a screen session called "exp":

```
screen -S exp ./scripts/experiment.sh
```

And detach with "Crtl-a d".

Then put the visualization part:

```
tensorboard --logdir=large/tensorboard_log/ --port=6007
```

into another shell script, for example, called "visualize.sh". And run it in another screen session:

```
screen -S vis ./scripts/visualize.sh
```

then detach.

Now you can reach the visualization even when the training is not finished yet.

The experiments in "eecs-349-experiment-small.sh" and "eecs-349-experiment-large.sh" is quick enough to just wait until finished to visualize, so I put the two parts into one script. But when you are running some large experiments with your own data file, you would want to monitor it during training, and the instruction above will do.

~ An instructor (Doug Downey) endorsed this answer ~

Updated 2 days ago by Chen Liang

followup discussions *for lingering questions and comments*