计算机科学与技术学院神经网络与深度学习课程实验报告

实验题目: The initialization of Huawei cloud server | 学号: 201600181058

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实验目的:

Configure the cloud server and test it.

实验软件和硬件环境:

Python 3.6

ThinkPad X1Carbon 8G+256G

Huawei cloud server

Experiment Principles and methods:

Follow the lead.

实验步骤: (不要求罗列完整源代码)

- 1. Follow the lead and configure the server.
 - Start my own bucket and download MNIST data into it.
 - Start the notebook and training work
- 2. Download the MNIST python file and run it in the notebook. (I need to add some snippets to the original python file.)
- 3. Run the code in training work and start a Tensorboard.
- 4. Run the MNIST code of pytorch version.

结论分析与体会:

1. My bucket:

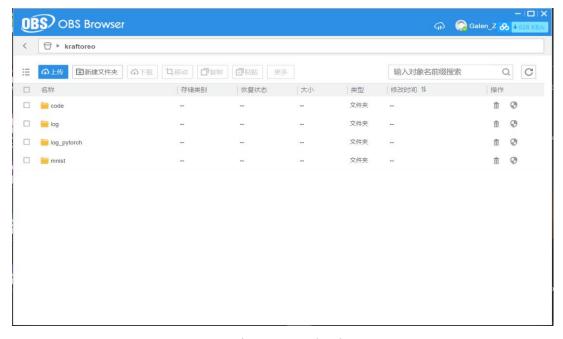


Figure 1. My bucket

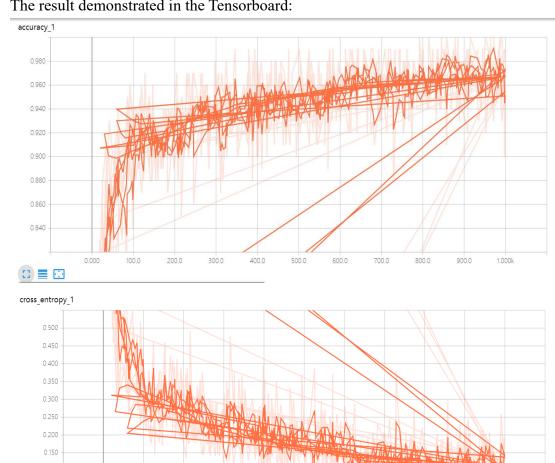
2. The result which is run in the notebook:

```
Train Epoch: 10 [51200/60000 (85%)]
                                        Loss: 0.022184
Train Epoch: 10 [51840/60000 (86%)]
                                        Loss: 0.034332
Train Epoch: 10 [52480/60000 (87%)]
                                        Loss: 0.005865
Train Epoch: 10 [53120/60000 (88%)]
                                        Loss: 0.005392
                                        Loss: 0.036281
Train Epoch: 10 [53760/60000 (90%)]
Train Epoch: 10 [54400/60000 (91%)]
                                        Loss: 0.009267
Train Epoch: 10 [55040/60000 (92%)]
                                        Loss: 0.005003
Train Epoch: 10 [55680/60000 (93%)]
                                        Loss: 0.000648
Train Epoch: 10 [56320/60000 (94%)]
                                        Loss: 0.007059
Train Epoch: 10 [56960/60000 (95%)]
                                        Loss: 0.102807
Train Epoch: 10 [57600/60000 (96%)]
                                        Loss: 0.004590
Train Epoch: 10 [58240/60000 (97%)]
                                        Loss: 0.177058
Train Epoch: 10 [58880/60000 (98%)]
                                        Loss: 0.005649
Train Epoch: 10 [59520/60000 (99%)]
                                        Loss: 0.008369
```

Test set: Average loss: 0.0315, Accuracy: 9891/10000 (99%)

Figure 2. The result which is run in the notebook

3. The result demonstrated in the Tensorboard:



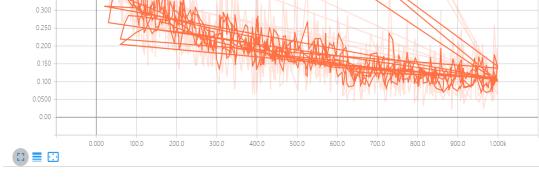




Figure 3. The result demonstrated in the Tensorboard

就实验过程中遇到和出现的问题, 你是如何解决和处理的, 自拟 1-3 道问答题:

The biggest problem is that the pytorch version MNIST can't run in training work, but successfully output in the notebook. Still unsolved now.