

关于ChatGLM2-6B训练的问题

主要问题

使用默认脚本对ChatGLM2-6B模型进行训练后报错，暂时没有找到解决办法。

详细描述：

- 环境：使用glm2环境，如下所示。使用该环境在10月22日已经完成过一次训练，所以应该不是环境的问题。

```
1 (glm2) [liwanyun@s2 ptuning]$ conda info --envs
2 # conda environments:
3 #
4 LLaMa                /media/hnu/hnu2023/huangzhan/.conda/envs/LLaMa
5 alpha                /media/hnu/hnu2023/huangzhan/.conda/envs/alpha
6 chatglm2-6b          /media/hnu/hnu2023/huangzhan/.conda/envs/chatglm2-6b
7 glm2                 * /media/hnu/hnu2023/huangzhan/.conda/envs/glm2
8 llama-2              /media/hnu/hnu2023/huangzhan/.conda/envs/llama-2
9 base                 /root/anaconda3
```

- 脚本：位于 `/media/hnu/hnu2023/huangzhan/ChatGLM2-6B/ptuning/test.sh`，内容如下：

```
1 PRE_SEQ_LEN=128
2 LR=2e-2 # 学习率
3 NUM_GPUS=1 # gpu数量
4
5 torchrun --standalone --nnodes=1 --nproc-per-node=$NUM_GPUS main.py \
6     --do_train \
7     --train_file /media/hnu/hnu2023/huangzhan/training/dax.js \
8     --validation_file /media/hnu/hnu2023/huangzhan/training/devx.json \
9     --preprocessing_num_workers 10 \
10    --prompt_column content \
11    --response_column summary \
12    --overwrite_cache \
13    --model_name_or_path /media/hnu/hnu2023/huangzhan/chatglm2-6b \
14    --output_dir /media/hnu/hnu2023/huangzhan/training/output2 \
15    --overwrite_output_dir \
16    --max_source_length 64 \
17    --max_target_length 128 \
18    --per_device_train_batch_size 1 \
19    --per_device_eval_batch_size 1 \
20    --gradient_accumulation_steps 16 \
21    --predict_with_generate \
22    --max_steps 3000 \
```

```

23 --logging_steps 10 \
24 --save_steps 1000 \
25 --learning_rate $LR \
26 --pre_seq_len $PRE_SEQ_LEN \
27 --quantization_bit 4

```

--train_file, --validation_file, --model_name_or_path, --output_dir分别标识了训练数据集、验证数据集、模型、输出文件夹的位置。

- 数据集：

该项目的标准数据集如下所示：

```

1 {"content": "类型#裙*材质#针织*颜色#纯色*风格#复古*风格#文艺*风格#简约*图案#格子*图案#纯色*图案#复古*裙型#背带裙*裙长#连衣裙*裙领型#半高领", "summary": "这款BRAND针织两件套连衣裙，简约的纯色半高领针织上衣，修饰着颈部线，尽显优雅气质。同时搭配叠穿起一条背带式的复古格纹裙，整体散发着一股怀旧的时髦魅力，很是文艺范。"}
2 {"content": "类型#上衣*风格#嘻哈*图案#卡通*图案#印花*图案#撞色*衣样式#卫衣*衣款式#连帽", "summary": "嘻哈玩转童年，随时<UNK>，没错，出街还是要靠卫衣来装酷哦！时尚个性的连帽设计，率性有范还防风保暖。还有胸前撞色的卡通印花设计，靓丽抢眼更富有趣味性，加上前幅大容量又时尚美观的袋鼠兜，简直就是孩子耍帅装酷必备的利器。"}
3 .....

```

本项目用于训练的数据集如下所示：

```

1 {
2   "content": "试着提取下面日程信息中的时间，地点和事件。输出格式为起始时间：....；结束时间：....；地点：...；事件：.....；周期：.....；      欢迎投稿WISE2023会议！和Web Information Systems Engineering相关的论文都可以投，2023年10月25-27日在澳大利亚墨尔本开会，abstract和full paper的投稿截止时间都延期至6月20日，系统不会关。当前时间：2023-4-4",
3   "summary": "起始时间:2023-4-4；结束时间:2023-6-20；地点:无；事件:WISE2023会议投稿；周期:单次；"
4 }
5 {
6   "content": "试着提取下面日程信息中的时间，地点和事件。输出格式为起始时间：....；结束时间：....；地点：...；事件：.....；周期：.....；      科大讯飞手气星火营Spark Camp学院推荐.时间：2023年8月15—8月25日.地点：安徽合肥。科大讯飞除了全程费用报销之外我们学院可推荐两名学生参训 当前时间:2023-7-4",
7   "summary": "起始时间:2023-8-15；结束时间:2023-8-25；地点:安徽合肥；事件:学院推荐两名学生去科大讯飞手气星火营Spark Camp；周期:单次；"
8 }
9 .....

```

- 训练时的报错：

```

1 (glm2) [liwanyun@s2 ptuning]$ bash train.sh
2 master_addr is only used for static rdzv_backend and when rdzv_endpoint is not specified.
3 [E socket.cpp:860] [c10d] The client socket has timed out after 60s while trying to connect to (localhost, 29400).

```

```

4  [E socket.cpp:860] [c10d] The client socket has timed out after 60s
   while trying to connect to (localhost, 29400).
5  Traceback (most recent call last):
6    File
   "/media/hnu/hnu2023/huangzhan/.conda/envs/glm2/lib/python3.10/site-
   packages/torch/distributed/elastic/rendezvous/c10d_rendezvous_backend.py
   ", line 155, in _create_tcp_store
7      store = TCPStore(
8  TimeoutError: The client socket has timed out after 60s while trying to
   connect to (localhost, 29400).
9
10 The above exception was the direct cause of the following exception:
11
12 Traceback (most recent call last):
13   File "/media/hnu/hnu2023/huangzhan/.conda/envs/glm2/bin/torchrun",
   line 33, in <module>
14     sys.exit(load_entry_point('torch==2.0.1', 'console_scripts',
   'torchrun'))()
15   File
   "/media/hnu/hnu2023/huangzhan/.conda/envs/glm2/lib/python3.10/site-
   packages/torch/distributed/elastic/multiprocessing/errors/__init__.py",
   line 346, in wrapper
16     return f(*args, **kwargs)
17   File
   "/media/hnu/hnu2023/huangzhan/.conda/envs/glm2/lib/python3.10/site-
   packages/torch/distributed/run.py", line 794, in main
18     run(args)
19   File
   "/media/hnu/hnu2023/huangzhan/.conda/envs/glm2/lib/python3.10/site-
   packages/torch/distributed/run.py", line 785, in run
20     elastic_launch(
21   File
   "/media/hnu/hnu2023/huangzhan/.conda/envs/glm2/lib/python3.10/site-
   packages/torch/distributed/launcher/api.py", line 134, in __call__
22     return launch_agent(self._config, self._entrypoint, list(args))
23   File
   "/media/hnu/hnu2023/huangzhan/.conda/envs/glm2/lib/python3.10/site-
   packages/torch/distributed/launcher/api.py", line 223, in launch_agent
24     rdzv_handler=rdzv_registry.get_rendezvous_handler(rdzv_parameters),
25   File
   "/media/hnu/hnu2023/huangzhan/.conda/envs/glm2/lib/python3.10/site-
   packages/torch/distributed/elastic/rendezvous/registry.py", line 65, in
   get_rendezvous_handler
26     return handler_registry.create_handler(params)
27   File
   "/media/hnu/hnu2023/huangzhan/.conda/envs/glm2/lib/python3.10/site-
   packages/torch/distributed/elastic/rendezvous/api.py", line 257, in
   create_handler
28     handler = creator(params)
29   File
   "/media/hnu/hnu2023/huangzhan/.conda/envs/glm2/lib/python3.10/site-
   packages/torch/distributed/elastic/rendezvous/registry.py", line 36, in
   _create_c10d_handler
30     backend, store = create_backend(params)

```

```
31 File
   "/media/hnu/hnu2023/huangzhan/.conda/envs/glm2/lib/python3.10/site-
   packages/torch/distributed/elastic/rendezvous/c10d_rendezvous_backend.py
   ", line 250, in create_backend
32     store = _create_tcp_store(params)
33 File
   "/media/hnu/hnu2023/huangzhan/.conda/envs/glm2/lib/python3.10/site-
   packages/torch/distributed/elastic/rendezvous/c10d_rendezvous_backend.py
   ", line 175, in _create_tcp_store
34     raise RendezvousConnectionError(
35 torch.distributed.elastic.rendezvous.api.RendezvousConnectionError: The
   connection to the c10d store has failed. See inner exception for
   details.
```

经过查询、各种尝试均不能解决该问题。