

2024-10-17 08:08:28 Starting - Starting the training job...

2024-10-17 08:08:56 Starting - Preparing the instances for trainingVanishingGradient:
InProgress
Overfit: InProgress
Overtraining: InProgress
PoorWeightInitialization: InProgress
ProfilerReport: InProgress
...

2024-10-17 08:09:28 Downloading - Downloading input data.....

2024-10-17 08:10:29 Downloading - Downloading the training image...

2024-10-17 08:10:57 Training - Training image download completed. Training in progress.bash:
cannot set terminal process group (-1): Inappropriate ioctl for device
bash: no job control in this shell

2024-10-17 08:10:46,761 sagemaker-training-toolkit INFO Imported framework
sagemaker_pytorch_container.training

2024-10-17 08:10:46,763 sagemaker-training-toolkit INFO No GPUs detected (normal if no
gpus installed)

2024-10-17 08:10:46,774 sagemaker_pytorch_container.training INFO Block until all host
DNS lookups succeed.

2024-10-17 08:10:46,776 sagemaker_pytorch_container.training INFO Invoking user training
script.

2024-10-17 08:10:47,021 sagemaker-training-toolkit INFO No GPUs detected (normal if no
gpus installed)

2024-10-17 08:10:47,034 sagemaker-training-toolkit INFO No GPUs detected (normal if no
gpus installed)

2024-10-17 08:10:47,046 sagemaker-training-toolkit INFO No GPUs detected (normal if no
gpus installed)

2024-10-17 08:10:47,057 sagemaker-training-toolkit INFO Invoking user script

Training Env:

```
{
  "additional_framework_parameters": {},
  "channel_input_dirs": {
    "training": "/opt/ml/input/data/training"
  },
  "current_host": "algo-1",
  "framework_module": "sagemaker_pytorch_container.training:main",
  "hosts": [
    "algo-1"
  ],
  "hyperparameters": {
    "batch_size": 64,
    "learning_rate": "0.08771011842071054"
  },
  "input_config_dir": "/opt/ml/input/config",
```

```



```

Environment variables:

```
SM_HOSTS=["algo-1"]
SM_NETWORK_INTERFACE_NAME=eth0
SM_HPS={"batch_size":64,"learning_rate":"0.08771011842071054"}
SM_USER_ENTRY_POINT=hpo.py
SM_FRAMEWORK_PARAMS={}
SM_RESOURCE_CONFIG={"current_group_name":"homogeneousCluster","current_host":"algo-1","current_instance_type":"ml.m5.xlarge","hosts":["algo-1"],"instance_groups":[{"hosts":["algo-1"],"instance_group_name":"homogeneousCluster","instance_type":"ml.m5.xlarge"}],"network_interface_name":"eth0"}
SM_INPUT_DATA_CONFIG={"training":{"RecordWrapperType":"None","S3DistributionType":"FullyReplicated","TrainingInputMode":"File"}}
SM_OUTPUT_DATA_DIR=/opt/ml/output/data
SM_CHANNELS=["training"]
SM_CURRENT_HOST=algo-1
SM_MODULE_NAME=hpo
SM_LOG_LEVEL=20
SM_FRAMEWORK_MODULE=sagemaker_pytorch_container.training:main
SM_INPUT_DIR=/opt/ml/input
SM_INPUT_CONFIG_DIR=/opt/ml/input/config
SM_OUTPUT_DIR=/opt/ml/output
SM_NUM_CPUS=4
SM_NUM_GPUS=0
SM_MODEL_DIR=/opt/ml/model
SM_MODULE_DIR=s3://sagemaker-us-east-1-761932706238/dog-pytorch-2024-10-17-08-08-24-535/source/sourcedir.tar.gz
SM_TRAINING_ENV={"additional_framework_parameters":{},"channel_input_dirs":{"training":"/opt/ml/input/data/training"},"current_host":"algo-1","framework_module":"sagemaker_pytorch_container.training:main","hosts":["algo-1"],"hyperparameters":{"batch_size":64,"learning_rate":"0.08771011842071054"},"input_config_dir":"/opt/ml/input/config","input_data_config":{"training":{"RecordWrapperType":"None","S3DistributionType":"FullyReplicated","TrainingInputMode":"File"},"input_dir":"/opt/ml/input","is_master":true,"job_name":"dog-pytorch-2024-10-17-08-08-24-535","log_level":20,"master_hostname":"algo-1","model_dir":"/opt/ml/model","module_dir":"s3://sagemaker-us-east-1-761932706238/dog-pytorch-2024-10-17-08-08-24-535/source/sourcedir.tar.gz","module_name":"hpo","network_interface_name":"eth0","num_cpus":4,"num_gpus":0,"output_data_dir":"/opt/ml/output/data","output_dir":"/opt/ml/output","output_intermediate_dir":"/opt/ml/output/intermediate","resource_config":{"current_group_name":"homogeneousCluster","current_host":"algo-1","current_instance_type":"ml.m5.xlarge","hosts":["algo-1"],"instance_groups":[{"hosts":["algo-1"],"instance_group_name":"homogeneousCluster","instance_type":"ml.m5.xlarge"}],"network_interface_name":"eth0"},"user_entry_point":"hpo.py"}}
SM_USER_ARGS=["--batch_size","64","--learning_rate","0.08771011842071054"]
SM_OUTPUT_INTERMEDIATE_DIR=/opt/ml/output/intermediate
SM_CHANNEL_TRAINING=/opt/ml/input/data/training
SM_HP_BATCH_SIZE=64
SM_HP_LEARNING_RATE=0.08771011842071054
```

PYTHONPATH=/opt/ml/code:/opt/conda/bin:/opt/conda/lib/python36.zip:/opt/conda/lib/python3.6:/opt/conda/lib/python3.6/lib-dynload:/opt/conda/lib/python3.6/site-packages
Invoking script with the following command:
/opt/conda/bin/python3.6 hpo.py --batch_size 64 --learning_rate 0.08771011842071054
Namespace(batch_size=64, data='/opt/ml/input/data/training',
learning_rate=0.08771011842071054, model_dir='/opt/ml/model',
output_dir='/opt/ml/output/data')
Hyperparameters are LR: 0.08771011842071054, Batch Size: 64
Data Paths: /opt/ml/input/data/training
Starting Model Training
Epoch: 0
[2024-10-17 08:10:48.896 algo-1:27 INFO utils.py:27] RULE_JOB_STOP_SIGNAL_FILENAME:
None
[2024-10-17 08:10:49.057 algo-1:27 INFO profiler_config_parser.py:102] Using config at
/opt/ml/input/config/profilerconfig.json.
[2024-10-17 08:10:49.057 algo-1:27 INFO json_config.py:91] Creating hook from json_config at
/opt/ml/input/config/debughookconfig.json.
[2024-10-17 08:10:49.059 algo-1:27 INFO hook.py:199] tensorboard_dir has not been set for
the hook. SMDebug will not be exporting tensorboard summaries.
[2024-10-17 08:10:49.060 algo-1:27 INFO hook.py:253] Saving to /opt/ml/output/tensors
[2024-10-17 08:10:49.061 algo-1:27 INFO state_store.py:77] The checkpoint config file
/opt/ml/input/config/checkpointconfig.json does not exist.
[2024-10-17 08:10:49.661 algo-1:27 INFO hook.py:584] name:fc.0.weight
count_params:262144
[2024-10-17 08:10:49.661 algo-1:27 INFO hook.py:584] name:fc.0.bias count_params:128
[2024-10-17 08:10:49.661 algo-1:27 INFO hook.py:584] name:fc.2.weight count_params:17024
[2024-10-17 08:10:49.662 algo-1:27 INFO hook.py:584] name:fc.2.bias count_params:133
[2024-10-17 08:10:49.662 algo-1:27 INFO hook.py:586] Total Trainable Params: 279429
[2024-10-17 08:10:49.662 algo-1:27 INFO hook.py:413] Monitoring the collections: losses,
gradients, relu_input
[2024-10-17 08:10:49.664 algo-1:27 INFO python_profiler.py:182] Dumping cProfile stats to
/opt/ml/output/profiler/framework/pytorch/cprofile/27-algo-1/prestepzero-*-start-1729152649057
427.0_global-0-stepstart-1729152649663778.0/python_stats.
[2024-10-17 08:10:49.689 algo-1:27 INFO hook.py:476] Hook is writing from the hook with pid:
27
[2024-10-17 08:11:05.149 algo-1:27 INFO python_profiler.py:182] Dumping cProfile stats to
/opt/ml/output/profiler/framework/pytorch/cprofile/27-algo-1/global-0-stepstart-17291526496704
73.5_global-0-forwardpassend-1729152665149094.5/python_stats.
Epoch 0, Phase train, Images [64/6680 (1%)] Loss: 4.89 Accuracy: 0.0/64 (0.00%)
[2024-10-17 08:11:05.714 algo-1:27 INFO python_profiler.py:182] Dumping cProfile stats to
/opt/ml/output/profiler/framework/pytorch/cprofile/27-algo-1/global-0-forwardpassend-172915266
5152495.5_global-1-stepstart-1729152665713446.2/python_stats.
Epoch 0, Phase train, Images [128/6680 (2%)] Loss: 272.95 Accuracy: 1.0/128 (0.78%)
Epoch 0, Phase train, Images [192/6680 (3%)] Loss: 333.32 Accuracy: 2.0/192 (1.04%)

Epoch 0, Phase train, Images [256/6680 (4%)] Loss: 175.20 Accuracy: 3.0/256 (1.17%)
Epoch 0, Phase train, Images [320/6680 (5%)] Loss: 66.74 Accuracy: 4.0/320 (1.25%)
Epoch 0, Phase train, Images [384/6680 (6%)] Loss: 37.93 Accuracy: 5.0/384 (1.30%)
Epoch 0, Phase train, Images [448/6680 (7%)] Loss: 15.34 Accuracy: 6.0/448 (1.34%)
Epoch 0, Phase train, Images [512/6680 (8%)] Loss: 4.92 Accuracy: 7.0/512 (1.37%)
Epoch 0, Phase train, Images [576/6680 (9%)] Loss: 4.93 Accuracy: 8.0/576 (1.39%)
Epoch 0, Phase train, Images [640/6680 (10%)] Loss: 4.95 Accuracy: 9.0/640 (1.41%)
Epoch 0, Phase train, Images [704/6680 (11%)] Loss: 4.97 Accuracy: 10.0/704 (1.42%)
train loss: 84.1950, acc: 0.0142, best loss: 1000000.0000
Epoch 0, Phase valid, Images [64/835 (8%)] Loss: 4.95 Accuracy: 0.0/64 (0.00%)
Epoch 0, Phase valid, Images [128/835 (15%)] Loss: 4.92 Accuracy: 0.0/128 (0.00%)
valid loss: 4.9319, acc: 0.0000, best loss: 4.9319
Break due to epoch limit at epoch: 0

Testing Model

Testing Model on Whole Testing Dataset

VanishingGradient: InProgress

Overfit: InProgress

Overtraining: InProgress

PoorWeightInitialization: IssuesFound

Testing Loss: 4.909361266633541

Testing Accuracy: 0.009569377990430622

Saving Model

Downloading: "<https://download.pytorch.org/models/resnet50-19c8e357.pth>" to

/root/.cache/torch/hub/checkpoints/resnet50-19c8e357.pth

#015 0% | 0.00/97.8M [00:00<?, ?B/s]#015 31% | 30.8M/97.8M [00:00<00:00, 322MB/s]#015 65% | 63.9M/97.8M [00:00<00:00, 337MB/s]#015 100% | 97.5M/97.8M [00:00<00:00, 344MB/s]#015 100% | 97.8M/97.8M [00:00<00:00, 340MB/s]

DEBUG:__main__:Epoch 0, Phase train, Images [64/6680 (1%)] Loss: 4.89 Accuracy: 0.0/64 (0.00%)

DEBUG:__main__:Epoch 0, Phase train, Images [128/6680 (2%)] Loss: 272.95 Accuracy: 1.0/128 (0.78%)

DEBUG:__main__:Epoch 0, Phase train, Images [192/6680 (3%)] Loss: 333.32 Accuracy: 2.0/192 (1.04%)

DEBUG:__main__:Epoch 0, Phase train, Images [256/6680 (4%)] Loss: 175.20 Accuracy: 3.0/256 (1.17%)

DEBUG:__main__:Epoch 0, Phase train, Images [320/6680 (5%)] Loss: 66.74 Accuracy: 4.0/320 (1.25%)

DEBUG:__main__:Epoch 0, Phase train, Images [384/6680 (6%)] Loss: 37.93 Accuracy: 5.0/384 (1.30%)

DEBUG:__main__:Epoch 0, Phase train, Images [448/6680 (7%)] Loss: 15.34 Accuracy: 6.0/448 (1.34%)

DEBUG:__main__:Epoch 0, Phase train, Images [512/6680 (8%)] Loss: 4.92 Accuracy: 7.0/512 (1.37%)

DEBUG:__main__:Epoch 0, Phase train, Images [576/6680 (9%)] Loss: 4.93 Accuracy: 8.0/576 (1.39%)
DEBUG:__main__:Epoch 0, Phase train, Images [640/6680 (10%)] Loss: 4.95 Accuracy: 9.0/640 (1.41%)
DEBUG:__main__:Epoch 0, Phase train, Images [704/6680 (11%)] Loss: 4.97 Accuracy: 10.0/704 (1.42%)
INFO:__main__:train loss: 84.1950, acc: 0.0142, best loss: 1000000.0000
DEBUG:__main__:Epoch 0, Phase valid, Images [64/835 (8%)] Loss: 4.95 Accuracy: 0.0/64 (0.00%)
DEBUG:__main__:Epoch 0, Phase valid, Images [128/835 (15%)] Loss: 4.92 Accuracy: 0.0/128 (0.00%)
INFO:__main__:valid loss: 4.9319, acc: 0.0000, best loss: 4.9319
INFO:__main__:Break due to epoch limit at epoch: 0
INFO:__main__:Testing Model
DEBUG:__main__:Testing Model on Whole Testing Dataset
INFO:__main__:Testing Loss: 4.909361266633541
INFO:__main__:Testing Accuracy: 0.009569377990430622
INFO:__main__:Saving Model
2024-10-17 08:14:19,640 sagemaker-training-toolkit INFO Reporting training SUCCESS

2024-10-17 08:14:29 Uploading - Uploading generated training model

2024-10-17 08:14:58 Completed - Training job completed

Training seconds: 325

Billable seconds: 325