

Traceback (most recent call last)

```

in <module>:4
1 model.train()
2 model = torch.compile(model, backend="hpu_backend")
3 for epoch in range(1, 2):
> 4     train(epoch)
5     acc = test()
6     print(f'Epoch: {epoch}, Accuracy: {acc:.4f}')
7

in train:8
5     for i, (pos_rw, neg_rw) in enumerate(loader):
6         optimizer.zero_grad()
7         loss = model.loss(pos_rw.to(device), neg_rw.to(device))
> 8         loss.backward()
9         optimizer.step()
10
11     total_loss += loss.item()

/usr/local/lib/python3.10/dist-packages/torch/_tensor.py:531 in backward
528         create_graph=create_graph,
529         inputs=inputs,
530     )
> 531     torch.autograd.backward(
532         self, gradient, retain_graph, create_graph, inputs=inputs
533     )
534

/usr/local/lib/python3.10/dist-packages/torch/autograd/__init__.py:289 in backward
286     # The reason we repeat the same comment below is that
287     # some Python versions print out the first line of a multi-line function
288     # calls in the traceback and some print out the last line
> 289     _engine_run_backward(
290         tensors,
291         grad_tensors_,
292         retain_graph,

/usr/local/lib/python3.10/dist-packages/torch/autograd/graph.py:768 in _engine_run_backward
765     if attach_logging_hooks:
766         unregister_hooks = _register_logging_hooks_on_whole_graph(t_outputs)
767     try:
> 768         return Variable._execution_engine.run_backward( # Calls into the C++ engine to
769             t_outputs, *args, **kwargs
770         ) # Calls into the C++ engine to run the backward pass
771     finally:

```

NotImplementedError: Could not run 'aten::sparse_coo_tensor_with_dims_and_tensors' with arguments from the 'SparseHPU' backend. This could be because the operator doesn't exist for this backend, or was omitted during the selective/custom build process (if using custom build). If you are a Facebook employee using PyTorch on mobile, please visit <https://fburl.com/ptmfixes> for possible resolutions. 'aten::sparse_coo_tensor_with_dims_and_tensors' is only available for these backends: [HPU, Meta, SparseCPU, SparseMeta, BackendSelect, Python, FuncTorchDynamicLayerBackMode, Functionalize, Named, Conjugate, Negative, ZeroTensor, ADInplaceOrView, AutogradOther, AutogradCPU, AutogradCUDA, AutogradHIP, AutogradXLA, AutogradMPS, AutogradIPU, AutogradXPU, AutogradHPU, AutogradVE, AutogradLazy, AutogradMTIA, AutogradPrivateUse1, AutogradPrivateUse2, AutogradPrivateUse3, AutogradMeta, AutogradNestedTensor, Tracer, AutocastCPU, AutocastXPU, AutocastHPU, AutocastCUDA, FuncTorchBatched, BatchedNestedTensor, FuncTorchVmapMode, Batched, VmapMode, FuncTorchGradWrapper, PythonTLSSnapshot, FuncTorchDynamicLayerFrontMode, PreDispatch, PythonDispatcher].

HPU: registered at /npu-stack/pytorch-integration/hpu_ops/cpu_fallback.cpp:116 [backend fallback]
 Meta: registered at /npu-stack/pytorch-fork/build/aten/src/ATen/RegisterMeta.cpp:26993 [kernel]
 SparseCPU: registered at /npu-stack/pytorch-fork/build/aten/src/ATen/RegisterSparseCPU.cpp:1387 [kernel]
 SparseMeta: registered at /npu-stack/pytorch-fork/build/aten/src/ATen/RegisterSparseMeta.cpp:287 [kernel]
 BackendSelect: registered at /npu-stack/pytorch-fork/build/aten/src/ATen/RegisterBackendSelect.cpp:815 [kernel]
 Python: registered at /npu-stack/pytorch-fork/aten/src/ATen/core/PythonFallbackKernel.cpp:153 [backend fallback]
 FuncTorchDynamicLayerBackMode: registered at /npu-stack/pytorch-fork/aten/src/ATen/func_torch/DynamicLayer.cpp:497 [backend fallback]
 Functionalize: registered at /npu-stack/pytorch-fork/aten/src/ATen/FunctionalizeFallbackKernel.cpp:349 [backend fallback]
 Named: registered at /npu-stack/pytorch-fork/aten/src/ATen/core/NamedRegistrations.cpp:7 [backend fallback]
 Conjugate: registered at /npu-stack/pytorch-fork/aten/src/ATen/ConjugateFallback.cpp:17 [backend fallback]
 Negative: registered at /npu-stack/pytorch-fork/aten/src/ATen/native/NegateFallback.cpp:18 [backend fallback]
 ZeroTensor: registered at /npu-stack/pytorch-fork/aten/src/ATen/ZeroTensorFallback.cpp:86 [backend fallback]
 ADInplaceOrView: fallthrough registered at /npu-stack/pytorch-fork/aten/src/ATen/core/VariableFallbackKernel.cpp:86 [backend fallback]
 AutogradOther: registered at /npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857 [autograd kernel]
 AutogradCPU: registered at /npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857 [autograd kernel]
 AutogradCUDA: registered at /npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857 [autograd kernel]
 AutogradHIP: registered at /npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857 [autograd kernel]
 AutogradXLA: registered at /npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857 [autograd kernel]
 AutogradMPS: registered at /npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857 [autograd kernel]

AutogradIPU: registered at [/npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857](#) [autograd kernel]
AutogradXPU: registered at [/npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857](#) [autograd kernel]
AutogradHPU: registered at [/npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857](#) [autograd kernel]
AutogradVE: registered at [/npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857](#) [autograd kernel]
AutogradLazy: registered at [/npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857](#) [autograd kernel]
AutogradMTIA: registered at [/npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857](#) [autograd kernel]
AutogradPrivateUse1: registered at [/npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857](#) [autograd kernel]
AutogradPrivateUse2: registered at [/npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857](#) [autograd kernel]
AutogradPrivateUse3: registered at [/npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857](#) [autograd kernel]
AutogradMeta: registered at [/npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857](#) [autograd kernel]
AutogradNestedTensor: registered at [/npu-stack/pytorch-fork/torch/csrc/autograd/generated/VariableType_2.cpp:19857](#) [autograd kernel]
Tracer: registered at [/npu-stack/pytorch-fork/torch/csrc/autograd/generated/TraceType_2.cpp:17623](#) [kernel]
AutocastCPU: fallback registered at [/npu-stack/pytorch-fork/aten/src/ATen/autocast_mode.cpp:209](#) [backend fallback]
AutocastXPU: fallback registered at [/npu-stack/pytorch-fork/aten/src/ATen/autocast_mode.cpp:351](#) [backend fallback]
AutocastHPU: fallback registered at [/builds/pytorch_modules_multi_build/torch/py3.10/pt2.4.0/Release/generated/backend/hpu_autocast_ops0.cpp:49](#) [backend fallback]
AutocastCUDA: fallback registered at [/npu-stack/pytorch-fork/aten/src/ATen/autocast_mode.cpp:165](#) [backend fallback]
FuncTorchBatched: registered at [/npu-stack/pytorch-fork/aten/src/ATen/functorch/LegacyBatchingRegistrations.cpp:731](#) [backend fallback]
BatchedNestedTensor: registered at [/npu-stack/pytorch-fork/aten/src/ATen/functorch/LegacyBatchingRegistrations.cpp:758](#) [backend fallback]
FuncTorchVmapMode: fallback registered at [/npu-stack/pytorch-fork/aten/src/ATen/functorch/VmapModeRegistrations.cpp:27](#) [backend fallback]
Batched: registered at [/npu-stack/pytorch-fork/aten/src/ATen/LegacyBatchingRegistrations.cpp:1075](#) [backend fallback]
VmapMode: fallback registered at [/npu-stack/pytorch-fork/aten/src/ATen/VmapModeRegistrations.cpp:33](#) [backend fallback]
FuncTorchGradWrapper: registered at [/npu-stack/pytorch-fork/aten/src/ATen/functorch/TensorWrapper.cpp:207](#) [backend fallback]
PythonTLSSnapshot: registered at [/npu-stack/pytorch-fork/aten/src/ATen/core/PythonFallbackKernel.cpp:161](#) [backend fallback]
FuncTorchDynamicLayerFrontMode: registered at [/npu-stack/pytorch-fork/aten/src/ATen/functorch/DynamicLayer.cpp:493](#) [backend fallback]
PreDispatch: registered at [/npu-stack/pytorch-fork/aten/src/ATen/core/PythonFallbackKernel.cpp:165](#) [backend fallback]
PythonDispatcher: registered at [/npu-stack/pytorch-fork/aten/src/ATen/core/PythonFallbackKernel.cpp:157](#) [backend fallback]