# 迁移

### 々3个文件尚未迁移

exec load\_data base\_cfgs

- Dataset 这个类的对应关系没找到
  - DataLoader与DataParallel
- 梯度这块 clip\_grad\_norm\_
  - PyTorch中梯度是Tensor的属性,可以通过设置 requires\_grad=True 使Tensor带有梯度。由于框架机制的不同,在MindSpore中,梯度和权重是互相独立的Tensor。因此在梯度裁剪时,MindSpore需要先获取梯度Tensor再进行裁剪。
  - PyTorch中能实现原地梯度裁剪, Mindspore中梯度先提取出来, 再裁剪

## load\_data

Dataset类正在对应Mindspore中对应类import torch.utils.data as Data

```
import torch.utils.data as Data
import torch.utils.data as Data

class DataSet(Data.Dataset):
def __init__(self, __C):
    self.__C = __C
```

#### torch中Dataset类:

```
class Dataset(Generic[T_co]):
```

r"""An abstract class representing a :class:`Dataset`.

All datasets that represent a map from keys to data samples should subclass it. All subclasses should overwrite :meth:`\_getitem\_\_`, supporting fetching a data sample for a given key. Subclasses could also optionally overwrite :meth:`\_len\_\_`, which is expected to return the size of the dataset by many :class:`~torch.utils.data.Sampler` implementations and the default options of :class:`~torch.utils.data.DataLoader`. Subclasses could also optionally implement :meth:`\_getitems\_\_`, for speedup batched samples loading. This method accepts list of indices of samples of batch and returns list of samples.

.. note::

:class:`~torch.utils.data.DataLoader` by default constructs an index
sampler that yields integral indices. To make it work with a map-style
dataset with non-integral indices/keys, a custom sampler must be provided.
""

## base\_cfgs

#### proc

### Mindspore没有找到对应的api

```
torch.set_num_threads(2)
# ------- Seed setup
# fix pytorch seed
torch.manual_seed(self.SEED)
if self.N_GPU < 2:
torch.cuda.manual_seed(self.SEED)
else:
torch.cuda.manual_seed_all(self.SEED)
torch.backends.cudnn.deterministic = True</pre>
```

#### exec

## train方法

Net网络有cuda方法和train方法吗?

```
net = Net(
    self.__C,
    pretrained_emb,
    token_size,
    ans_size
)
net.cuda()
net.train()
```

DataParallel 这个方法没对应明白mindspore.set auto parallel context

比较与torch.utils.data.DataLoader的差异

比较与torch.nn.utils.clipgrad norm的差异