

test_Barin

March 9, 2022

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[1]: import torch
from torch.utils.data import DataLoader

from thermoclassifier.dataset.test_data import TestData
from thermoclassifier.elements.net import ElementClassifier
```

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[2]: seq_len = 5
td = TestData()
data = td(r'C:\Users\danie\Documents\Montanuni\Masterarbeit\4_
↳Daten\Barin\Excel', 'barin', seq_len, (200, 2000))

test_loader = DataLoader(data, batch_size=1, shuffle=True)
```

```
[3]: def test(net, test_loader):
    correct = 0
    incorrect = 0

    for d in test_loader:
        inp = d[:, :, :-1]
        inp[:, :, 0] /= 1000
        predictions = net(inp.float())
        targets = d[:, :, -1][:, 0].long()

        correct += (predictions.argmax(dim=-1) == targets).sum().item()
        incorrect += len(targets) - (predictions.argmax(dim=-1) == targets).
↳sum().item()

    accuracy = correct/(correct + incorrect)
    print('Test accuracy: ', accuracy)

    return accuracy
```

```
[16]: net = torch.load(r'C:\Users\danie\Documents\Montanuni\Masterarbeit\5_
↳Programmcodes\packages\thermoclassifier\thermoclassifier\elements\models\ElementClassifier_
↳pth')
```

```
[17]: test(net, test_loader)
```

Test accuracy: 0.6459854014598541

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