PyTorch

测 试

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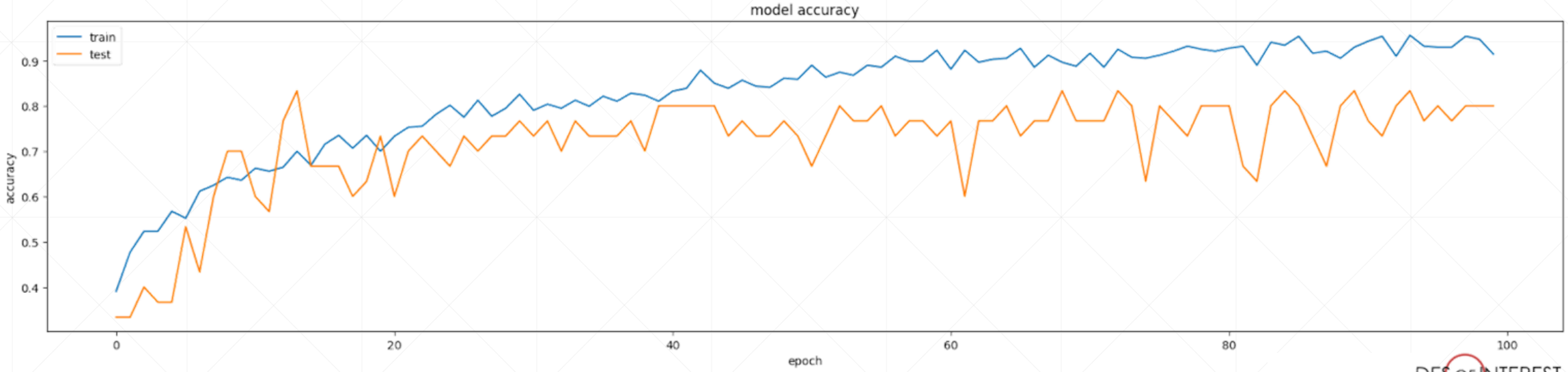
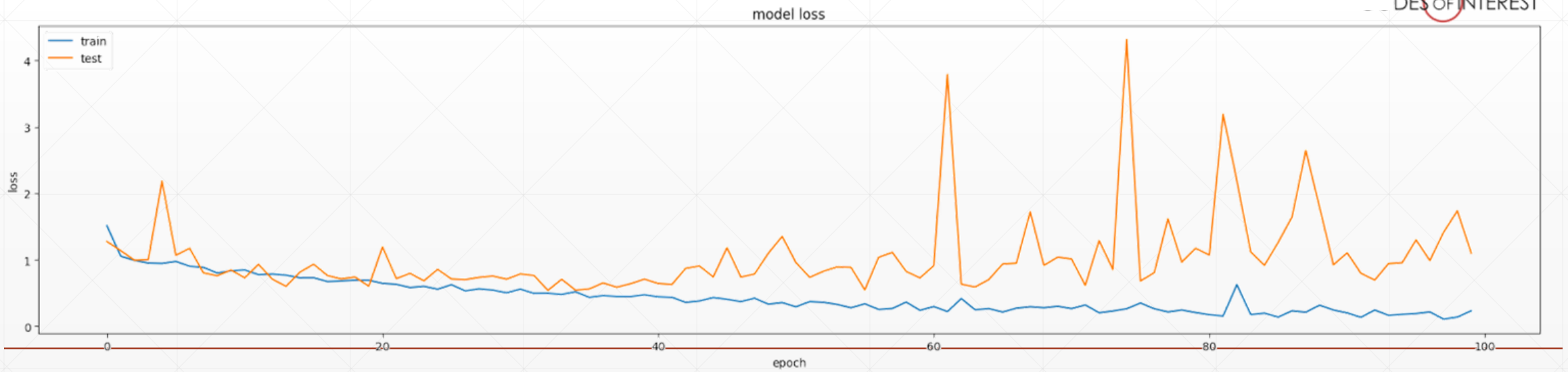
Loss != Accuracy





DES OF INTEREST

argmax

```
In [60]: logits=torch.rand(4, 10)

In [62]: pred=F.softmax(logits, dim=1)
In [63]: pred.shape
Out[63]: torch.Size([4, 10])

In [64]: pred_label=pred.argmax(dim=1)
In [65]: pred_label
Out[65]: tensor([9, 5, 9, 4])

In [66]: logits.argmax(dim=1)
Out[66]: tensor([9, 5, 9, 4])

In [67]: label=torch.tensor([9,3,2,4])
In [68]: correct=torch.eq(pred_label, label)
Out[69]: tensor([1, 0, 0, 1], dtype=torch.uint8)

In [71]: correct.sum().float().item()/4.
Out[71]: 0.5
```

When to test

- test once per several batch
- test once per epoch
- epoch V.S. step?

```
    test_loss = 0
    correct = 0
    for data, target in test_loader:
        data = data.view(-1, 28 * 28)
        data, target = data.to(device), target.cuda()
        logits = net(data)
        test_loss += criteon(logits, target).item()

        pred = logits.argmax(dim=1)
        correct += pred.eq(target).float().sum().item()

    test_loss /= len(test_loader.dataset)
    print('\nTest set: Average loss: {:.4f}, Accuracy: {}/{} ({:.0f}%)\n'.format(
        test_loss, correct, len(test_loader.dataset),
        100. * correct / len(test_loader.dataset)))
```

下一课时

Visdom可视化

Thank You.