图像分类数据集（Fashion-MNIST）

Eng Teong Cheah

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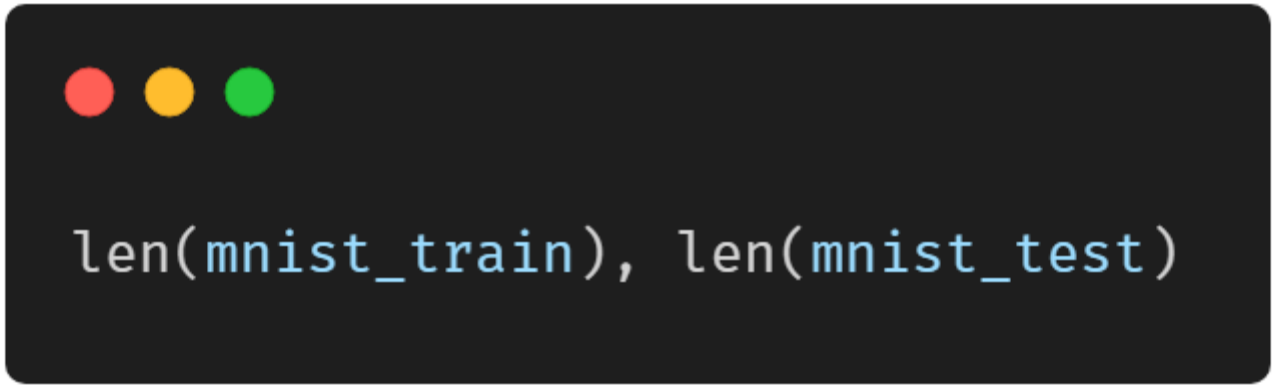
获取数据集

```
%matplotlib inline
import d2l
from mxnet import gluon
import sys
```

获取数据集

```
mnist_train = gluon.data.vision.FashionMNIST(train=True)
mnist_test = gluon.data.vision.FashionMNIST(train=False)
```

获取数据集



获取数据集

```
# Save to the d2l package.
def get_fashion_mnist_labels(labels):
    text_labels = ['t-shirt', 'trouser', 'pullover', 'dress',
'coat',               'sandal', 'shirt', 'sneaker', 'bag', 'ankle boot']
    return [text_labels[int(i)] for i in labels]
```

获取数据集

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def get_fashion_mnist_labels(labels):
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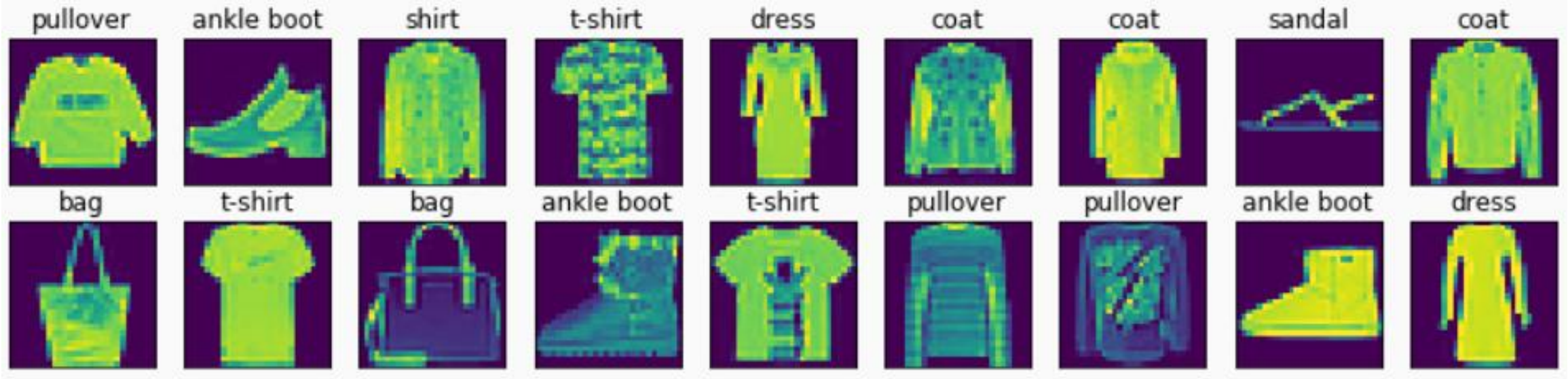
```

获取数据集

```
X, y = mnist_train[:18]
d2l.show_images(X.squeeze(axis=-1), 2, 9,
titles=get_fashion_mnist_labels(y));
```



读取小批量

```python
# Save to the d2l package.
def get_dataloader_workers(num_workers=4):
    # 0 means no additional process is used to speed up the reading of data.
    if sys.platform.startswith('win'):
        return 0
    else:
        return num_workers
```

读取小批量

```
batch_size = 256
transformer = gluon.data.vision.transforms.ToTensor()
train_iter = gluon.data.DataLoader(mnist_train.transform_first(transformer),
                                   batch_size, shuffle=True,
                                   num_workers=get_dataloader_workers())
```

读取小批量

```
timer = d2l.Timer()
for X, y in train_iter:
    continue
'%.2f sec' % timer.stop()
```

谢谢!

Does anyone have any questions?

Twitter: @walkercet
Blog: https://ceteongvanness.wordpress.com

资源

Dive into Deep Learning