

data_for_machine_learning

March 3, 2019

```
In [3]: import pickle
import urllib
from sklearn.datasets import fetch_mldata, load_svmlight_file, fetch_covtype, fetch_2008

In [6]: # mnist = fetch_mldata("MNIST original") # [WinError 10060] A connection attempt failed
from tensorflow.examples.tutorials.mnist import input_data
mnist = input_data.read_data_sets('MNIST_data', one_hot=True)
pickle.dump(mnist, open("mnist.pickle", 'wb'))
```

```
D:\Python\Lib\importlib\_bootstrap.py:219: RuntimeWarning: numpy.ufunc size changed, may indicate
return f(*args, **kwargs)
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D:\Python\Lib\importlib\_bootstrap.py:219: RuntimeWarning: numpy.ufunc size changed, may indicate
return f(*args, **kwargs)
```

```
WARNING:tensorflow:From <ipython-input-6-a1d59a542922>:3: read_data_sets (from tensorflow.contrib.learn.python.learn.datasets.base) is deprecated and will be removed in a future version.
Instructions for updating:
Please use alternatives such as official/mnist/dataset.py from tensorflow/models.
WARNING:tensorflow:From d:\python\lib\site-packages\tensorflow\contrib\learn\python\learn\datasets\mnist.py:254: read_data_sets (from tensorflow.contrib.learn.python.learn.datasets.base) is deprecated and will be removed in a future version.
Instructions for updating:
Please write your own downloading logic.
WARNING:tensorflow:From d:\python\lib\site-packages\tensorflow\contrib\learn\python\learn\datasets\mnist.py:254: read_data_sets (from tensorflow.contrib.learn.python.learn.datasets.base) is deprecated and will be removed in a future version.
Instructions for updating:
Please use urllib or similar directly.
Successfully downloaded train-images-idx3-ubyte.gz 9912422 bytes.
WARNING:tensorflow:From d:\python\lib\site-packages\tensorflow\contrib\learn\python\learn\datasets\mnist.py:254: read_data_sets (from tensorflow.contrib.learn.python.learn.datasets.base) is deprecated and will be removed in a future version.
Instructions for updating:
Please use tf.data to implement this functionality.
Extracting MNIST_data\train-images-idx3-ubyte.gz
Successfully downloaded train-labels-idx1-ubyte.gz 28881 bytes.
WARNING:tensorflow:From d:\python\lib\site-packages\tensorflow\contrib\learn\python\learn\datasets\mnist.py:254: read_data_sets (from tensorflow.contrib.learn.python.learn.datasets.base) is deprecated and will be removed in a future version.
Instructions for updating:
Please use tf.data to implement this functionality.
Extracting MNIST_data\train-labels-idx1-ubyte.gz
WARNING:tensorflow:From d:\python\lib\site-packages\tensorflow\contrib\learn\python\learn\datasets\mnist.py:254: read_data_sets (from tensorflow.contrib.learn.python.learn.datasets.base) is deprecated and will be removed in a future version.
Instructions for updating:
```

Please use `tf.one_hot` on tensors.
Successfully downloaded `t10k-images-idx3-ubyte.gz` 1648877 bytes.
Extracting `MNIST_data\t10k-images-idx3-ubyte.gz`
Successfully downloaded `t10k-labels-idx1-ubyte.gz` 4542 bytes.
Extracting `MNIST_data\t10k-labels-idx1-ubyte.gz`
WARNING:tensorflow:From `d:\python\lib\site-packages\tensorflow\contrib\learn\python\learn\data_instructions.py`:
Instructions for updating:
Please use alternatives such as `official/mnist/dataset.py` from `tensorflow/models`.

```
In [7]: target_page = 'http://www.csie.ntu.edu.tw/~cjlin/libsvmtools/datasets/binary/ijcnn1.bz2'
        with urllib.request.urlopen(target_page) as response:
            with open('ijcnn1.bz2', 'wb') as W:
                W.write(response.read())
```

```
In [8]: target_page = 'http://www.csie.ntu.edu.tw/~cjlin/libsvmtools/datasets/regression/cadata'
        cadata=load_svmlight_file(urllib.request.urlopen(target_page))
        pickle.dump(cadata,open('cadata.pickle', 'wb'))
```

```
In [10]: coervtype_dataset = fetch_covtype(random_state=101, shuffle=True)
         pickle.dump(coervtype_dataset,open('coervtype_dataset.pickle', 'wb'))
```

Downloading <https://ndownloader.figshare.com/files/5976039>

```
In [12]: news_groups_dataset = fetch_20newsgroups(shuffle=True, remove=('readers', 'footers', 'quotes'))
         pickle.dump(news_groups_dataset, open('news_groups_dataset.pickle', 'wb'))
```

```
In [ ]:
```