

spare gccca

Structure of Project

The structure of this project should be construct like this:

- your_project_name/
 - gccca/
 - spare_gcca
 - origin_gcca
 - ...
 - gccca_data/
 - csv_data/
 - genes_data/
 - twitter_data/

Package

You should install some necessary package within python3

```
keras
theano
numpy
sklearn
pandas
```

Test result

Main programe is in `all_kinds_of_test.py` . You should open this file and choose which model you want to run

```
# preserve all model in one list
clf_list = [gccca, spare_gcca, cca, deepcca, WeightedGCCA, dgcca_]

# choose which model you want to use
clf_ = clf_list[0]
```

And then you should choose which part you want to print, such as, the first part :

```
print ("##### start testing result #####")
print()
t_result_gene_data(clf_)
print("##### finish testing result #####")
print()
```

And then **comment the other printing code**, because it will take you massive time to run

And also, you can check the file which you like and deepen it.

parameter tuning

In deep cca, you only can tune `epoch` , `batch size` and `learning rate` , because the other parameter do not make a big deal. Or maybe you can edit the code whatever you want:

In `deep_cca.py` :

```
class deepcca(metric):
    def __init__(self, ds, m_rank, batch_size = 50, epoch_num = 10, learning_rate =

        # ...

        # parameter you can tune
        self.batch_size = batch_size
        self.epoch_num = epoch_num
        self.learning_rate = learning_rate
```

In `dgcca_format.py` , you only can tune `epoch` and `batch size` :

```
class dgcca_(metric):
    def __init__(self, ds, m_rank, batchSize=40, epochs = 200):

        # ...

        # parameter you can tune
        self.batchSize = batchSize
        self.epochs = epochs
```

Feedback

If you have any issue, please let me know or email me b.ben.hjy@gmail.com or 879837607@qq.com

Reference

Thanks to the code of [wgcca](#) written by abenton and [deep cca](#) written by VahidooX