single-cell Panoramic View clustering (PanoView)

Manual

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1. Introduction

2. Installation

PanoView is a python module that uses other common python libraries such as *numpy, pandas, scikit-learn*, etc. For installing *PanoView* at your local computer, open your command prompt and type the following line

```
pip install git+https://github.com/mhu10/scPanoView.git#egg=scPanoView
```

It will install all the required python libraries for executing *PanoView*. Please make sure that *Git* is probably installed or go to https://git-scm.com/ for the installation.

To test the PanoView, open the python interpreter or your preferred IDE and type the following

```
from PanoramicView import scPanoView
```

There should not be any error message popping out.

3. Tutorial

3.1 Input data
3.2 Generate clusters
3.3 Output results

4. Functions

4.1 RunPanoView

```
Arguments
RunPanoView(self, Normal=True, Log2=True,
            GeneLow='default', Zscore='default')
```

4.2 OutputPanoView

```
Arguments
OutputPanoView(self, clust_merge='default',
               metric_dis='default',
               fclust_dis='default',
               init='default', n_PCs='default')
```

4.3 VisCluster

```
Arguments
VisCluster(self, clevel, cnumber)
```

4.4 VisClusterAnno

```
Arguments
VisClusterAnno(self, annotation)
```

4.5 VisGeneExp

```
Arguments
VisGeneExp(self, genes)
```

4.6 RunVGs

```
Arguments
RunVGs(self, clevel)
```

4.7 HeatMapVGs

```
Arguments
HeatMapVGs(self, pval, number, fd, clevel,
           genelist=None)
```

4.8 HeatMapGenes

```
Arguments
HeatMapGenes(self, clevel, genelist)
```

5. Others