Package ‘clustertend’

May 20, 2015

Type Package
Title Check the Clustering Tendency
Version 1.4
Date 2015-05-17
Author Luo YiLan, Zeng RuTong
Maintainer Zeng RuTong <670273197@qq.com>
Description Calculate some statistics aiming to help analyzing the clustering tendency of given data. In the first version, Hopkins’ statistic is implemented.
License GPL (>= 2)
NeedsCompilation no
Repository CRAN
Date/Publication 2015-05-20 01:15:11

R topics documented:

clustertend-package .......................................................... 1
hopkins ................................................................. 2

Index

clustertend-package Check the Clustering Tendency

Description

Calculate some statistics aiming to help analyzing the clustering tendency of the given data. In the first version, Hopkins’ statistic is implemented.
Preprocess your data into a dataframe or matrix form. Then several statistics about clustering tendency can be calculated. In the first version, we only provided calculating function of Hopkins’ statistic.

Author(s)

Luo YiLan, Zeng RuTong
Maintainer: Zeng RuTong <670273197@qq.com>

References


Examples

```r
x<-matrix(runif(200,1,100),50,4);
hopkins(x,n=10)
```

Description

Calculate the Hopkins’ statistic of given data. ‘n’ can be set to see whether this statistic converges.

Usage

`hopkins(data, n, byrow = F, header = F)`

Arguments

data a data frame or a matrix of the sample
n an integer, the number of points selected from sample space which is also the number of points selected from the given sample(data)
byrow logical. If FALSE (the default) the variables is taken by columns, otherwise the variables is taken by rows.
header logical. If FALSE (the default) the first column(or row) will be deleted in the calculation
Details
Sample data must be preprocessed into dataframe or matrix form before given as the value of parameter "data".

Value
the number of Hopkins’ statistic will be shown in the CW.

Author(s)
Luo YiLan, Zeng RuTong 670273197@qq.com

References

Examples
x<-matrix(runif(200,1,100),50,4);
hopkins(x,n=10)
Index

*Topic **Statistics**
  hopkins, 2
*Topic **cluster**
  hopkins, 2
*Topic **package**
  clustertend-package, 1

clustertend (clustertend-package), 1
clustertend-package, 1

hopkins, 2