Package 'MediaK'

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Type Package

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Title Calculate MeDiA_K Distance

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Author Zizhuo Ren, Hesen Peng, Tianwei Yu

Maintainer Zizhuo Ren<zizhuoren@gmail.com>

Description Calculates MeDiA_K (means Mean Distance Association by K-nearest neighbor) in order to detect nonlinear associations.

License GPL

LazyData TRUE

Imports Rcpp (>= 0.11.3)

LinkingTo Rcpp, RcppEigen

NeedsCompilation yes

Repository CRAN

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R topics documented:

Media_pvalue   *functions to calculate pvalue*

Description

This function is created to calculate p values about MeDiA_k

Usage

```
Media_pvalue(iTest,jTest,times,selectvec)
```

Arguments

iTest	a numeric matrix
jTest	a numeric matrix which has the same rows as iTest
selectvec	an integer vector which contains a series of K values you want to get
times	an integer indicates permutation times

Value

Media_pvalue(iTest,jTest,times,selectvec) return a numeric vectors contains p values based on the selectvec(K value you want to select)

Examples

```
iTest <- matrix(rnorm(1000),100)
jTest<- matrix(rnorm(200),100)
times<- 100
selectvec <- c(1:10)
Media_pvalue(iTest,jTest,times,selectvec)
```

RcppExports   *Set of functions in example RcppEigen package*

Description

These two functions are created to calculate different values about MeDiA_k

Usage

```
dis_value(iTest,jTest,select)
permute(iTest,jTest,times,selectvec)
```

Arguments

`iTest`	a numeric matrix
`jTest`	a numeric matrix which has the same rows as iTest
`select`	an integer which means get k values you want to get
`selectvec`	an integer vector which contains a series of K values you want to get
`times`	an integer indicates permutation times

Value

`dis_val(iTest,jTest,select)` returns a distance `permute(iTest,jTest,times,selectvec)` return a list contains mean and sd values based on the selectvec(K value you want to select)

Examples

```
iTest <- matrix(rnorm(1000),100)
jTest<- matrix(rnorm(200),100)
select<- 5
times<- 100
selectvec <- c(1:10)
dis_value(iTest,jTest,select)
permute(iTest,jTest,times,selectvec)
```

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