Package: MediaK (via r-universe)

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Type Package

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Title Calculate MeDiA_K Distance

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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

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Repository https://robertren.r-universe.dev

RemoteUrl https://github.com/cran/MediaK

RemoteRef HEAD

RemoteSha e39439b52784f27edaa785229cc351b730703134

Contents

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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