Package 'rapidsplit'

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Type Package

Title Fast split-half reliability algorithm

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Description Fast and flexible split-half reliability algorithm.

License GPL (>= 2)

Imports Rcpp (>= 1.0.5), AATtools

LinkingTo Rcpp

RoxygenNote 7.3.1

Encoding UTF-8

R topics documented:

`applyItersplits` *applyItersplits*

Description

generate splits for splithalf

Usage

```
applyItersplits(iters, splits, replace = FALSE)
```

Arguments

iters	number of iterations
splits	list of vectors of row numbers
replace	Sample without (default) or with replacement

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colMedians *colMedians*

Description

get column medians

Usage

```
colMedians(mat)

colMedians_mask(mat, mask)

mediansByMask(values, mask)

colMeans_mask(mat, mask)

meansByMask(values, mask)
```

Arguments

mat	a matrix with values to aggregate
mask	a logical matrix determining which data points to include and which not to
values	Values to aggregate over in different mask configurations

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colSds *colSds*

Description

get column SDs

Usage

```
colSds(mat)

colSds_mask(mat, mask)

sdsByMask(values, mask)
```

Arguments

mat	the matrix to retrieve column SDs from
mask	a logical matrix determining which data points to include and which not to
values	Values to aggregate over in different mask configurations

corByColumns — *Correlate each column of 1 matrix with the same column in another matrix*

Description

Correlate each column of 1 matrix with the same column in another matrix

Usage

```
corByColumns(mat1, mat2)

corByColumns_mask(mat1, mat2, mask)
```

Arguments

mat1, mat2	Matrices whose values to correlate by column
mask	Logical matrix marking which data points to include

Value

A numeric vector of correlations per column

ExcludeSDOutliers — *Exclude SD-based outliers*

Description

Update a mask matrix based on outlyingness

Usage

```
ExcludeSDOutliers(rtvec, mask, sdlim = 3)

ExcludeSDOutliers_nomask(mat, sdlim = 3)
```

Arguments

rtvec	Reaction time vector
mask	a logical matrix determining which data points to include and which not to
sdlim	Standard deviation limit to apply; values beyond are classified as outliers and masked
mat	Matrix in which to mark SD-based outleirs by column (with FALSE)

Value

An updated mask

rapidsplit *rapidsplit*

Description

A very fast algorithm for permutated split-half reliability

Usage

```
rapidsplit(
  ds,
  subjvar,
  diffvars = NULL,
  stratvars = NULL,
  rtvar,
  iters,
  agg = c("means", "medians"),
  standardize = F
)
```

Arguments

ds	Dataset, a data.frame
subjvar	Subject ID variable name, a character
diffvars	Variables that determine which conditions need to be subtracted from each other, a character
stratvars	Additional variables that the splits should be stratified by, if possible; a character
rtvar	Reaction time variable name, a character
iters	Number of split-halves to average, an integer
agg	The function by which to aggregate the RTs; can be "means" or "medians"
standardize	Whether to divide by scores by the subject's SD; a logical

Value

A list containing the averaged reliability as well as a vector with the reliability of each iteration

Examples

```
print("no example")
```

`stratified_itersplits` *stratified_itersplits*

Description

generate stratified splits for a single participant

Usage

```
stratified_itersplits(itercount, groupsizes)
```

Arguments

`itercount`	number of iterations
`groupsizes`	vector of number of RTs per group to stratify

Details

This first equally splits what can be equally split within groups. Then it randomly splits all the leftovers.

Value

A matrix with zeroes and ones

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