

Package ‘rapidsplit’

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Title Fast split-half reliability algorithm
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Description Fast and flexible split-half reliability algorithm.
License GPL (>= 2)
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R topics documented:

applyItersplits	1
colMedians	2
colSds	2
corByColumns	3
ExcludeSDOutliers	3
rapidsplit	4
stratified_itersplits	5
Index	6

applyItersplits	<i>applyItersplits</i>
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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

colMedians	<i>colMedians</i>
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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

colSds	<i>colSds</i>
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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	<i>Correlate each column of 1 matrix with the same column in another matrix</i>
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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	<i>Exclude SD-based outliers</i>
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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 outliers 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

<code>ds</code>	Dataset, a <code>data.frame</code>
<code>subjvar</code>	Subject ID variable name, a character
<code>diffvars</code>	Variables that determine which conditions need to be subtracted from each other, a character
<code>stratvars</code>	Additional variables that the splits should be stratified by, if possible; a character
<code>rtvar</code>	Reaction time variable name, a character
<code>iters</code>	Number of split-halves to average, an integer
<code>agg</code>	The function by which to aggregate the RTs; can be "means" or "medians"
<code>standardize</code>	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_itsplits` *stratified_itsplits*

Description

generate stratified splits for a single participant

Usage

```
stratified_itsplits(itercount, groupsizes)
```

Arguments

<code>itercount</code>	number of iterations
<code>groupsizes</code>	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

Index

`applyItersplits`, [1](#)

`colMeans_mask (colMedians)`, [2](#)
`colMedians`, [2](#)
`colMedians_mask (colMedians)`, [2](#)
`colSds`, [2](#)
`colSds_mask (colSds)`, [2](#)
`corByColumns`, [3](#)
`corByColumns_mask (corByColumns)`, [3](#)

`ExcludeSDOutliers`, [3](#)
`ExcludeSDOutliers_nomask`
 (`ExcludeSDOutliers`), [3](#)

`meansByMask (colMedians)`, [2](#)
`mediansByMask (colMedians)`, [2](#)

`rapidsplit`, [4](#)
`rapidsplit-package (rapidsplit)`, [4](#)

`sdsByMask (colSds)`, [2](#)
`stratified_itersplits`, [5](#)