

# Package ‘rapidsplit’

January 11, 2023

**Type** Package  
**Title** Fast split half algorithm  
**Version** 0.0.0.1  
**Date** 2021-11-24  
**Author** Sercan Kahveci  
**Maintainer** Your Name <your@email.com>  
**Description** Fast split-half reliability algorithm. Developed for use in one of my studies.  
**License** GPL (>= 2)  
**Imports** Rcpp (>= 1.0.5), AATtools  
**LinkingTo** Rcpp  
**RoxygenNote** 7.2.3.9000

## R topics documented:

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rapidsplit-package	<i>A short title line describing what the package does</i>
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## Description

A more detailed description of what the package does. A length of about one to five lines is recommended.

## Details

This section should provide a more detailed overview of how to use the package, including the most important functions.

**Author(s)**

Your Name, email optional.  
Maintainer: Your Name <your@email.com>

**References**

This optional section can contain literature or other references for background information.

**See Also**

Optional links to other man pages

**Examples**

```
## Not run:  
## Optional simple examples of the most important functions  
## These can be in \dontrun{} and \donttest{} blocks.  
  
## End(Not run)
```

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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 |

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colMedians	<i>colMedians</i>
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**Description**

get column medians

**Usage**

```
colMedians(mat)  
  
colMedians_mask(values, mask)  
  
colMeans_mask(values, mask)
```

**Arguments**

mat	the matrix to retrieve column medians from
mask	a logical matrix determining which data points to include and which not to

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colSds	<i>colSds</i>
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**Description**

get column SDs

**Usage**

```
colSds(mat)

colSds_mask(mat, mask)
```

**Arguments**

mat	the matrix to retrieve column SDs from
mask	a logical matrix determining which data points to include and which not to

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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)
```

**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

**Value**

An updated mask

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rapidsplit	<i>rapidsplit ultra fast split-half</i>
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**Usage**

```
rapidsplit(
  ds,
  subjvar,
  pullvar,
  targetvar,
  rtvar,
  iters,
  agg = c("means", "medians"),
  standardize = F
)
```

**Arguments**

ds	dataset
subjvar	subject var name
pullvar	movement direction var name
targetvar	stim type var name
rtvar	rt varname
iters	n iterations
agg	means or medians
standardize	divide by sd or not

**Examples**

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

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rcpp_hello_world	<i>Simple function using Rcpp</i>
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**Description**

Simple function using Rcpp

**Usage**

```
rcpp_hello_world()
```

**Examples**

```
## Not run:
rcpp_hello_world()

## End(Not run)
```

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`stratified_itersplits` *stratified\_itersplits*

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**Description**

generate stratified splits for a single participant

**Usage**

```
stratified_itersplits(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

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