

Package: rescale (via r-universe)

September 6, 2024

Title Rescales Data Based on Other Data

Version 0.0.0.9006

Description Rescales columns in a data frame based on the columns in a second data frame. For example a column can be rescaled by subtracting the mean and dividing by the standard deviation. The user can pass the names of functions which calculate the value to subtract and/or the value to divide by. The package was developed for making predictions based on models with rescaled variables. For the predictions to be valid the new data frame must have its predictor variables rescaled based on the original data.

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URL <https://github.com/poissonconsulting/rescale>,
<https://poissonconsulting.github.io/rescale/>

BugReports <https://github.com/poissonconsulting/rescale/issues>

Depends R (>= 4.1)

Imports chk, glue, lifecycle, purrr, rlang, stats

Suggests covr, datasets, newdata, testthat (>= 3.0.0)

Remotes poissonconsulting/newdata

Config/testthat/edition 3

Encoding UTF-8

LazyData true

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.2

Repository <https://poissonconsulting.r-universe.dev>

RemoteUrl <https://github.com/poissonconsulting/rescale>

RemoteRef HEAD

RemoteSha f32907cf04a23a07d697e9fb548c2e9aead0bc4d

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check_valid_rescalers *Check Valid Rescalers*

Description

Check Valid Rescalers

Usage

```
check_valid_rescalers(x, x_name = substitute(x))
```

Arguments

x	A character vector to test for valid rescalers.
x_name	A string of the object name.

Value

An informative error if the check failed otherwise the original object.

get_rescaler_colnames *Get Rescaler Colnames*

Description

Get Rescaler Colnames

Usage

```
get_rescaler_colnames(x)
```

Arguments

x	A character vector.
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Value

A character vector of the rescaler column names.

Examples

```
get_rescaler_colnames(c("log(mean)*", "sqrt(cc)"))
```

rescale

Rescale Data

Description

Centers and scales columns in a data frame based on the columns in a second data frame. A column is centered by subtracting the mean and scaled by dividing by the standard deviation. Columns in scale are automatically added to center so they are standardised.

Usage

```
rescale(data, data2 = data, center = character(0), scale = character(0))
```

Arguments

data	The data frame to center and scale.
data2	A data frame to use for the centering and scaling.
center	A character vector of the columns to center.
scale	A character vector of the columns to scale (after centering).

Value

The data frame with rescaled columns.

See Also

[scale](#), [rescale_f](#) and [rescale_c](#)

Examples

```
rescale(datasets::mtcars, scale = "mpg")
```

`rescale_c`*Rescale Transformed Data*

Description

Rescales transformed columns in a data frame based on the transformed columns in a second data frame. The columns are rescaled by subtracting values and then dividing by values.

Usage

```
rescale_c(data, data2 = data, colnames = character(0))
```

Arguments

<code>data</code>	The data frame to rescale.
<code>data2</code>	A data frame to use for the rescaling.
<code>colnames</code>	A character vector of column names to transform and/or rescale.

Details

The column names can include a single function for the transform as well as the following suffices: + (subtract mean), - (subtract min), =(subtract min and add 1), / (divide by sd) and * (subtract mean and divide by sd).

Value

The data frame with transformed and rescaled columns.

See Also

[rescale](#)

`rescale_f`*Rescale Transformed Data*

Description

Rescales transformed columns in a data frame based on the transformed columns in a second data frame. The columns are rescaled by subtracting values and then dividing by values.

Usage

```
rescale_f(  
  data,  
  data2 = data,  
  transform = list(),  
  subtract = list(),  
  divide_by = list()  
)
```

Arguments

data	The data frame to rescale.
data2	A data frame to use for the rescaling.
transform	A named list where the name(s) indicate the function(s) to use for the transformations and the elements indicate the columns to transform.
subtract	A named list where the name(s) indicate the function(s) to use when determining the value to subtract and the elements indicate the columns.
divide_by	A named list where the name(s) indicate the function(s) to use when determining the value to divide by and the elements indicate the columns.

Value

The data frame with transformed and rescaled columns.

See Also

[rescale](#)

Examples

```
rescale_f(datasets::mtcars,  
  transform = list(log = "mpg"),  
  subtract = list(mean = c("mpg", "disp"), min = "gear"),  
  divide_by = list(sd = c("mpg", "hp"))  
)
```

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