

Package: rksfun (via r-universe)

May 26, 2026

Title rksfun - a collection of usefull (to me) code

Version 0.0.0.9000

Description rksfun - a collection of usefull (to me) code

License Boost Software License 1.0

Encoding UTF-8

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.2

Depends R (>= 3.5)

LazyData true

Suggests BiocStyle, knitr, RefManageR, rmarkdown, sessioninfo,
spelling, testthat

Language en-US

Config/testthat/edition 3

URL <https://github.com/richardstoeckl/rksfun>,
<https://richardstoeckl.github.io/rksfun/>

BugReports <https://github.com/richardstoeckl/rksfun/issues>

Imports dplyr, ggplot2, grDevices, magrittr, purrr, pwalgn, readr,
stringr

VignetteBuilder knitr

Config/pak/sysreqs libicu-dev libx11-dev zlib1g-dev

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

Date/Publication 2025-02-03 14:09:03 UTC

RemoteUrl <https://github.com/richardstoeckl/rksfun>

RemoteRef v0.0.0.9000

RemoteSha 1e731d22685ea498dea3b4cfe6ee1d2b517730e6

Contents

%NOTIN%	2
allVSall_pid	3
calculate_pid	3
ggsave_landscape	4
ggsave_portrait	4
hasOneOfMultiplePatterns	5
read_annotation	5
rksfun.pals	6
rksfunPalettes	7
scale_color_rksfun_c	7
scale_color_rksfun_d	8
scale_colour_rksfun_c	8
scale_colour_rksfun_d	9
scale_fill_rksfun_c	10
scale_fill_rksfun_d	10
Index	12

%NOTIN%	<i>Negate the %in% operator</i>
---------	---------------------------------

Description

This function negates the %in% operator. I really don't know why this is not a built-in operator in R rksfun

Usage

```
x %NOTIN% y
```

Arguments

x	A vector of values to check if they exist in y
y	A vector of values to check if x values exist in

allVSall_pid	<i>Calculate all-vs-all protein percent identities</i>
--------------	--

Description

Calculate all-vs-all protein percent identities

Usage

```
allVSall_pid(protlist)
```

Arguments

protlist	List of protein sequences
----------	---------------------------

Value

Dataframe with percent identities

calculate_pid	<i>Calculate pairwise percent identity between two sequences</i>
---------------	--

Description

Calculate pairwise percent identity between two sequences

Usage

```
calculate_pid(
  seq1,
  seq2,
  substitutionMatrix = "BLOSUM62",
  gapOpening = 10,
  gapExtension = 0.5,
  type = "global",
  ...
)
```

Arguments

seq1	First sequence
seq2	Second sequence
substitutionMatrix	Substitution matrix to use for alignment
gapOpening	Gap opening penalty

gapExtension	Gap extension penalty
type	Type of alignment. One of "global", "local", "overlap"
...	Additional arguments passed to pwalgn::pairwiseAlignment

Value

Pairwise percent identity

ggsave_landscape	<i>ggsave with A4 size (landscape)</i>
------------------	--

Description

This function saves the plot with A4 size in landscape mode

Usage

```
ggsave_landscape(filename, plot = last_plot(), ...)
```

Arguments

filename	character. The name of the file to save the plot to.
plot	ggplot object
...	Other arguments passed to ggsave()

ggsave_portrait	<i>ggsave with A4 size (portrait)</i>
-----------------	---------------------------------------

Description

This function saves the plot with A4 size in portrait mode. rksfun

Usage

```
ggsave_portrait(filename, plot = last_plot(), ...)
```

Arguments

filename	character. The name of the file to save the plot to.
plot	ggplot object
...	Other arguments passed to ggsave()

hasOneOfMultiplePatterns

Function to get a logical vector if a text contains one of multiple sting patterns

Description

Function to get a logical vector if a text contains one of multiple sting patterns

Usage

```
hasOneOfMultiplePatterns(patterns, text)
```

Arguments

patterns	A vector of strings to detect in the text
text	A vector of strings to detect the patterns

Value

A logical vector of the same length as the text vector

Examples

```
# define a vector of patterns
patterns <- c("Merc", "Hornet")
# create a DF
df <- datasets::mtcars
df$car <- rownames(df)
# filter the DF to keep only the rows that do not contain one of the patterns
df_with_pattern <- df %>% dplyr::filter(hasOneOfMultiplePatterns(patterns, df$car))
# filter the DF to keep only the rows that do not contain one of the patterns
df_without_pattern <- df %>% dplyr::filter(!hasOneOfMultiplePatterns(patterns, df$car))
```

read_annotation

Read the result file from my annotation pipeline

Description

This function reads the result file from my annotation pipeline

Usage

```
read_annotation(file, threads = 12, ...)
```

Arguments

file	character. The name of the file to read
threads	integer. Number of threads to use
...	Other arguments passed to read_tsv

rksfun.pals

rksfunPalettes for plotting

Description

rksfunPalettes for plotting

Usage

```
rksfun.pals(
  name,
  n,
  type = c("discrete", "continuous"),
  direction = c(1, -1),
  override.order = FALSE
)
```

Arguments

name	Name of Palette. Choices are: rktbns_post, and tf2
n	Number of desired colors. If number of requested colors is beyond the scope of the palette, colors are automatically interpolated. If n is not provided, the length of the palette is used.
type	Either "continuous" or "discrete". Use continuous if you want to automatically interpolate between colors.
direction	Sets order of colors. Default palette is 1. If direction is -1, palette color order is reversed
override.order	Colors are picked from palette to maximize readability and aesthetics. This means that colors are not always selected in sequential order from the full palette. If override.order is set to TRUE, colors are selected in sequential order from the full palette instead. Default is FALSE.

Value

A vector of colors.

rksfunPalettes *Complete list of palettes.*

Description

Use `names(rksfunPalettes)` to return all possible palette names. Current choices are: `rktbns_post`, and `tf2` Use [rksfun.pals](#) to construct palettes.

Usage

```
rksfunPalettes
```

Format

An object of class `list` of length 2.

`scale_color_rksfun_c` *rksfunPalettes for plotting with ggplot2*

Description

Function for using `rksfunPalettes` colors schemes in `ggplot2`. Use [scale_color_rksfun_d](#) and [scale_fill_rksfun_d](#) for discrete scales and [scale_color_rksfun_c](#) and [scale_fill_rksfun_c](#) for continuous scales.

Usage

```
scale_color_rksfun_c(name, direction = 1, ...)
```

Arguments

<code>name</code>	Name of Palette. Choices are: <code>rktbns_post</code> , and <code>tf2</code>
<code>direction</code>	Sets order of colors. Default palette is 1. If <code>direction</code> is -1, palette color order is reversed
<code>...</code>	Other arguments passed on to scale_color_gradientn

Value

A function that returns a continuous color scale.

scale_color_rksfun_d *rksfunPalettes for plotting with ggplot2*

Description

Function for using `rksfunPalettes` colors schemes in `ggplot2`. Use `scale_color_rksfun_d` and `scale_fill_rksfun_d` for discrete scales and `scale_color_rksfun_c` and `scale_fill_rksfun_c` for continuous scales.

Usage

```
scale_color_rksfun_d(name, direction = 1, override.order = FALSE, ...)
```

Arguments

<code>name</code>	Name of Palette. Choices are: <code>rktbns_post</code> , and <code>tf2</code>
<code>direction</code>	Sets order of colors. Default palette is 1. If <code>direction</code> is -1, palette color order is reversed
<code>override.order</code>	Colors are picked from palette to maximize readability and aesthetics. This means that colors are not always selected in sequential order from the full palette. If <code>override.order</code> is set to <code>TRUE</code> , colors are selected in sequential order from the full palette instead. Default is <code>FALSE</code> .
<code>...</code>	Other arguments passed on to <code>discrete_scale</code>

Value

A function that returns a discrete color scale.

scale_colour_rksfun_c *rksfunPalettes for plotting with ggplot2*

Description

Function for using `rksfunPalettes` colors schemes in `ggplot2`. Use `scale_color_rksfun_d` and `scale_fill_rksfun_d` for discrete scales and `scale_color_rksfun_c` and `scale_fill_rksfun_c` for continuous scales.

Usage

```
scale_colour_rksfun_c(name, direction = 1, ...)
```

Arguments

name	Name of Palette. Choices are: rktbns_post, and tf2
direction	Sets order of colors. Default palette is 1. If direction is -1, palette color order is reversed
...	Other arguments passed on to scale_color_gradientn

Value

A function that returns a continuous colour scale.

scale_colour_rksfun_d *rksfunPalettes for plotting with ggplot2*

Description

Function for using rksfunPalettes colors schemes in ggplot2. Use [scale_color_rksfun_d](#) and [scale_fill_rksfun_d](#) for discrete scales and [scale_color_rksfun_c](#) and [scale_fill_rksfun_c](#) for continuous scales.

Usage

```
scale_colour_rksfun_d(name, direction = 1, override.order = FALSE, ...)
```

Arguments

name	Name of Palette. Choices are: rktbns_post, and tf2
direction	Sets order of colors. Default palette is 1. If direction is -1, palette color order is reversed
override.order	Colors are picked from palette to maximize readability and aesthetics. This means that colors are not always selected in sequential order from the full palette. If override.order is set to TRUE, colors are selected in sequential order from the full palette instead. Default is FALSE.
...	Other arguments passed on to discrete_scale

Value

A function that returns a discrete colour scale.

scale_fill_rksfun_c *rksfunPalettes for plotting with ggplot2*

Description

Function for using rksfunPalettes colors schemes in ggplot2. Use [scale_color_rksfun_d](#) and [scale_fill_rksfun_d](#) for discrete scales and [scale_color_rksfun_c](#) and [scale_fill_rksfun_c](#) for continuous scales.

Usage

```
scale_fill_rksfun_c(name, direction = 1, ...)
```

Arguments

name	Name of Palette. Choices are: rktbns_post, and tf2
direction	Sets order of colors. Default palette is 1. If direction is -1, palette color order is reversed
...	Other arguments passed on to scale_color_gradientn

Value

A function that returns a continuous color scale.

scale_fill_rksfun_d *rksfunPalettes for plotting with ggplot2*

Description

Function for using rksfunPalettes colors schemes in ggplot2. Use [scale_color_rksfun_d](#) and [scale_fill_rksfun_d](#) for discrete scales and [scale_color_rksfun_c](#) and [scale_fill_rksfun_c](#) for continuous scales.

Usage

```
scale_fill_rksfun_d(name, direction = 1, override.order = FALSE, ...)
```

Arguments

name	Name of Palette. Choices are: rktbns_post, and tf2
direction	Sets order of colors. Default palette is 1. If direction is -1, palette color order is reversed
override.order	Colors are picked from palette to maximize readability and aesthetics. This means that colors are not always selected in sequential order from the full palette. If override.order is set to TRUE, colors are selected in sequential order from the full palette instead. Default is FALSE.
...	Other arguments passed on to discrete_scale

Value

A function that returns a discrete color scale.

Index

* datasets

- rksfunPalettes, [7](#)
- %NOTIN%, [2](#)

- allVSall_pid, [3](#)

- calculate_pid, [3](#)

- discrete_scale, [8–10](#)

- ggsave_landscape, [4](#)
- ggsave_portrait, [4](#)

- hasOneOfMultiplePatterns, [5](#)

- read_annotation, [5](#)
- rksfun.pals, [6, 7](#)
- rksfunPalettes, [7](#)

- scale_color_gradientn, [7, 9, 10](#)
- scale_color_rksfun_c, [7, 7–10](#)
- scale_color_rksfun_d, [7, 8, 8–10](#)
- scale_colour_rksfun_c, [8](#)
- scale_colour_rksfun_d, [9](#)
- scale_fill_rksfun_c, [7–9, 10, 10](#)
- scale_fill_rksfun_d, [7–9, 10, 10](#)