

Package ‘GimmeMyPlot’

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Title Graphical Utilities for Visualizing and Exploring Data

Version 0.1.0

Description Simplifies the process of creating essential visualizations in R, offering a range of plotting functions for common chart types like violin plots, pie charts, and histograms. With an intuitive interface, users can effortlessly customize colors, labels, and styles, making it an ideal tool for both beginners and experienced data analysts. Whether exploring datasets or producing quick visual summaries, this package provides a streamlined solution for fundamental graphics in R.

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Imports dplyr, ggforce, ggplot2, ggpubr, magrittr, RColorBrewer, rstatix, scales, stats, stringr, tidyr

Suggests covr, knitr, rmarkdown, testthat

VignetteBuilder knitr

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plot_violin

Violin plot

Description

Visualize the distribution of single or multiple variables using violin plots, boxplots, and sina plots

Usage

```
plot_violin(
  x,
  method = "anova",
  method_adjust = "BH",
  title = NULL,
  width_text = 20,
  width_title = 20,
  colour = "red",
  color_title = colour,
  pch_alpha = 1,
  pch_colour = "gray50",
  pch_size = cex,
  cex = 1,
  cex_axis = 17 * cex,
  cex_main = 21 * cex,
  cex_sub = 15 * cex,
  stats = TRUE,
  digits = 0,
  alpha = 0.3,
  coef = 1.5,
  hjust = 0.5,
  lwd = 1,
  probs = c(0.25, 0.75),
  subtitle = FALSE,
  ylab = NULL
)
```

Arguments

x	Vector or data.frame of numerical values visualized on the plot.
method	Character for the test method ('anova', 'kruskal', or 'wilcox').
method_adjust	Character for the multiple correction test among 'BH', 'BY', 'bonferroni', 'fdr', 'hochberg', 'holm', 'hommel', 'none'
title	Character for the title.
width_text	Integer for the maximum length of the subtitle(s).
width_title	Integer for the maximum length of the title.

colour	Color or vector of colors for the violin and boxplot.
color_title	Color for the title.
pch_alpha	Integer for the transparency of the points (ranging from 0 to 1 for maximum opacity).
pch_colour	Color for the sina points.
pch_size	Integer for the magnification factor for the points relative to the default.
cex	Integer for the magnification factor for the text relative to the default.
cex_axis	Integer for the magnification factor for the axis labels relative to the default.
cex_main	Integer for the magnification factor for the subtitles relative to the default.
cex_sub	Integer for the magnification factor for the main title relative to the default.
stats	Boolean to display the results of statistical tests.
digits	Integer for the number of decimals.
alpha	Integer for the transparency of the violin plot (ranging from 0 to 1 for maximum opacity)
coef	Integer to multiply the quantiles by.
hjust	Integer for the horizontal justification (in [0,1]).
lwd	Integer for the line width.
probs	Integer vector of probabilities (in [0,1]).
subtitle	Character for the subtitle.
ylab	Character for the title of the Y-axis.

Value

A ggplot object.

Examples

```
library(RColorBrewer)

# Default plot
x <- runif(10)
plot_violin(x)

# Advanced parameters
df <- lapply(seq(2), function(x) runif(10))
df <- as.data.frame(df)
df[, 3] <- runif(10, 1, 2)
colnames(df) <- paste0("X", seq(3))
plot_violin(
  df,
  title = "Some random variables",
  color_title = brewer.pal(9, "Set1")[5],
  ylab = "Y-values",
  colour = brewer.pal(9, "Set1")[seq(3)],
  method = "kruskal",
```

```
method_adjust = "none",  
cex = 1.2,  
pch_size = 3,  
width_text = 5,  
pch_colour = "gray30",  
pch_alpha = 0.5,  
width_title = 30,  
lwd = 1.25,  
digits = 2  
)
```

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