Package ‘GimmeMyPlot’

October 18, 2023

**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.

**License**  GPL-3

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

**Suggests**  covr, knitr, rmarkdown, testthat

**VignetteBuilder**  knitr

**Config/testthat/edition**  3

**Encoding**  UTF-8

**RoxygenNote**  7.2.3

**NeedsCompilation**  no

**Author**  Etienne Camenen [aut, cre] (<https://orcid.org/0000-0002-2398-0190>)

**Maintainer**  Etienne Camenen <etienne.camenen@gmail.com>

**Repository**  CRAN

**Date/Publication**  2023-10-18 16:10:02 UTC

**R topics documented:**

plot_violin .................................................. 2

Index  5
plot_violin  

Description

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

Usage

```r
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).

coeff

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
)
Index

plot_violin, 2