Package ‘radarBoxplot’

October 7, 2021

Title  Implementation of the Radar-Boxplot
Version  1.0.5
Description  Creates the radar-boxplot, a plot that was created by the
author during his Ph.D. in forest resources.
The radar-boxplot is a visualization feature suited for multivariate classification/clustering. It provides an intuitive deep understanding of the data.

Suggests  ggplot2
Depends  R (>= 3.5)
License  MIT + file LICENSE
Encoding  UTF-8
LazyData  true
RoxygenNote  7.1.2


BugReports  https://github.com/caiohamamura/radarBoxplot-R/issues

Author  Caio Hamamura [aut, cre]
Maintainer  Caio Hamamura <caiohamamura@gmail.com>
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R topics documented:

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Function to plot the radar-boxplot

Usage

radarBoxplot(x, ...)  

## S3 method for class 'formula'
radarBoxplot(x, data, ...)

## Default S3 method:
radarBoxplot(
  x,
  y,
  IQR = 1.5,
  use.ggplot2 = FALSE,
  mfrow = NA,
  oma = c(5, 4, 0, 0) + 0.1,
  mar = c(0, 0, 1, 1) + 0.1,
  innerPolygon = list(),
  outerPolygon = list(),
  innerBorder = list(),
  outerBorder = list(),
  medianLine = list(),
  outlierPoints = list(),
  nTicks = 4,
  ticksArgs = list(),
  axisArgs = list(),
  labelsArgs = list(),
  angleOffset = NA,
  ...
)

Arguments

x a data frame or matrix of attributes or a formula describing the attributes for the class

... parameter to allow the usage of S3 methods

data dataset for formula variant for which formula was defined

y a response vector
IQR numeric. The factor to multiply the IQR to define the outlier threshold. Default 1.5
use.ggplot2 if ggplot2 are available it will use ggplot for plotting: Default FALSE
mfrow mfrow argument for defining the subplots nrows and ncols: Default will calculate the minimum square
oma outer margins of the subplots: Default c(5,4,0,0) + 0.1
mar margins of the subplots: Default c(0,0,1,1) + 0.1
innerPolygon a list of optional arguments to override Q2-Q3 ‘graphics::polygon()’ style: Default list()
outerPolygon a list of optional arguments to override the outer (range) ‘graphics::polygon()’ default style: Default list()
innerBorder a list of optional arguments to override the inner border ‘graphics::lines()’ default style: Default list()
outerBorder a list of optional arguments to override the outer border ‘graphics::lines()’ default style: Default list()
medianLine a list of optional arguments to override the median line ‘graphics::lines()’ default style: Default list()
outlierPoints a list of optional arguments to override the outliers ‘graphics::points()’ default style: Default list()

Examples
library(radarBoxplot)
data("winequality_red")

# Regular
radarBoxplot(quality ~ ., winequality_red)

# Orange and green pattern with grey median
radarBoxplot(quality ~ ., winequality_red,
            use.ggplot2=FALSE, medianLine=list(col="grey"),
            innerPolygon=list(col="#FFA500CC"),
            outerPolygon=list(col=rgb(0,.7,0,0.6)))

# Plot in 2 rows and 3 columns
# change columns order (counter clockwise)
R code:
```
radarBoxplot(quality ~ volatile.acidity + citric.acid +
             residual.sugar + fixed.acidity + chlorides +
             free.sulfur.dioxide + total.sulfur.dioxide +
             density + pH + sulphates + alcohol,
data = winequality_red,
mfrow=c(2,3))
```

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**winequality_red**  
*Red Wine Quality Dataset*

**Description**

Related to red vinho verde wine samples, from the north of Portugal. The goal is to model wine quality based on physicochemical tests.

**Usage**

winequality_red

**Format**

A data frame with 1599 rows and 12 variables:

**Source**


**References**


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**winequality_white**  
*White Wine Quality Dataset*

**Description**

Related to white vinho verde wine samples, from the north of Portugal. The goal is to model wine quality based on physicochemical tests.

**Usage**

winequality_white
winequality_white

Format

A data frame with 4898 rows and 12 variables:

Source

https://archive.ics.uci.edu/ml/datasets/wine+quality

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