

Package ‘QCpipeline’

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Version 0.1.0

Type Package

Title Utilities for the QC pipeline

Description Configuration and plotting code

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Depends

Imports gplots, grid, gridBase, hexbin

Suggests MSBVAR

License GPL (>= 2)

LazyLoad yes

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boxplotMeanSD	<i>Boxplot with mean and SD</i>
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Description

Boxplot with mean and SD

Usage

```
boxplotMeanSD(x, y, data=NULL, xlab=NULL, ylab=NULL, nSD=1, ...)
```

Arguments

x	vector or character string denoting column in data
y	vector or character string denoting column in data
data	data.frame
xlab	title for x axis (defaults to x if data is not NULL)
ylab	title for y axis (defaults to y if data is not NULL)
nSD	number of standard deviations to plot
...	additional plotting arguments

Author(s)

Jess Shen

Examples

```
age <- sample(25:55, 100, replace=TRUE)
sex <- sample(c("M", "F"), 100, replace=TRUE)
boxplotMeanSD(sex, age)

data <- data.frame(age, sex)
boxplotMeanSD("sex", "age", data)
```

plot2DwithHist	<i>Scatterplot with density</i>
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Description

plot2DwithHist produces a scatterplot of y vs x, along with histograms of the marginal distributions of x and y.

Usage

```
plot2DwithHist(x, y, xlab=NULL, ylab=NULL, xlim=NULL, ylim=NULL,  
              sublab=NULL, col2D="#0000ff22", mn=NULL, sd=NULL)
```

Arguments

x	vector of x coordinates
y	vector of y coordinates
xlab	x-axis label (defaults to variable name)
ylab	y-axis label (defaults to variable name)
xlim	x-axis limits (defaults to [min,max] of X, plus a bit of space)
ylim	y-axis limits (defaults to [min,max] of Y, plus a bit of space)
sublab	sub-label (instead of main, since there's no room)
col2D	color for plotting points
mn	2-element vector with mean of x and y
sd	2-element vector with sd of x and y

Author(s)

Leila Zelnick

Examples

```
library(MSBVAR)  
# generate some multivariate normal example data  
n <- 5000  
mu <- c(0, 2)  
vmatrix <- matrix(c(1, 0.7, 0.7, 1), nrow=2)  
  
dat <- rmultnorm(n, mu, vmatrix) # generates n multivariate normal obs.  
x <- dat[,1]  
y <- dat[,2]  
  
plot2DwithHist(x, y, xlab="This is the X variable", ylab="This is the Y variable.",  
              sub="Example Plot!")  
# defining axis limits  
plot2DwithHist(x, y, xlab="This is the X variable", ylab="This is the Y variable.",  
              sub="Example Plot!", xlim=c(0,4), ylim=c(-2,2))
```

readConfig	<i>Read a configuration file</i>
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Description

Read a configuration file

Usage

```
readConfig(file, ...)
```

Arguments

<code>file</code>	file where column 1 is parameter name and column 2 is value.
<code>...</code>	additional arguments to <code>read.table</code>

Author(s)

Stephanie Gogarten

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