Package 'tttplot'

May 8, 2026

Type Package

Title Time to Target Plot

Version 1.1.1

Date 2016-03-29

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Description Implementation of Time to Target plot based on the work of Ribeiro and Rosseti (2015) <DOI:10.1007/s11590-014-0760-8>, that describe a numerical method that gives the probability of an algorithm A finds a solution at least as good as a given target value in smaller computation time than algorithm B.

License GPL (>= 2)

NeedsCompilation no

Repository CRAN

Date/Publication 2016-03-29 18:59:47

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`tttPlot` *Time to Target Plot for one vector*

Description

Make a TTTPlot with the information of a vector of times and calcule the theoretical time values (exp) according to work of Ribeiro and Rosseti (2015) <DOI: 10.1007/s11590-014-0760-8>.

Usage

```
tttPlot(timeValue = NULL, tGraph = "TTTPlot", snTheorical = FALSE)
```

Arguments

timeValue	A vector with the times
tGraph	A character with the type of Plot: ["QQPlot","TTTPlot"]
snTheorical	A boolean that indicated if need to plot the exp function

Value

xSortVal	is the vector timeValue sorted
probTV	is the accumulated probability distribution for timeValue

References

Riveiro, C.C., & Rosseti I.(2015), tttplots-compare: A perl program to compare time-to-target plots or general runtime distributions of randomized algorithms, *Optimization Letters*, vol. **9**, issue 3, pp. 601-614.<DOI: 10.1007/s11590-014-0760-8>.

See Also

See more in http://link.springer.com/article/10.1007/s11590-014-0760-8

Examples

```
tttPlot(c(1:10))
```

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tttPlotCompare *TTTPlot with the comparation of two vectors*

Description

Make a TTTPlot with the information of a vector of times and calcule the theoretical time values (exp) according to work of Ribeiro and Rosseti (2015) <DOI: 10.1007/s11590-014-0760-8> for two vectors.

Usage

```
tttPlotCompare(timeValue1 = NULL, timeValue2 = NULL, tGraph = "TTTPlot",
snTheorical = FALSE, xLab = "Time", yLab = "Accum. Prob.", legendTT = NULL,
snReturn = TRUE, posLegend = "topleft")
```

Arguments

timeValue1	A vector with the times
timeValue2	A vector with the times
tGraph	A character with the type of Plot: ["QQPlot","TTTPlot"]
snTheorical	A boolean that indicated if need to plot the exp function
xLab	A character with the information of xlab for the plot
yLab	A character with the information of ylab for the plot
legendTT	A character with the information of legend for the plot
snReturn	A boolean that indicate if the function return the list of values.
posLegend	A character with the position of the legend in the plot.

Value

xSortVal1	is the vector timeValue1 sorted
xSortVal2	is the vector timeValue2 sorted
probTV1	is the accumulated probability distribution for timeValue1
probTV2	is the accumulated probability distribution for timeValue2

References

Riveiro, C.C., & Rosseti I.(2015), tttplots-compare: A perl program to compare time-to-target plots or general runtime distributions of randomized algorithms, *Optimization Letters*, vol. **9**, issue 3, pp. 601-614.<DOI: 10.1007/s11590-014-0760-8>.

See Also

See more in http://link.springer.com/article/10.1007/s11590-014-0760-8

Examples

```
tttPlotCompare(c(1:10), c(1:10))
```

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