Package: tttplot (via r-universe)

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Type Package

Title Time to Target Plot

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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

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Repository https://amartinunal.r-universe.dev

RemoteUrl https://github.com/cran/tttplot

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Contents

`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))
```

`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))
```

Index