

The scagnostics Package

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Type Package

Title Compute scagnostics.

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Description Calculates graph theoretic scagnostics. Scagnostics describe various measures of interest for pairs of variables, based on their appearance on a scatterplot. They are useful tool for discovering interesting or unusual scatterplots from a scatterplot matrix, without having to look at every individual plot.

Suggests rggobi

LazyData yes

License GPL

R topics documented:

ggobi.scagdf	2
print.scagdf	2
scagnostics	3
scagnostics.tour	4

Index	5
--------------	----------

ggobi.scagdf *Open ggobi with matching R plot*

Description

Experimental interface to interact with scagnostics output with GGobi

Usage

```
ggobi.scagdf(data, ...)
```

Arguments

data
...

Details

This is an experimental interface to explore the scagnostics output with GGobi, taking advantage of the fact that each point in the output of `scagnostics` corresponds to a plot. To use it, switch into identify mode and hover over the plot (= point) that you want to see.

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print.scagdf *Print scagnostics data structure*

Description

@keyword internal

Usage

```
print.scagdf(x, ...)
```

Arguments

x
...

Author(s)

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`scagnostics`*Calculate scagnostics for a scatterplot*

Description

Scagnostics summarise potentially interesting patterns in 2d scatterplot

Usage

```
scagnostics(x, ...)
```

Arguments

<code>x</code>	object to calculate scagnostics on: a vector, a matrix or a data.frame
<code>...</code>	...

Details

Current scagnostics are:

- Outlying
- Skewed
- Clumpy
- Sparse
- Striated
- Convex
- Skinny
- Stringy
- Monotonic

These are described in more detail in: Graph-Theoretic Scagnostics, Leland Wilkinson, Anushka Anand, Robert Grossman. <http://www.ncdm.uic.edu/publications/files/proc-094.pdf>

You can call the function with two 1d vectors to get a single vector of scagnostics, or with a 2d structure (matrix or data frame) to get scagnostics for every combination of the variables.

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Examples

```
scagnostics(1:10, 1:10)
scagnostics(rnorm(100), rnorm(100))
scagnostics(mtcars)
scagnostics(as.matrix(mtcars))

if (require(rggobi)) ggobi(scagnostics(mtcars))
```

scagnostics.tour *Calculate scagnostics while tour is running*

Description

@keyword internal

Usage

```
scagnostics.tour(x, ...)
```

Arguments

x
...

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Index

*Topic **dynamic**

ggobi.scagdf, 1

*Topic **hplot**

scagnostics, 3

*Topic **internal**

print.scagdf, 2

scagnostics.tour, 4

ggobi.scagdf, 1

print.scagdf, 2

scagnostics, 2, 3

scagnostics.tour, 4

scagnostics_2d(*scagnostics*), 3