

Package ‘roughnet’

December 6, 2022

Title Visualize Networks using 'roughjs'

Version 1.0.1

Description

Visualize networks using the 'javascript' library 'roughjs'. This allows to draw sketchy, hand-drawn-like networks.

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URL <https://github.com/schochastics/roughnet/>

BugReports <https://github.com/schochastics/roughnet/issues>

Encoding UTF-8

RoxygenNote 7.2.0

Imports igraph, graphlayouts, jsonlite, htmlwidgets

Suggests pagedown

NeedsCompilation no

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Repository CRAN

Date/Publication 2022-12-06 20:20:02 UTC

R topics documented:

roughnet	2
save_roughnet	3

Index	4
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roughnet

*Create a rough network***Description**

plot a network using rough.js

Usage

```
roughnet(
  g,
  roughness = c(1, 1),
  bowing = c(1, 1),
  font = "30px Arial",
  width = NULL,
  height = NULL,
  elementId = NULL,
  chunk_name = "canvas"
)
```

Arguments

<code>g</code>	igraph object
<code>roughness</code>	numeric vector for roughness of vertices and edges
<code>bowing</code>	numeric vector for bowing of vertices and edges
<code>font</code>	font size and font family for labels
<code>width</code>	width
<code>height</code>	height
<code>elementId</code>	DOM id
<code>chunk_name</code>	markdown specific

Details

the function recognizes the following attributes Vertex attributes (e.g. $V(g)\$shape$):

- *shape* one of "circle", "rectangle", "heart", "air", "earth", "fire", "water"
- *fill* vertex fill color
- *color* vertex stroke color
- *stroke* stroke size
- *fillstyle* one of "hachure", "solid", "zigzag", "cross-hatch", "dots", "sunburst", "dashed", "zigzag-line"
- *size* vertex size
- *label* vertex label

- *pos* position of vertex label (c)enter, (n)orth, (e)ast, (s)outh, (w)est

Edge attributes (e.g. `E(g)$color`):

- *color* edge color
- *width* edge width

Default values are used if one of the attributes is not found.

The result of a roughnet call can be printed to file with `save_roughnet()`

More details on roughjs can be found on <https://github.com/rough-stuff/rough/wiki>

Value

htmlwidget containing the drawn network

Examples

```
library(igraph)

g <- make_graph("Zachary")
V(g)$shape <- "circle"
V(g)$shape[c(1, 34)] <- "rectangle"
V(g)$fill <- c("#E41A1C", "#377EB8", "#4DAF4A", "#984EA3")[membership(cluster_louvain(g))]
V(g)$fillstyle <- c("hachure", "zigzag", "cross-hatch", "dots")[membership(cluster_louvain(g))]
V(g)$color <- "black"
V(g)$size <- 30
V(g)$stroke <- 2
E(g)$color <- "#AEAEAE"
roughnet(g, width = 960, height = 600)
```

save_roughnet

Save roughnet plot to file

Description

Save roughnet plot to file

Usage

```
save_roughnet(rnet, file, background = "white")
```

Arguments

rnet	result from calling the function roughnet
file	filename
background	string giving the html background color

Value

No return value, called for side effect

Index

`roughnet`, [2](#)

`save_roughnet`, [3](#)