

Package ‘ggbump’

April 24, 2020

Type Package

Title Bump Chart and Sigmoid Curves

Version 0.1.0

Author David Sjoberg

Maintainer David Sjoberg <dav.sjob@gmail.com>

Description A geom for ggplot to create bump plots. Can be good to use for showing rank over time.

License MIT + file LICENSE

Encoding UTF-8

LazyData true

Imports ggplot2, dplyr, purrr, tidyr

RoxygenNote 7.1.0

Suggests testthat (>= 2.1.0)

NeedsCompilation no

Repository CRAN

Date/Publication 2020-04-24 16:00:02 UTC

R topics documented:

geom_bump	2
geom_sigmoid	3
rank_sigmoid	4
sigmoid	5

Index	6
--------------	----------

geom_bump	<i>geom_bump</i> Creates a ggplot that makes a smooth rank over time. To change the 'smooth' argument you need to put it outside of the 'aes' of the geom. Uses the x and y aesthetics.
-----------	---

Description

geom_bump

Creates a ggplot that makes a smooth rank over time. To change the 'smooth' argument you need to put it outside of the 'aes' of the geom. Uses the x and y aesthetics.

Usage

```
geom_bump(
  mapping = NULL,
  data = NULL,
  geom = "line",
  position = "identity",
  na.rm = FALSE,
  show.legend = NA,
  smooth = 8,
  direction = "x",
  inherit.aes = TRUE,
  ...
)
```

Arguments

mapping	provide you own mapping. both x and y need to be numeric.
data	provide you own data
geom	change geom
position	change position
na.rm	remove missing values
show.legend	show legend in plot
smooth	how much smooth should the curve have? More means steeper curve.
direction	the character x or y depending of smoothing direction
inherit.aes	should the geom inherits aesthetics
...	other arguments to be passed to the geom

Value

ggplot layer

Examples

```
library(ggplot2)
df <- data.frame(country = c(
  "India", "India", "India",
  "Sweden", "Sweden", "Sweden",
  "Germany", "Germany", "Germany",
  "Finland", "Finland", "Finland"),
  year = c(2011, 2012, 2013,
  2011, 2012, 2013,
  2011, 2012, 2013,
  2011, 2012, 2013),
  rank = c(4, 2, 2, 3, 1, 4, 2, 3, 1, 1, 4, 3))

ggplot(df, aes(year, rank, color = country)) +
  geom_point(size = 10) +
  geom_bump(size = 2)
```

geom_sigmoid

geom_sigmoid Creates a ggplot that makes a smooth rank over time. To change the 'smooth' argument you need to put it outside of the 'aes' of the geom. Uses the x, xend, y and yend aesthetics. Make sure each sigmoid curve is its own group.

Description

geom_sigmoid

Creates a ggplot that makes a smooth rank over time. To change the 'smooth' argument you need to put it outside of the 'aes' of the geom. Uses the x, xend, y and yend aesthetics. Make sure each sigmoid curve is its own group.

Usage

```
geom_sigmoid(
  mapping = NULL,
  data = NULL,
  geom = "line",
  position = "identity",
  na.rm = FALSE,
  show.legend = NA,
  smooth = 8,
  direction = "x",
  inherit.aes = TRUE,
  ...
)
```

Arguments

mapping	provide you own mapping. both x, xend, y and yend need to be numeric.
data	provide you own data
geom	xchange geom
position	change position
na.rm	remove missing values
show.legend	show legend in plot
smooth	how much smooth should the curve have? More means steeper curve.
direction	the character x or y depending of smoothing direction
inherit.aes	should the geom inherits aesthetics
...	other arguments to be passed to the geom

Value

ggplot layer

Examples

```
library(ggplot2)
df <- data.frame(x = 1:6,
  y = 5:10,
  xend = 7,
  yend = -3:2)

ggplot(df, aes(x = x, xend = xend, y = y, yend = yend, color = factor(x))) +
  geom_sigmoid()
```

rank_sigmoid	<i>rank_sigmoid</i> Creates a longer dataframe with coordinates for a smoothed line.
--------------	--

Description

rank_sigmoid

Creates a longer dataframe with coordinates for a smoothed line.

Usage

```
rank_sigmoid(x, y, smooth = 8, direction = "x")
```

Arguments

x	vector
y	vector
smooth	smooth parameter. Higher means less smoothing
direction	the character x or y depending of smoothing direction

Value

a data frame

sigmoid	<i>sigmoid</i> Creates a longer dataframe with coordinates for a smoothed line.
---------	---

Description

sigmoid

Creates a longer dataframe with coordinates for a smoothed line.

Usage

```
sigmoid(x_from, x_to, y_from, y_to, smooth = 5, n = 100, direction = "x")
```

Arguments

x_from	start x value
x_to	end x value
y_from	start y value
y_to	end y values
smooth	smooth parameter. Higher means less smoothing
n	number of point that should be smoothed
direction	the character x or y depending on direction of smoothing

Value

a data frame

Index

geom_bump, 2
geom_sigmoid, 3
rank_sigmoid, 4
sigmoid, 5