

Package: ggbump (via r-universe)

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Type Package

Title Bump Chart and Sigmoid Curves

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

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Encoding UTF-8

LazyData true

Imports ggplot2, dplyr, purrr, tidyr, magrittr

RoxygenNote 7.2.1

Suggests testthat (>= 2.1.0)

Repository <https://davidsjoberg.r-universe.dev>

RemoteUrl <https://github.com/davidsjoberg/ggbump>

RemoteRef HEAD

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Contents

geom_bump	2
geom_sigmoid	3
ggbump-ggproto	4
rank_sigmoid	5
sigmoid	5

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

`geom_bump`*geom_bump*

Description

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. Usually you want to compare multiple lines and if so, use the ‘color’ aesthetic. To change the direction of the curve to ‘vertical’ set ‘direction = “y”’

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

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

Value

ggplot layer

Examples

```
library(ggplot2)
library(ggbump)
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),
  month = c("January", "July", "November",
            "January", "July", "November",
            "January", "July", "November",
            "January", "July", "November"),
  rank = c(4, 2, 2, 3, 1, 4, 2, 3, 1, 1, 4, 3))

# Contingous x axis
ggplot(df, aes(year, rank, color = country)) +
  geom_point(size = 10) +
  geom_bump(size = 2)

# Discrete x axis
ggplot(df, aes(month, rank, color = country)) +
  geom_bump(size = 2)
```

geom_sigmoid

geom_sigmoid

Description

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	xhange 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()
```

Description

These ggproto objects are participate in the ggproto class extension mechanism provided by ggplot2. They are typically of no concern, as they can be used through the ‘geom_*()’ functions.

rank_sigmoid	<i>rank_sigmoid</i>
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Description

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>
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Description

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

* datasets

ggbump-ggproto, 4

geom_bump, 2

geom_sigmoid, 3

ggbump-ggproto, 4

rank_sigmoid, 5

sigmoid, 5

StatBump (ggbump-ggproto), 4

StatSigmoid (ggbump-ggproto), 4