Package ‘ggbump’

October 13, 2022

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
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)

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 your own mapping. Both x, xend, y and yend need to be numeric.
- **data**: provide your 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 aestethics
- **...**: other arguments to be passed to the geom

Value

- ggplot layer

Examples

```r
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**

*rank_sigmoid* Creates a longer dataframe with coordinates for a smoothed line.

Description

**rank_sigmoid**

Creates a longer dataframe with coordinates for a smoothed line.

Usage

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

**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

---

**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