Package ‘vizdraws’

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Title Visualize Draws from the Prior and Posterior Distributions
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Description Interactive visualization for Bayesian prior and posterior distributions.
When both distributions are provided the animation shows a transition from
prior to posterior. Finally, the animation splits the distribution using the provided
‘breaks’ into bars that show the probability for each region.
If no ‘breaks’ are providers it will use zero by default.

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Encoding UTF-8

https://vizdraws.martinez.fyi/

Imports dplyr, htmlwidgets, magrittr, stats, stringr
Suggests knitr, rmarkdown
RoxygenNote 7.1.1
VignetteBuilder knitr
NeedsCompilation no

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Description

vizdraws

Usage

vizdraws(
  prior = NULL,
  posterior = NULL,
  MME = 0,
  threshold = NULL,
  units = NULL,
  quantity = FALSE,
  tense = c("future", "past"),
  xlab = NULL,
  breaks = NULL,
  break_names = NULL,
  colors = NULL,
  width = NULL,
  height = NULL,
  xlim = NULL,
  font_scale = 1,
  display_mode_name = FALSE,
  title = "",
  stop_trans = FALSE,
  percentage = FALSE,
  elementId = NULL
)

Arguments

prior
  prior distribution or draws from it. Currently 'Normal', 'uniform', 'beta', and 'gamma' are supported. This is an optional parameter but either this or posterior should be provided

posterior
  draws from the posterior distribution. This is an optional parameter but either this or prior should be provided

MME
  minimum meaningful effect. If not provided MME is set to zero

threshold
  if the probability is greater than this threshold, you would feel comfortable making a decision

units
  optional argument to specify the units of x. For example, dollars or applications

quantity
  defaults to FALSE. When set to true text will change to reflect that you are predicting a quantity rather than a treatment effect
tense: either "future" or "past". This is the tense that it will be used in the description if quantity is set to TRUE. NULL

xlab: defaults to NULL

breaks: defaults to NULL

break_names: defaults to NULL

colors: colors for the left, middle, and right areas. The defaults are c("#e41a1c", "#377eb8", "#4daf4a")

width: width for shiny

height: height for shiny

xlim: defaults to NULL

font_scale: defaults to 1

display_mode_name: defaults to FALSE

title: defaults to '

stop_trans: defaults to FALSE. When set to true, initial transition stops at posterior density.

percentage: defaults to FALSE. When set to true, the x axis tick format will be set to percentage.

elementId: Use an explicit element ID for the widget (rather than an automatically generated one).elementID for shiny

Value

A HTML widget object

Examples

```r
if(interactive()){
  set.seed(9782)
  library(vizdraws)
  vizdraws(prior= rnorm(100000))
}
```

vizdraws-shiny  

**Shiny bindings for vizdraws**

Description

Output and render functions for using vizdraws within Shiny applications and interactive Rmd documents.

Usage

vizdrawsOutput(outputId, width = "100%", height = "100%")

rendervizdraws(expr, env = parent.frame(), quoted = FALSE)
Arguments

outputId          output variable to read from
width, height     Must be a valid CSS unit (like '100%', '400px', 'auto') or a number, which will be coerced to a string and have 'px' appended.
expr              An expression that generates a vizdraws
env               The environment in which to evaluate expr.
quoted            Is expr a quoted expression (with quote())? This is useful if you want to save an expression in a variable.
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