

Package ‘Setviz’

December 10, 2019

Type Package

Title Visualise intersecting sets with weights

Version 0.1.0

Description This package lets you visualise intersecting sets.

It is a wrapper for the upsetR package, and can be used in combination with weighted percentages from the svydesign package. Its functions take a list of binary variables in a dataframe, and show you what combinations of variables occur in what percentages.

License What license is it under?

Encoding UTF-8

LazyData true

Imports dplyr, roxygen2, UpSetR, magrittr, survey

Suggests hypegrammaR,
testthat,
knitr,
rmarkdown

RoxygenNote 6.1.1

VignetteBuilder knitr

R topics documented:

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add_set_intersection_to_df
Create a vector containing the weighted percentages in each set

Description

Create a vector containing the weighted percentages in each set

Usage

```
add_set_intersection_to_df(data, varnames, exclude_unique = T)
```

Arguments

data a dataframe containing all the sets for each record, coercible to 1,0

varnames a vector containing the names of variables to be used in the intersection

exclude_unique whether the set intersections should include singular sets (i.e. that one variable). Note that if this is set to True, the total set size on the left will be wrong

Value

A vector of the aggregated percent for each intersection

```
expand_to_set_intersections
```

Expand the binary indicators to set intersections

Description

Expand the binary indicators to set intersections

Usage

```
expand_to_set_intersections(data, varnames)
```

Arguments

data a dataframe containing all the 1,0 indicators in varnames

varnames a vector containing the names of variables to be used in the intersection

Value

The dataframe containing the intersections of all variables and the names of those combinations of varnames with '&'

```
plot_set_percentages
```

Create a plot from a dataset and variable names combining the make_set_percentages and set_percentage_plot functions

Description

Create a plot from a dataset and variable names combining the make_set_percentages and set_percentage_plot functions

Usage

```
plot_set_percentages(data, varnames, weight_variable = NULL,
  weighting_function = NULL, nintersects = 12, exclude_unique = T,
  label = NULL)
```

Arguments

data	a dataframe containing all the 1,0 indicators in varnames
varnames	a vector containing the names of variables to be used in the intersection
weight_variable	a character string: the name of the variable in the dataset containing the weights, defaults to NULL
nintersects	number of intersections to look at, the default being 12
exclude_unique	whether the set intersections should include singular sets (i.e. that one variable). Note that if this is set to True, the total set size on the left will be wrong
label	the label to be added to the plot

Value

An UpSetR plot object with the different sets

set_intersection_plot *Create a plot from the percentages in each set*

Description

Create a plot from the percentages in each set

Usage

```
set_intersection_plot(set_percentages, nintersects = 12, nsets = NULL,
  label = NULL)
```

Arguments

set_percentages	a names vector with the percentages for each combination
nintersects	number of intersections to look at, the default being 12
nsets	number of unique sets making up the intersection
label	the label to be added to the plot

Value

A plot object

`svymean_intersected_sets`*Create a vector containing the weighted percentages in each set*

Description

Create a vector containing the weighted percentages in each set

Usage

```
svymean_intersected_sets(data, intersected_names, weight_variable = NULL,  
  weighting_function = NULL)
```

Arguments

<code>data</code>	a dataframe containing all the intersected sets
<code>intersected_names</code>	the names of the intersected sets: as combinations of variable names combined with '&'
<code>weight_variable</code>	character string: the name of the variable in the dataset containing the weights

Value

A plot of the intersection

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