Package 'pacviz'

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Title Pac-Man Residual Function

Version 1.0.0.0

Description TBA

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Depends R (>= 3.3.3)

Imports circlize,
e1071,
graphics,
plotrix,
stats,
utils

Suggests knitr,
rmarkdown

VignetteBuilder knitr

Encoding UTF-8

LazyData true

RoxygenNote 7.1.1

R topics documented:

`deg2rad` *Pac-Man SVM*

Description

Conversion between degrees and radians

Usage

```
deg2rad(deg)
```

Arguments

`deg`	Angle in degrees

Value

Pac-Man SVM

`linMap` *Pac-Man SVM*

Description

linear map

Usage

```
linMap(x, i, f)
```

Arguments

`x`	Range of values to be mapped
`i`	Lowest value
`f`	Largest value

Value

Pac-Man SVM

`lsvm` *Pac-Man SVM*

Description

A visualization technique in R for regression analysis results, specifically residual values, based on a restricted radial coordinate system. It provides a broad view perspective on the performance of regression models, and supports most model inputs. See the pacviz documentation page for more information: https://pharaohcola13.github.io/pacviz/book/

Usage

```
lsvm(x, y, l, title, train_size = 0.7, rand_state = sample(1:2^15, 1))
```

Arguments

`x, y`	Numeric data
`l`	Numeric labels data
`title`	Figure title
`train_size`	Fraction of total data that the SVM will train on
`rand_state`	Value of the random state used to set the seed

Value

Pac-Man SVM

`pac.lsvm` *Pac-Man SVM*

Description

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Usage

```
pac.lsvm(
  x,
  y,
  l,
  title,
  axis_label,
  train_size = 0.7,
  rand_state = sample(1:2^15, 1)
)
```

Arguments

x, y	Numeric data
l	Numeric labels data
title	Figure title
axis_label	Label for the axis
train_size	Fraction of total data that the SVM will train on
rand_state	Value of the random state used to set the seed

Value

Pac-Man SVM

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pac.plot *Pac-Man SVM*

Description

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Usage

```
pac.plot(x, y, title, xaxislabel, yaxislabel, xunits, yunits, color1 = "gold")
```

Arguments

x, y	Numeric data
title	Figure title
xaxislabel	Angular axis label
yaxislabel	Radial axis label
xunits	String to define units on the angular axis (For temperature measurements use 'degC' or 'degF')
yunits	String to define units on the radial axis (For temperature measurements use 'degC' or 'degF')
color1	Color value as string or rgb

Value

Pac-Man SVM

Examples

```
# Generic Pac-Man residual
data("cars")
pac.plot(cars$dist,cars$speed, 'Example 1', "Distance", "Speed", 'm', 'm/s')
```

`pac.resid` *Pac-Man Residual Function*

Description

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Usage

```
pac.resid(
  x,
  y,
  title,
  unit,
  axis_label,
  model = lm(y ~ x, data = data.frame(x, y)),
  color1 = "gold",
  standardize = FALSE
)
```

Arguments

`x, y`	Numeric data
`title`	Figure title
`unit`	String to define units on the angular axis (For temperature measurements use 'degC' or 'degF')
`axis_label`	Angular axis label
`model`	An object for which the extraction of model residuals is meaningful.
`color1`	Color value as string or rgb
`standardize`	Boolean to standardize the residual value

Value

Pac-Man residual plot

`rad2deg` *Pac-Man SVM*

Description

Conversion between radians and degrees

Usage

```
rad2deg(rad)
```

Arguments

`rad`	Angle in radians

Value

Pac-Man SVM

`svm.partition` *Pac-Man SVM*

Description

A visualization technique in R for regression analysis results, specifically residual values, based on a restricted radial coordinate system. It provides a broad view perspective on the performance of regression models, and supports most model inputs. See the pacviz documentation page for more information: https://pharaohcola13.github.io/pacviz/book/

Usage

```
## S3 method for class 'partition'
svm(x, y, l, train_size = 0.7, rand_state = sample(1:2^15, 1))
```

Arguments

`x, y`	Numeric data
`l`	Numeric labels data
`train_size`	Fraction of total data that the SVM will train on
`rand_state`	Value of the random state used to set the seed

Value

Data Partition

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