# Package 'pacviz'

August 24, 2020

Title Pac-ivian Residual Function	
Version 1.0.0.0	
Description TBA	
License MIT + file LICENSE	
<b>Depends</b> 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:	
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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)
```

## **Arguments**

x, y Numeric data

Numeric labels data

title Figure title

train\_size Fraction of total data that the SVM will train on

#### Value

Pac-Man SVM

pac.plot Pac-Man SVM

## Description

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#### Usage

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

pac.resid 3

#### **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
)
```

4 svm.partition

#### **Arguments**

x, y Numeric data title Figure title

unit String to define units on the angular axis (For temperature measurements use

'degC' or 'degF')

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

svm.partition Pac-Man SVM

### **Description**

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### Usage

```
## S3 method for class 'partition'
svm(x, y, l, train_size)
```

#### Arguments

x, yNumeric dataNumeric labels data

train\_size Fraction of total data that the SVM will train on

## Value

Pac-Man SVM

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