R documentation

of 'man/plot-dataset-methods.Rd' etc.

November 4, 2014

`plot.svm` *plot*

Description

Draws choosen dimenstions from a dataset on 2D plot coloring by class. NOTE: This function will be change to a package default function.

Usage

```
plot(svm, dim1, dim2)
```

Arguments

`dim1`	(optional) Dimension of x to plot on x axis, by default 1
`dim2`	(optional) Dimension of x to plot on y axis, by default 2

`dataset.X` *dataset.X*

Description

Prints dataset stored in a SVM object, without the labels.

Usage

```
dataset.X(svm)
```

Arguments

`object`	SVM object.

`dataset.Y` *dataset.Y*

Description

Prints lables stored in a SVM object.

Usage

```
dataset.Y(svm)
```

Arguments

`object`	SVM object.

`predict.svm` *Predict*

Description

Returns predicted classes for provided test examples.

Usage

```
predict(svm, x)
```

Arguments

`object`	Trained SVM object.
`x`	unlabeled data, note that each entry needs to be the same dimentionality as training examples.

print.svm *print*

Description

Prints short summary of the SVM object and its parameters.

Usage

```
print(svm)
```

Arguments

object	SVM object

Format

NULL

SVM *SVM*

Description

Create and train SVM model object. If any parameter will be omitted a default value will be used

Usage

```
SVM(formula, data, lib = "libsvm", kernel = "linear", prep = "none",
  mclass = "none", C = 1, gamma = 0.01, coef0 = 0, degree = 1,
  shrinking = TRUE, probability = FALSE, cweights = NULL,
  sweights = NULL, cache_size = 100, tol = 0.001)
```

Arguments

lib	Desired SVM Library, avialable are: libsvm
kernel	Kernel type, avialable are: linear, poly, rbf, sigmoid
prep	Preprocess method, avialable are: none, 2e
mclass	Multiclass wariant, avialable are: none
C	Cost/Complexity parameter
gamma	Gamma parameter for poly, rbf and sigmoid kernels
coef0	Coef0 for poly and sigmoid kernels
degree	Degree for poly kernel

shrinking	Whether to use shrinking heuristics
probability	Whether to train a model for probability estimates
cache_size	Cache size
tol	Tolerance of termination criterion
x	Dataset without labels
y	Labels

Value

SVM model object

Examples

```
svm <- SVM(lib = "libsvm", kernel = "linear", C = 1, gamma = 0.01, coef0 = 0,degree = 3)
```

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