Package 'topten'

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Type Package

Title Builds a prediction model from top 10 features

Version 1.0

Date 2016-01-06

Author RH

Maintainer Anybody but RH <notRH@notRH.com>

Description Functions for building predictive model and doing principal components analysis

License GPL-3

RoxygenNote 5.0.1

NeedsCompilation no

R topics documented:

`topten-package` *Builds a prediction model from top 10 features*

Description

Functions for building predictive model and doing principal components analysis

Details

The DESCRIPTION file:

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Index of help topics:

```
predict10               Prediction with the Top Ten features
topten                  Building a Model with Top Ten Features
topten-package          Builds a prediction model from top 10 features
```

~~ An overview of how to use the package, including the most important functions ~~

Author(s)

RH

Maintainer: Anybody but RH <notRH@notRH.com>

References

~~ Literature or other references for background information ~~

See Also

~~ Optional links to other man pages, e.g. ~~ ~~ <pkg> ~~

Examples

```
~~ simple examples of the most important functions ~~
```

predict10 *Prediction with the Top Ten features*

Description

This function takes a set of coefficients produced by the `topten` function and makes a prediction for each of the values provided in the input 'X' matrix.

Usage

```
predict10(X, b)
```

Arguments

`X`	a n x 10 matrix containing n new observation
`b`	a vector of coefficients obtained from the `topten` function

Value

a numeric vector containing the predicted values

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topten *Building a Model with Top Ten Features*

Description

This function develops a prediction algorithm based on the top 10 features in 'x' that are most predictive of 'y'.

Usage

```
topten(x, y)
```

Arguments

`x`	a n x p matrix of n observation and p predictors
`y`	a vector of length n representing the response

Details

This function runs a univariate regression of y on each predictor in x and calclulates a p-value indicating the significance of the association. The final sef of 10 predictors is taken from the 10 smallest p-values.

Value

a vector of coefficients from the final fitted model with top 10 features

Author(s)

Roger Peng

See Also

`lm`

Index