

Package ‘meifly’

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Type Package

Title Interactive model exploration using GGobi

Version 0.2

Imports plyr, leaps, MASS,

Suggests rggobi

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Description Exploratory model analysis. Fit and graphical explore ensembles of linear models.

URL <http://had.co.nz/meifly>

License GPL

LazyData true

Collate ‘ensemble.r’ ‘generate.r’ ‘ggobi.r’ ‘meifly.r’ ‘summarise.r’

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R topics documented:

coef.ensemble	2
findmodels	2
fitall	3
fitbest	3
ggobi.ensemble	4
lmboot	4
residuals.ensemble	5
summary.ensemble	5
summary.resid_ensemble	6
summary.variable_ensemble	6

Index	7
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coef.ensemble	<i>Calculate coefficients for all models in ensemble.</i>
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Description

Calculate coefficients for all models in ensemble. Returns raw, t-value, absolute t-value, and standardised coefficient values.

Usage

```
## S3 method for class 'ensemble'
coef(object, ...)
```

Arguments

object	ensemble of models
...	other arguments ignored

findmodels	<i>General ensemble of models from models in global workspace'...</i>
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Description

General ensemble of models from models in global workspace'

Usage

```
findmodels(modeltype="lm", dataset, pattern)
```

Arguments

modeltype	model class
dataset	if specified, all models must use this dataset
pattern	pattern of model object names to match

fitall	<i>Fit all combinations of x variables (2^p).</i>
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Description

Fit all combinations of x variables (2^p).

Usage

```
fitall(y, x, method="lm", ...)
```

Arguments

y	vector y values
x	matrix of x values
method	name of method used to fit the model, e.g lm , r1m
...	other arguments passed on to method

Details

This technique generalises [fitbest](#). While it is much slower it will work for any type of model.

Examples

```
y <- swiss$Fertility
x <- swiss[, -1]
mods <- fitall(y, x, "lm")
```

fitbest	<i>Use the leaps package to generate the best subsets.</i>
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Description

Use the leaps package to generate the best subsets.

Usage

```
fitbest(formula, data, nbest=10, ...)
```

Arguments

formula	model formula
data	data frame
nbest	number of subsets of each size to record
...	other arguments passed to regsubsets

Examples

```
y <- swiss$Fertility
mods <- fitbest(Fertility ~ ., swiss)
```

ggobi.ensemble	<i>Load model ensemble into GGobi with appropriate edge structure...</i>
----------------	--

Description

Load model ensemble into GGobi with appropriate edge structure

Usage

```
ggobi.ensemble(data, ...)
```

Arguments

data	model ensemble object
...	other arguments ignored

Examples

```
y <- swiss$Fertility
x <- swiss[, -1]
mods <- fitall(y, x, "lm")
## Not run:
library(rggobi)
ggobi(mods, swiss)

## End(Not run)
```

lmboot	<i>Generate linear models by bootstrapping observations...</i>
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Description

Generate linear models by bootstrapping observations

Usage

```
lmboot(formula, data, n=100)
```

Arguments

formula	model formula
data	data set
n	number of bootstrapped data sets to generate

residuals.ensemble	<i>Calculate residuals for all models in ensemble.</i>
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Description

Calculate residuals for all models in ensemble.

Usage

```
## S3 method for class 'ensemble'  
residuals(object, ...)
```

Arguments

object	ensemble of models
...	other arguments ignored

Value

data.frame of class resid_ensemble

See Also

[summary.resid_ensemble](#)

summary.ensemble	<i>Returns degrees of freedom, log likelihood, R-squared, AIC, BIC and...</i>
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Description

Returns degrees of freedom, log likelihood, R-squared, AIC, BIC and adjusted R-squared.

Usage

```
## S3 method for class 'ensemble'  
summary(object, ...)
```

Arguments

object	ensemble of models
...	other arguments ignored

summary.resid_ensemble

Summarise residuals from ensemble.

Description

Summarise residuals from ensemble.

Usage

```
## S3 method for class 'resid_ensemble'  
summary(object, data=attr(object,  
  "data"), ...)
```

Arguments

object	model residuals from residuals.ensemble
data	associated data set
...	other arguments ignored

summary.variable_ensemble

Summarise variable ensemble.

Description

Summarise variable ensemble.

Usage

```
## S3 method for class 'variable_ensemble'  
summary(object, ...)
```

Arguments

object	ensemble of models
...	other arguments ignored

Details

Provides variable level statistics.

Index

*Topic **dynamic**

ggobi.ensemble, 4

*Topic **regression**

coef.ensemble, 2

findmodels, 2

fitall, 3

fitbest, 3

ggobi.ensemble, 4

lmboot, 4

residuals.ensemble, 5

summary.ensemble, 5

summary.resid_ensemble, 6

summary.variable_ensemble, 6

coef.ensemble, 2

findmodels, 2

fitall, 3

fitbest, 3, 3

ggobi.ensemble, 4

lm, 3

lmboot, 4

regsubsets, 3

residuals.ensemble, 5, 6

r1m, 3

summary.ensemble, 5

summary.resid_ensemble, 5, 6

summary.variable_ensemble, 6