

Package ‘meifly’

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Type Package

Title Interactive model exploration using GGobi

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

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URL <https://github.com/hadley/meifly>

BugReports <https://github.com/hadley/meifly/issues>

Imports plyr, leaps, MASS,

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R topics documented:

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

Index	7
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<code>coef.ensemble</code>	<i>Calculate coefficients for all models in ensemble. Returns raw, t-value, absolute t-value, and standardised coefficient values.</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

<code>object</code>	ensemble of models
<code>...</code>	other arguments ignored

<code>findmodels</code>	<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

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

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

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

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 , rlm
...	other arguments passed on to method

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)
```

lmboot	<i>Generate linear models by bootstrapping observations</i>
--------	---

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

meifly	<i>Interactive model ensemble exploration.</i>
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Description

Interactive model ensemble exploration.

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 adjusted R-squared.</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	<i>Summarise residuals from ensemble.</i>
------------------------	---

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

Provides variable level statistics.

Usage

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

Arguments

object	ensemble of models
...	other arguments ignored

Index

*Topic **regression**

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

coef.ensemble, 2

findmodels, 2

fitall, 3

fitbest, 3, 3

lm, 3

lmboot, 4

meifly, 4

package-meifly (meifly), 4

regsubsets, 3

residuals.ensemble, 4, 5

rlm, 3

summary.ensemble, 5

summary.resid_ensemble, 5, 5

summary.variable_ensemble, 6