

# Package ‘meifly’

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**Type** Package

**Title** Interactive Model Exploration using 'GGobi'

**Version** 0.3.1

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**Description** Exploratory model analysis with <<http://ggobi.org>>. 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** leaps, MASS, plyr

**Encoding** UTF-8

**RoxygenNote** 7.2.0

**NeedsCompilation** no

**Repository** CRAN

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coef.ensemble	<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**

object	ensemble of models
...	other arguments ignored

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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 (<math>2^p</math>).</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 <a href="#">lm</a> , <a href="#">rlm</a>
...	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>
---------	--

---

## 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 <a href="#">regsubsets</a>

## Examples

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

**lmboot***Generate linear models by bootstrapping observations***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***Interactive model ensemble exploration.***Description**

Interactive model ensemble exploration.

**residuals.ensemble***Calculate residuals for all models in ensemble.***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`

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`summary.ensemble`

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

---

**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 <code>residuals.ensemble</code>
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

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