

Package ‘meifly’

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Type Package

Title Interactive model exploration using GGobi

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Depends reshape(>= 0.8.1), 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

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

Returns raw, t-value, absolute t-value, and standardised coefficient values.

Usage

```
coef.ensemble(object, ...)
```

Arguments

<code>object</code>	ensemble of models
<code>...</code>	

Author(s)

Hadley Wickham <h.wickham@gmail.com>

<code>findmodels</code>	<i>Find models in 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 type
<code>dataset</code>	if specified, all models must use this dataset
<code>pattern</code>	pattern of model object names to match

Author(s)

Hadley Wickham <h.wickham@gmail.com>

fitall *Generate all models*

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	method used to fit the model, eg lm , rlm
...	

Details

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

Author(s)

Hadley Wickham <h.wickham@gmail.com>

fitbest *Generate best linear models*

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

Author(s)

Hadley Wickham <h.wickham@gmail.com>

ggobi.ensemble	<i>Explore a model ensemble with GGobi</i>
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Description

Load model ensemble into GGobi with appropriate edge structure

Usage

```
ggobi.ensemble(data, original=NULL, ...)
```

Arguments

```
data
original
...
```

Author(s)

Hadley Wickham <h.wickham@gmail.com>

Examples

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

lmboot	<i>Bootstrap linear models</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
```

Author(s)

Hadley Wickham <h.wickham@gmail.com>

residuals.ensemble *Residuals for model ensemble*

Description

Calculate residuals for all models in ensemble

Usage

```
residuals.ensemble(object, ...)
```

Arguments

object ensemble of models
...

Author(s)

Hadley Wickham <h.wickham@gmail.com>

See Also

[summary.resid_ensemble](#)

summary.ensemble *Summarise ensemble of models with model fit statistics*

Description

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

Usage

```
summary.ensemble(object, ...)
```

Arguments

object ensemble of models
...

Author(s)

Hadley Wickham <h.wickham@gmail.com>

summary.resid_ensemble

Residual summary for model ensemble

Description

Summarise residuals from ensemble

Usage

```
summary.resid_ensemble(object, data=NULL, ...)
```

Arguments

object model residuals from `residuals.ensemble`
data
...

Author(s)

Hadley Wickham <h.wickham@gmail.com>

summary.variable_ensemble

Summarise variable ensemble

Description

Summary function of `coef(ensemble)`

Usage

```
summary.variable_ensemble(object, ...)
```

Arguments

object
...

Details

Provides variable level statistics.

Author(s)

Hadley Wickham <h.wickham@gmail.com>

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