

Package ‘mlrpro’

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Type Package

Title Stepwise Regression with Assumptions Checking

Version 0.1.2

Description

The stepwise regression with assumptions checking and the possible Box-Cox transformation.

License GPL-3

Encoding UTF-8

Imports car, dplyr, MASS

RoxygenNote 7.2.0

Suggests knitr, rmarkdown, testthat (>= 3.0.0)

VignetteBuilder knitr

Config/testthat/edition 3

NeedsCompilation no

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Repository CRAN

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mlrpro-package	<i>Perform stepwise regression with verifying assumptions and identifying possible Box-Cox transformation</i>
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Description

A tool for multiple regression, select independent variables, check multiple linear regression assumptions and identify possible.

Usage

```
mlrpro(Data, Y, Column_Y, Alpha)
```

Arguments

Data	a data frame containing the variables in the model.
Y	the response variable.
Column_Y	the column response variable.
Alpha	significance level.

Value

An object of class `mlrpro` is a list containing at least the following components:

<code>coefficients</code>	a named vector of coefficients.
<code>residuals</code>	the residuals, that is response minus fitted values.
<code>fitted.values</code>	the fitted mean values.
<code>rank</code>	the numeric rank of the fitted linear model.
<code>df.residual</code>	the residual degrees of freedom.
<code>call</code>	the matched call.
<code>terms</code>	the terms object used.
<code>model</code>	if requested (the default), the model frame used.
<code>lambda</code>	lambda value utilized in the data conversion.

Examples

```
data(trees)
Model1 <- mlrpro(Data = trees, Y = trees$Volume, Column_Y = 3, Alpha = 0.05)
## or ##
data(mtcars)
Model2 <- mlrpro(Data = mtcars, Y = mtcars$mpg, Column_Y = 1, Alpha = 0.01)
```

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