Package 'PerMat'

June 14, 2024

Type Package

Title Performance Metrics in Predictive Modeling

Version 0.1.0

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Description Performance metric provides different performance measures like mean squared error, root mean square error, mean absolute deviation, mean absolute percentage error etc. of a fitted model. These can provide a way for forecasters to quantitatively compare the performance of competing models. For method details see (i) Pankaj Das (2020) <http://krishi.icar.gov.in/jspui/handle/123456789/44138>.

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Encoding UTF-8

RoxygenNote 7.2.3

Suggests knitr, rmarkdown, testthat (>= 3.0.0)

Config/testthat/edition 3

VignetteBuilder knitr

NeedsCompilation no

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Repository CRAN

Date/Publication 2024-06-14 15:20:11 UTC

Contents

accuracy *Accuracy of Model*

Description

Accuracy of Model

Usage

```
accuracy(actual, predicted)
```

Arguments

actual	Actual value of the target variable
predicted	Predicted/forecasted value of the target variable

Value

Accuracy of the fitted model

Examples

```
actual <- c(100, 150, 200, 250, 300, 350, 400, 450, 500, 550)
predicted <- c(95, 148, 210, 245, 290, 360, 395, 440, 510, 540)
accuracy(actual, predicted)
```

CVRMSE *Coefficient of Variation of Root Mean Squared Error*

Description

Coefficient of Variation of Root Mean Squared Error

Usage

```
CVRMSE(actual, predicted)
```

Arguments

actual	Actual value of the target variable
predicted	Predicted/forecasted value of the target variable

Value

CVRMSE of the fitted model

Examples

```
actual <- c(100, 150, 200, 250, 300, 350, 400, 450, 500, 550)
predicted <- c(95, 148, 210, 245, 290, 360, 395, 440, 510, 540)
CVRMSE(actual, predicted)
```

MAE *Mean Absolute Error*

Description

Mean Absolute Error

Usage

```
MAE(actual, predicted)
```

Arguments

actual	Actual value of the target variable
predicted	Predicted/forecasted value of the target variable

Value

MAE of the fitted model

Examples

```
 actual <- c(100, 150, 200, 250, 300, 350, 400, 450, 500, 550)
predicted <- c(95, 148, 210, 245, 290, 360, 395, 440, 510, 540)
MAE(actual, predicted)
```

MAPE *Mean Absolute Percentage Error*

Description

Mean Absolute Percentage Error

Usage

```
MAPE(actual, predicted)
```

Arguments

actual	Actual value of the target variable
predicted	Predicted value of the target variable

Value

MAPE of the fitted model

Examples

```
actual <- c(100, 150, 200, 250, 300, 350, 400, 450, 500, 550)
predicted <- c(95, 148, 210, 245, 290, 360, 395, 440, 510, 540)
MAPE(actual, predicted)
```

ME *Maximum Error*

Description

Maximum Error

Usage

```
ME(actual, predicted)
```

Arguments

`actual`	Actual value of the target variable
`predicted`	Predicted value of the target variable

Value

ME of the fitted model

Examples

```
actual <- c(100, 150, 200, 250, 300, 350, 400, 450, 500, 550)
predicted <- c(95, 148, 210, 245, 290, 360, 395, 440, 510, 540)
ME(actual, predicted)
```

NRMSE *Normalised Root Mean Squared Error*

Description

Normalised Root Mean Squared Error

Usage

```
NRMSE(actual, predicted)
```

Arguments

actual	Actual value of the target variable
predicted	Predicted value of the target variable

Value

NRMSE of the fitted model

Examples

```
actual <- c(100, 150, 200, 250, 300, 350, 400, 450, 500, 550)
predicted <- c(95, 148, 210, 245, 290, 360, 395, 440, 510, 540)
NRMSE(actual, predicted)
```

R2 *Coefficient of Determination (R-Square)*

Description

Coefficient of Determination (R-Square)

Usage

```
R2(actual, predicted)
```

Arguments

actual	Actual value of the target variable
predicted	Predicted value of the target variable

Value

Coefficient of Determination (R-Square) of the fitted model

Examples

```
actual <- c(100, 150, 200, 250, 300, 350, 400, 450, 500, 550)
predicted <- c(95, 148, 210, 245, 290, 360, 395, 440, 510, 540)
R2(actual, predicted)
```

RMSE *Root Mean Squared Error*

Description

Root Mean Squared Error

Usage

```
RMSE(actual, predicted)
```

Arguments

actual	Actual value of the target variable
predicted	Predicted value of the target variable

Value

RMSE and MSE of the fitted model

Examples

```
actual <- c(100, 150, 200, 250, 300, 350, 400, 450, 500, 550)
predicted <- c(95, 148, 210, 245, 290, 360, 395, 440, 510, 540)
RMSE(actual, predicted)
```

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