Package 'TSSVM'

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Type Package

Title Time Series Forecasting using SVM Model

Version 0.1.0

Depends R (>= 2.3.1), e1071,forecast

Description Implementation and forecasting univariate time series data using the Support Vector Machine model. Support Vector Machine is one of the prominent machine learning approach for non-linear time series forecasting. For method details see Kim, K. (2003) <doi:10.1016/S0925-2312(03)00372-2>.

Encoding UTF-8

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NeedsCompilation no

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R topics documented:

ARSVM *Auto-Regressive Support Vector Machine*

Description

The ARSVM function fit Auto-Regressive Support Vector Machine for univariate time series data.

Usage

```
ARSVM(data,h)
```

Arguments

data	Input univariate time series (ts) data.
h	The forecast horizon.

Details

This package allows you to fit the Auto-Regressive Support Vector Machine for univariate time series.

Value

Optimum lag	Optimum lag of the considered data
Model Summary	Summary of the fitted SVM
Weights	weights of the fitted SVM
Constant	Constant of the fitted SVM
MAPE	Mean Absolute Percentage Error (MAPE) of the SVM
RMSE	Root Mean Square Error (RMSE) of fitted SVM
fitted	Fitted values of SVM
forecasted.values	h step ahead forecasted values employing SVM

Author(s)

Mrinmoy Ray,Samir Barman, Kanchan Sinha, K. N. Singh

References

Kim, K.(2003). Financial time series forecasting using support vector machines, 55(1-2), 307-319.

See Also

SVM

Examples

```
data=lynx
ARSVM(data,5)
```

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