Package: TSSVM (via r-universe)

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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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Contents

`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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