Package ‘WaveletGBM’

April 7, 2023

Type Package

Title Wavelet Based Gradient Boosting Method

Version 0.1.0

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Description Wavelet decomposition method is very useful for modelling noisy time series data. Wavelet decomposition using ‘haar’ algorithm has been implemented to developed hybrid Wavelet GBM (Gradient Boosting Method) model for time series forecasting using algorithm by Anjoy and Paul (2017) <DOI:10.1007/s00521-017-3289-9>.

License GPL-3

Encoding UTF-8

Imports caret, dplyr, caretForecast, Metrics, tseries, stats,
wavelets, gbm

RoxygenNote 7.2.1

NeedsCompilation no

Repository CRAN

Date/Publication 2023-04-07 08:20:02 UTC

R topics documented:

WaveletGBM .......................................................... 2

Index 3
WaveletGBM  

Wavelet Based Gradient Boosting Method

Description

Wavelet Based Gradient Boosting Method

Usage

WaveletGBM(ts, MLag = 12, split_ratio = 0.8, wlevels = 3)

Arguments

ts  Time Series Data
MLag Maximum Lags
split_ratio Training and Testing Split
wlevels Number of Wavelet Levels

Value

• Lag: Lags used in model
• Parameters: Parameters of the model
• Train_actual: Actual train series
• Test_actual: Actual test series
• Train_fitted: Fitted train series
• Test_predicted: Predicted test series
• Accuracy: RMSE and MAPE of the model

References


Examples

library("WaveletGBM")
data<- rnorm(100,100, 10)
WG<-WaveletGBM(ts=data)
Index

WaveletGBM, 2