

R documentation

of all in ‘F:/DropBox/dropbox/letdataalk/man’

October 6, 2016

R topics documented:

evaluation-class	1
ldt-class	1
ldtpack-class	2
ldtpack_considernew	2
ldt_initialize	3
ldt_Run	3

Index	4
--------------	----------

evaluation-class	<i>Represents a scoring rule</i>
------------------	----------------------------------

Fields

Name Abbreviation of the rule

Description Full name and any other description about the rule

IsPositivelyOriented A boolean indicates wether higher is better

Score The scoring function. It should get two arguments: vector of forecast errors and vector of forecast standard errors and it should return a vector of the same length

ldt-class	<i>The main class in ldt package.</i>
-----------	---------------------------------------

Details

This is a reference class. Use \$new to generate an instance. example: load("data/endodata_rand.rda")
load("data/exodata_rand.rda") a=ldt\$new(endodata,exodata, maxsize = 3) a\$Run()

Fields

- EndoData** A ts that contains the data for the endogenous variable. The target variable (the one we are trying to forecast) is the first variable in this series.
- ExoData** A matrix that contains the data for the exogenous variable. note that the frequency and start date will be fetched from EndoData
- MaxHorizon** A positive integer that indicates the maximum of the forecast horizons. Forecasts will be provided up to this horizon. Default is 1
- MaxLag** A positive integer that indicates the maximum lag of models (including AR and MA parts). Default is 1
- MaxSize** A positive integer that indicates the maximum size of multiple/multivariate models. Default is 1. For example, in arima case, a value of 2 means that models might have zero or one exogenous variables.
- ScoringRules** A list of evaluation objects. Default is a list of AIC, BIC, MAE, MSE, LSR, LnSR, QSR, HSR and CRPSR (for all score rules, normality is assumed)
- SimulationCount** A positive integer that indicates the number of Out-of-sample evaluations. i.e., how many times we should separate the data into training and evaluation samples and test the forecast accuracy of different models. The default is 1
- Packs** A list of ldtpack objects

ldtpack-class	<i>Represents a specific forecast package</i>
---------------	---

Fields

- ParentLDT** The main ldt class
- ID** A unique string that represents the related package
- Description** A description for the related package
- SupportedScoringRules** A list of 'evaluation' objects that this package can provide. Not all packages can report (e.g.) AIC
- Processes** A list of ldtpacksub
- Results** A list that contains the results for each member of SupportedScoringRules.
- AllModels** Just in case you wanted to check all the models

ldtpack_considernew	<i>consider a new score</i>
---------------------	-----------------------------

Arguments

- | | |
|--------|--|
| model | the model based on which the scores are generated |
| i | the index of evaluation in SupportedScoringRules based on which the scores are generated |
| scores | the generated scores |

ldt_initialize	<i>The constructor of ldt class</i>
----------------	-------------------------------------

Arguments

endodata	sets EndoData field of the class
exodata	sets ExoData field of the class
maxhorizon	sets MaxHorizon field of the class
maxlag	sets MaxLag field of the class
maxsize	sets MaxSize field of the class
simulationcount	sets SimulationCount field of the class

ldt_Run	<i>Starts the forecasting process</i>
---------	---------------------------------------

Index

`evaluation (evaluation-class)`, [1](#)
`evaluation-class`, [1](#)

`ldt (ldt-class)`, [1](#)
`ldt-class`, [1](#)
`ldt_initialize`, [3](#)
`ldt_Run`, [3](#)
`ldtpack (ldtpack-class)`, [2](#)
`ldtpack-class`, [2](#)
`ldtpack_considernew`, [2](#)