Package ‘shinyML’

Type Package
Title Compare H20 or Spark Supervised Regression Models Using Shiny App
Version 0.2.0
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Description Implementation of a shiny app to easily compare supervised regression model performances. You provide the data and configure each model parameter directly on the shiny app. Four main supervised learning algorithms can be tested either on Spark or H2O frameworks to suit your regression problem on a given time series. Implementation of these time series forecasting methods on R has been done by Shmueli and Lichtendahl (2015, ISBN:0991576632).
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Encoding UTF-8
Imports shiny (>= 1.0.3), shinydashboard, h2o, shinyWidgets, dygraphs, plotly, sparklyr, tidyr, DT, ggplot2, shinycssloaders
Suggests knitr, rmarkdown, covr, testthat
Depends dplyr, data.table
LazyData True
RoxygenNote 6.1.1
VignetteBuilder knitr
NeedsCompilation no
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R topics documented:

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### shiny_h2o

*Implement a shiny web app to compare h2o supervised regression models on time series*

**Description**

This function creates in one line of code a shareable web app to compare supervised regression model performance (framework: H2O).

**Usage**

```r
shiny_h2o(data = data, y, date_column, share_app = FALSE,
            port = NULL)
```

**Arguments**

- **data**
  - Time serie containing one or more input values and one output value. The time serie must be a data.frame or a data.table and must contain at least one time-based column on Date or POSIXct format.

- **y**
  - the numerical output variable to forecast (must correspond to one data column)

- **date_column**
  - the name of time-based column (must correspond to one data column). Must correspond to Date or POSIXct format.

- **share_app**
  - a logical value indicating whether the app must be shared on local LAN

- **port**
  - a four-digit number corresponding to the port the application should listen to. This parameter is necessary only if share_app option is set to TRUE

**Examples**

```r
## Not run:
library(shinyML)
longley2 <- longley %>% mutate(Year = as.Date(as.character(Year),format = "%Y"))
shiny_h2o(data = longley2, y = "GNP", date_column = "Year", share_app = FALSE)

## End(Not run)
```

### shiny_spark

*Implement a shiny web app to compare spark supervised regression models on time series*

**Description**

This function creates in one line of code a shareable web app to compare supervised regression model performances (framework: Spark).
shiny_spark

Usage

shiny_spark(data = data, y, date_column, share_app = FALSE, port = NULL)

Arguments

data Time serie containing one or more input values and one output value. The time serie must be a data.frame or a data.table and must contain at least one time-based column on Date or Posixct format.
y the numerical output variable to forecast (must correspond to one data column)
date_column the name of time-based column (must correspond to one data column). Must correspond to Date or POSIXct format.
share_app a logical value indicating whether the app must be shared on local LAN
port a four-digit number corresponding to the port the application should listen to. This parameter is necessary only if share_app option is set to TRUE

Examples

## Not run:
library(shinyML)
longley2 <- longley %>% mutate(Year = as.Date(as.character(Year),format = "%Y"))
shiny_spark(data =longley2,y = "GNP",date_column = "Year",share_app = FALSE)

## End(Not run)
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