

# Package ‘predictoR’

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**Type** Package

**Title** Predictive Data Analysis System

**Version** 4.1.7

**Description** Perform a supervised data analysis on a database through a 'shiny' graphical interface. It includes methods such as K-Nearest Neighbors, Decision Trees, ADA Boosting, Extreme Gradient Boosting, Random Forest, Neural Networks, Deep Learning, Support Vector Machines and Bayesian Methods.

**License** GPL (>= 2)

**Imports** DT (>= 0.27), dplyr (>= 1.1.0), shiny (>= 1.7.4), golem (>= 0.3.5), rlang (>= 1.0.6), loadeR (>= 1.0.1), config (>= 0.3.1), glmnet (>= 4.1-6), traineR (>= 2.2.0), shinyjs (>= 2.1.0), xgboost (>= 1.7.3.1), shinyAce (>= 0.4.2), echarts4r (>= 0.4.4), htmltools (>= 0.5.4), rpart.plot (>= 3.1.1), colourpicker (>= 1.1.1), shinydashboard (>= 0.7.2), shinycustomloader (>= 0.9.0), shinydashboardPlus (>= 2.0.3)

**Depends** R (>= 4.1)

**Encoding** UTF-8

**URL** <https://promidat.website/>

**BugReports** <https://github.com/PROMiDAT/predictoR/issues>

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**NeedsCompilation** no

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**Repository** CRAN

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## Contents

contr.dummy . . . . .	2
contr.metric . . . . .	3
contr.ordinal . . . . .	3
data.frame.dummy . . . . .	4
e_ada_evol_error . . . . .	4
e_boost_importance . . . . .	5
e_coeff_lambda . . . . .	6
e_global_gauge . . . . .	6
e_JS . . . . .	7
e_posib_lambda . . . . .	8
e_rf_error . . . . .	9
e_rndf_importance . . . . .	9
e_xgb_importance . . . . .	10
predictoR . . . . .	11
run_app . . . . .	11
voronoi_svm_plot . . . . .	12
<b>Index</b>	<b>13</b>

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contr.dummy	<i>Returns a matrix of contrasts for the train.kknn.</i>
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### Description

Returns a matrix of contrasts for the train.kknn.

### Usage

```
contr.dummy(n, contrasts = TRUE)
```

### Arguments

n	A vector containing levels of a factor, or the number of levels.
contrasts	A logical value indicating whether contrasts should be computed.

### Author(s)

Joseline Quiros <joseline.quiros@promidat.com>

### Examples

```
contr.dummy(5)
```

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contr.metric	<i>Returns a matrix of contrasts for the train.kknn.</i>
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**Description**

Returns a matrix of contrasts for the train.kknn.

**Usage**

```
contr.metric(n, contrasts = TRUE)
```

**Arguments**

n	A vector containing levels of a factor, or the number of levels.
contrasts	A logical value indicating whether contrasts should be computed.

**Author(s)**

Joseline Quiros <joseline.quiros@promidat.com>

**Examples**

```
contr.metric(5)
```

---

contr.ordinal	<i>Returns a matrix of contrasts for the train.kknn.</i>
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---

**Description**

Returns a matrix of contrasts for the train.kknn.

**Usage**

```
contr.ordinal(n, contrasts = TRUE)
```

**Arguments**

n	A vector containing levels of a factor, or the number of levels.
contrasts	A logical value indicating whether contrasts should be computed.

**Author(s)**

Joseline Quiros <joseline.quiros@promidat.com>

**Examples**

```
contr.ordinal(5)
```

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<code>data.frame.dummy</code>	<i>Convierte toda la tabla a código dummy.</i>
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---

**Description**

Convierte toda la tabla a código dummy.

**Usage**

```
data.frame.dummy(DF, exclude = NULL)
```

**Arguments**

DF	a data.frame.
exclude	variables of data.frame exclude of conversion.

**Author(s)**

Diego Jimenez <diego.jimenezs@promidat.com>

**Examples**

```
data.frame.dummy(iris)
```

---

<code>e_ada_evol_error</code>	<i>Error Evolution</i>
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**Description**

Error Evolution

**Usage**

```
e_ada_evol_error(modelo, datos, label = "Iterations")
```

**Arguments**

modelo	a adabag model.
datos	a data.frame object.
label	a label plot.

**Value**

echarts4r plot

**Author(s)**

Joseline Quiros <joseline.quiros@promidat.com>

**Examples**

```
model <- trainR::train.adabag(Species~., iris, mfinal = 20, coeflearn = 'Freund')
e_ada_evol_error(model, iris)
```

---

*e\_boost\_importance*      *Var importance Random Forest*

---

**Description**

Var importance Random Forest

**Usage**

```
e_boost_importance(modelo)
```

**Arguments**

modelo            a adabag model.

**Value**

echarts4r plot

**Author(s)**

Joseline Quiros <joseline.quiros@promidat.com>

**Examples**

```
model <- trainR::train.adabag(Species~., iris, mfinal = 20, coeflearn = 'Freund')
e_boost_importance(model)
```

e\_coeff\_lambda      *Coefficients and lambda*

---

### Description

Plot the coefficients and selected lambda of a glmnet model.

### Usage

```
e_coeff_lambda(model, cat, sel.lambda = NULL, label = "Log Lambda")
```

### Arguments

model	a glmnet model.
cat	a category of the variable to be predicted.
sel.lambda	the selected lambda.
label	a character specifying the title to use on selected lambda tooltip.

### Value

echarts4r plot

### Author(s)

Joseline Quiros <joseline.quiros@promidat.com>

### Examples

```
x <- model.matrix(Species ~ ., iris)[, -1]
y <- iris$Species
modelo <- glmnet::cv.glmnet(x, y, standardize = TRUE, alpha = 1, family = "multinomial")
e_coeff_lambda(modelo, 'setosa', log(modelo$lambda[1]))
```

---

e\_global\_gauge      *Gauge Plot*

---

### Description

Gauge Plot

**Usage**

```
e_global_gauge(  
  value = 100,  
  label = "Label",  
  color1 = "#B5E391",  
  color2 = "#90C468"  
)
```

**Arguments**

value	a number specifying the value of the graph.
label	a character specifying the title to use on legend.
color1	a color for the gauge.
color2	a shadowColor for the gauge.

**Value**

echarts4r plot

**Author(s)**

Joseline Quiros <joseline.quiros@promidat.com>

**Examples**

```
e_global_gauge(87, "Global Precision")
```

---

e\_JS

*Eval character vectors to JS code*

---

**Description**

Eval character vectors to JS code

**Usage**

```
e_JS(...)
```

**Arguments**

... character vectors to evaluate

**Author(s)**

Joseline Quiros <joseline.quiros@promidat.com>

**Examples**

```
e_JS('5 * 3')
```

---

e\_posib\_lambda

*Possible lambda*

---

**Description**

Possible lambda

**Usage**

```
e_posib_lambda(  
  cv.glm,  
  labels = c("Valor Superior", "Valor Inferior", "lambda")  
)
```

**Arguments**

cv.glm            a cv.glmnet model.  
labels            a character vector of length 3 specifying the titles to use on legend.

**Value**

echarts4r plot

**Author(s)**

Joseline Quiros <joseline.quiros@promidat.com>

**Examples**

```
x            <- model.matrix(Species~., iris)[, -1]  
y            <- iris[, 'Species']  
cv.glm      <- glmnet::cv.glmnet(x, y, standardize = TRUE, alpha = 1, family = 'multinomial')  
e_posib_lambda(cv.glm)
```

---

e_rf_error	<i>Error Evolution</i>
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**Description**

Error Evolution

**Usage**

```
e_rf_error(model, label = "Trees")
```

**Arguments**

model	a random forest model.
label	a label plot.

**Value**

echarts4r plot

**Author(s)**

Joseline Quiros <joseline.quiros@promidat.com>

**Examples**

```
model <- traineR::train.randomForest(Species~., iris, mtry = 2, ntree = 20)
label <- "Trees"
e_rf_error(model, label)
```

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e_rndf_importance	<i>Var importance Random Forest</i>
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**Description**

Var importance Random Forest

**Usage**

```
e_rndf_importance(modelo, error = "MeanDecreaseAccuracy")
```

**Arguments**

modelo	a random forest model.
error	a character specifying the type of importance.

**Value**

echarts4r plot

**Author(s)**

Joseline Quiros <joseline.quiros@promidat.com>

**Examples**

```
model <- traineR::train.randomForest(Species~., iris, mtry = 2, ntree = 20)
e_rndf_importance(model)
```

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e_xgb_importance	<i>Var importance XGBoosting</i>
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**Description**

Var importance XGBoosting

**Usage**

```
e_xgb_importance(modelo, error = "Gain")
```

**Arguments**

modelo	a random forest model.
error	a character specifying the type of importance.

**Value**

echarts4r plot

**Author(s)**

Joseline Quiros <joseline.quiros@promidat.com>

---

predictoR                      *Predictive Data Analysis System*

---

### Description

Perform a supervised data analysis on a database through a 'shiny' graphical interface. It includes methods such as K-Nearest Neighbors, Decision Trees, ADA Boosting, Extreme Gradient Boosting, Random Forest, Neural Networks, Deep Learning, Support Vector Machines and Bayesian Methods.

### Details

Package: predictoR  
Type: Package  
Version: 4.1.7  
Date: 2026-03-05  
License: GPL (>=2)

### Author(s)

Oldemar Rodriguez Rojas  
Maintainer: Oldemar Rodriguez Rojas <oldemar.rodriguez@ucr.ac.cr>

### See Also

Useful links:

- <https://promidat.website/>
- Report bugs at <https://github.com/PROMiDAT/predictoR/issues>

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run\_app                      *Run the Shiny Application*

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### Description

Run the Shiny Application

### Usage

```
run_app(...)
```

### Arguments

...                      A series of options to be used inside the app.

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voronoi_svm_plot	<i>Voronoi Plot SVM</i>
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**Description**

Voronoi Plot SVM

**Usage**

```
voronoi_svm_plot(datos, varpred, vars, kernel = "linear")
```

**Arguments**

datos	a data.frame object.
varpred	variable to predict.
vars	predictor variables.
kernel	the kernel used in training and predicting.

**Value**

plot

**Author(s)**

Diego Jimenez <diego.jimenez@promidat.com>

**Examples**

```
voronoi_svm_plot(iris, "Species", c("Sepal.Length", "Sepal.Width"), "linear")
```

# Index

## \* package

- predictoR, [11](#)
  
- contr.dummy, [2](#)
- contr.metric, [3](#)
- contr.ordinal, [3](#)
  
- data.frame.dummy, [4](#)
  
- e\_ada\_evol\_error, [4](#)
- e\_boost\_importance, [5](#)
- e\_coeff\_lambda, [6](#)
- e\_global\_gauge, [6](#)
- e\_JS, [7](#)
- e\_posib\_lambda, [8](#)
- e\_rf\_error, [9](#)
- e\_rndf\_importance, [9](#)
- e\_xgb\_importance, [10](#)
  
- predictoR, [11](#)
- predictoR-package (predictoR), [11](#)
  
- run\_app, [11](#)
  
- voronoi\_svm\_plot, [12](#)