

Package ‘RcmdrPlugin.BCA’

September 4, 2014

Type Package

Title Rcmdr Plug-In for Business and Customer Analytics

Version 0.9-8

Date 2014-09-01

Author Dan Putler

Maintainer Dan Putler <putler@yahoo.com>

Depends R (>= 3.0.0), Rcmdr (>= 2.1-0), BCA (>= 0.9-3), flexclust

Imports car (>= 2.0-21), RcmdrMisc (>= 1.0-1), nnet, foreign, rpart,rpart.plot

Suggests rgl

Description An Rcmdr ``plug-in" to accompany the book Customer and Business Analytics: Applied Data Mining for Business Decision Making Using R by Daniel S. Putler and Robert E. Krider.

License GPL (>= 2)

LazyLoad yes

LazyData yes

URL <http://www.customeranalyticsbook.com>

RcmdrModels nnet.formula, rpart

NeedsCompilation no

Repository CRAN

Date/Publication 2014-09-04 08:13:39

R topics documented:

RcmdrPlugin.BCA-package	2
Nnet	2
RcmdrPlugin.BCA.Utilities	3

RcmdrPlugin.BCA-package

RcmdrPlugin.BCA

Description

An R Commander plug-in to accompany the book *Customer and Business Analytics: Applied Data Mining for Business Decision Making Using R* by Daniel S. Putler and Robert E. Krider.

Details

Package: RcmdrPlugin.BCA

Version: 0.9-8

Date: 2013/09/01

Depends: R (>= 3.0.0), BCA, car

Imports: Rcmdr (>= 1.9-4), tcltk

Suggests: bind, aplpack, clv (>- 2.0-15, effects (>= 1.0-7), foreign, grid, lattice, lmtest, MASS, mgcv, multcomp, nlme, nnet, relimp, rpart, rpart.plot, rgl, RODBC

LazyLoad: no

License: GPL (>= 2)

URL: <http://www.customeranalyticsbook.com/>

Author(s)

Dan Putler <putler@yahoo.com> Maintainer: Dan Putler <putler@yahoo.com>

Nnet

Neural Networks Using Multiple Starting Weights

Description

Estimates a feed forward neural network using multiple initial starting weight vectors using the `nnet` function, and selects as the final model the one that minimizes the criterion function. This function is designed to be used with the `Rcmdrma` package. The function `nnSub` implements subsetting in a way more analogous to other R fitting functions.

Usage

```
Nnet(formula, data, decay, size, subset = "")
```

```
nnSub(data, subset)
```

Arguments

formula	The formula to be used by nnet.
data	The dataframe to be used in the estimation.
decay	The decay parameter to be used by nnet.
size	The number of nodes in the hidden layer.
subset	A subsetting expression (given as a quoted character string) for the estimation data frame.

Value

A set of components identical to those returned by nnet.

Author(s)

Dan Putler

See Also

[nnet](#)

Examples

```
data(iris3)
irisDat <- data.frame(rbind(iris3[,1], iris3[,2], iris3[,3]),
  species = as.factor(c(rep("s",50), rep("c",50), rep("v",50))))
ir.nn2 <- Nnet(species ~ ., irisDat, 0.2, 2)
```

RcmdrPlugin.BCA.Utilities

RcmdrPlugin.BCA Utility Functions

Description

These functions are actually internal and not exported.

Usage

```
bootDiagnostics()
SDIndexPlot()
activeRpartP()
createSamples()
exportDBF()
generalizedLinearModelBCA()
hCluster()
hclustSummaryBCA()
helpAboutBCA()
```

```
importDBF()
is.equality.prob(subset)
kmeansClusteringBCA()
liftChart()
liftChartP()
listHclustSolutions(envir=.GlobalEnv, ...)
listNnetModels(envir=.GlobalEnv, ...)
listRpartModels(envir=.GlobalEnv, ...)
nnetModel()
nnetP()
relabelFactor()
rpartModel()
rpartPlot()
rpartP()
rankScoreGUI()
rawProbScoreGUI()
adjProbScoreGUI()
stepwiseBCA()
subsetBoxBCA(window = top, model = FALSE)
summarizeModelBCA()
variableSummary()
variablesP(n = 1)
scatterPlotBCA()
scatterPlotMatrixBCA()
```

Arguments

envir	the environment to be searched; should generally be left at the default.
...	additional arguments.
subset	a subset string.
n	the number of variables required to activate a menu.
window	the frame to attach the subset box.
model	should a model entry form be included?

Details

These functions should typically not be used by the user.

Author(s)

Dan Putler

Index

- *Topic **misc**
 - Nnet, 2
 - RcmdrPlugin.BCA.Utilities, 3
- *Topic **package**
 - RcmdrPlugin.BCA-package, 2
- activeRpartP
 - (RcmdrPlugin.BCA.Utilities), 3
- adjProbScoreGUI
 - (RcmdrPlugin.BCA.Utilities), 3
- bootDiagnostics
 - (RcmdrPlugin.BCA.Utilities), 3
- createSamples
 - (RcmdrPlugin.BCA.Utilities), 3
- exportDBF (RcmdrPlugin.BCA.Utilities), 3
- generalizedLinearModelBCA
 - (RcmdrPlugin.BCA.Utilities), 3
- hCluster (RcmdrPlugin.BCA.Utilities), 3
- hclustSummaryBCA
 - (RcmdrPlugin.BCA.Utilities), 3
- helpAboutBCA
 - (RcmdrPlugin.BCA.Utilities), 3
- importDBF (RcmdrPlugin.BCA.Utilities), 3
- is.equality.prob
 - (RcmdrPlugin.BCA.Utilities), 3
- kcentroidsClustering
 - (RcmdrPlugin.BCA.Utilities), 3
- kmeansClusteringBCA
 - (RcmdrPlugin.BCA.Utilities), 3
- liftChart (RcmdrPlugin.BCA.Utilities), 3
- liftChartP (RcmdrPlugin.BCA.Utilities), 3
- listHclustSolutions
 - (RcmdrPlugin.BCA.Utilities), 3
- listNnetModels
 - (RcmdrPlugin.BCA.Utilities), 3
- listRpartModels
 - (RcmdrPlugin.BCA.Utilities), 3
- Nnet, 2
- nnet, 3
- nnetModel (RcmdrPlugin.BCA.Utilities), 3
- nnetP (RcmdrPlugin.BCA.Utilities), 3
- nnSub (Nnet), 2
- rankScoreGUI
 - (RcmdrPlugin.BCA.Utilities), 3
- rawProbScoreGUI
 - (RcmdrPlugin.BCA.Utilities), 3
- RcmdrPlugin.BCA
 - (RcmdrPlugin.BCA-package), 2
- RcmdrPlugin.BCA-package, 2
- RcmdrPlugin.BCA.Utilities, 3
- relabelFactor
 - (RcmdrPlugin.BCA.Utilities), 3
- rpartModel (RcmdrPlugin.BCA.Utilities), 3
- rpartP (RcmdrPlugin.BCA.Utilities), 3
- rpartPlot (RcmdrPlugin.BCA.Utilities), 3
- scatterPlotBCA
 - (RcmdrPlugin.BCA.Utilities), 3
- scatterPlotMatrixBCA
 - (RcmdrPlugin.BCA.Utilities), 3
- SDIndexPlot
 - (RcmdrPlugin.BCA.Utilities), 3
- stepwiseBCA
 - (RcmdrPlugin.BCA.Utilities), 3
- subsetBoxBCA
 - (RcmdrPlugin.BCA.Utilities), 3
- summarizeModelBCA
 - (RcmdrPlugin.BCA.Utilities), 3
- variablesP (RcmdrPlugin.BCA.Utilities), 3

variableSummary
 (RcmdrPlugin.BCA.Utilities), 3