Package 'AutoPlots'

March 15, 2023

Title AutoPlots

Version 1.0.0

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Maintainer Adrian Antico <adrianantico@gmail.com>

Description R package for generating plots in a simple way

URL https://github.com/AdrianAntico/AutoPlots

BugReports https://github.com/AdrianAntico/AutoPlots/issues

Depends R (>= 4.0.0)

Imports bit64, data.table, lubridate, ggplot2, plotly, echarts4r

Suggests knitr, rmarkdown

VignetteBuilder knitr

Contact Adrian Antico

Encoding UTF-8

Language en-US

LazyData true

NeedsCompilation no

RoxygenNote 7.2.1

Author Adrian Antico [aut, cre]

R topics documented:

BuildBinary *BuildBinary*

Description

Build package binary

Usage

```
BuildBinary(Root = NULL)
```

Arguments

Root   NULL will setwd to project root as defined in function

Author(s)

Adrian Antico

See Also

Other Utilities: [Install](), [UpdateDocs]()

Install *Install*

Description

To install the package

Usage

```
Install(Root = NULL)
```

Arguments

Root   NULL will setwd to project root as defined in function

Author(s)

Adrian Antico

See Also

Other Utilities: [BuildBinary](), [UpdateDocs]()

Plot.Area *Plot.Area*

Description

This function automatically builds calibration plots and calibration boxplots for model evaluation using regression, quantile regression, and binary and multinomial classification

Usage

```
Plot.Area(
  dt = NULL,
  AggMethod = "mean",
  PreAgg = TRUE,
  Engine = "Echarts",
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  Height = NULL,
  Width = NULL,
  Title = "Line Plot",
  ShowLabels = FALSE,
```

```
    Title.YAxis = NULL,
    Title.XAxis = NULL,
    EchartsTheme = "macarons",
    X_Scroll = FALSE,
    Y_Scroll = FALSE,
    TimeLine = TRUE,
    Alpha = 0.5,
    Smooth = TRUE,
    ShowSymbol = FALSE,
    BackGroundColor = "#6a6969",
    ChartColor = "#001534",
    FillColor = "#0066ff",
    FillColorReverse = "#97ff00",
    GridColor = "white",
    TextColor = "white",
    ZeroLineColor = "#ffff",
    ZeroLineWidth = 1.25,
    title.fontSize = 22,
    title.fontWeight = "bold",
    title.textShadowColor = "#63aeff",
    title.textShadowBlur = 3,
    title.textShadowOffsetY = 1,
    title.textShadowOffsetX = -1,
    xaxis.fontSize = 14,
    yaxis.fontSize = 14,
    Debug = FALSE
)
```

Arguments

`dt`	source data.table
`AggMethod`	character
`PreAgg`	logical
`Engine`	"Echarts" or "Plotly"
`XVar`	X-Axis variable name
`YVar`	Y-Axis variable name
`GroupVar`	One Grouping Variable
`YVarTrans`	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
`XVarTrans`	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
`FacetRows`	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
`FacetCols`	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
`FacetLevels`	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
`Height`	= NULL,
`Width`	= NULL,

Title	"Title"
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
EchartsTheme	Provide an "Echarts" theme
X_Scroll	logical
Y_Scroll	logical
TimeLine	Logical
Alpha	0 to 1 for setting transparency
Smooth	= TRUE
ShowSymbol	= FALSE
BackGroundColor	
	color outside of plot window. Rcolors and hex
ChartColor	color
FillColor	color
FillColorReverse	
	character
GridColor	color
TextColor	"Not Implemented"
ZeroLineColor	color
ZeroLineWidth	1
Debug	Debugging purposes
Area	logical

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.BarPlot3D`(), `Plot.Bar`(), `Plot.Box`(), `Plot.Copula3D`(), `Plot.Copula`(), `Plot.CorrMatrix`(), `Plot.Density`(), `Plot.HeatMap`(), `Plot.Histogram`(), `Plot.Line`(), `Plot.Pie`(), `Plot.River`(), `Plot.Scatter3D`(), `Plot.Scatter`(), `Plot.StackedBar`(), `Plot.Step`(), `Plot.Violin`()

Plot.Bar	*Plot.Bar*

Description

Build a bar plot by simply passing arguments to a single function

Usage

```
Plot.Bar(
  dt = NULL,
  PreAgg = FALSE,
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  AggMethod = "mean",
  Height = NULL,
  Width = NULL,
  Title = "Bar Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Echarts",
  EchartsTheme = "macarons",
  TimeLine = TRUE,
  X_Scroll = TRUE,
  Y_Scroll = TRUE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  ZeroLineColor = "#ffff",
  ZeroLineWidth = 1.25,
  title.fontSize = 22,
  title.fontWeight = "bold",
  title.textShadowColor = "#63aeff",
  title.textShadowBlur = 3,
  title.textShadowOffsetY = 1,
  title.textShadowOffsetX = -1,
  xaxis.fontSize = 14,
  yaxis.fontSize = 14,
  Debug = FALSE
)
```

Arguments

dt	source data.table
PreAgg	logical
XVar	X-Axis variable name
YVar	Y-Axis variable name
GroupVar	Column name of Group Variable for distinct colored histograms by group levels

YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standard-ize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standard-ize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
AggMethod	Choose from 'mean', 'sum', 'sd', and 'median'
Height	= NULL,
Width	= NULL,
Title	title
ShowLabels	logical
Title.YAxis	NULL. If NULL, YVar name will be used
Title.XAxis	NULL. If NULL, XVar name will be used
Engine	'Plotly' or "Echarts"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum","
TimeLine	logical
X_Scroll	logical
Y_Scroll	logical
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	'lightsteelblue'
FillColor	'gray'
FillColorReverse	
	character
GridColor	'white'
TextColor	'darkblue'
ZeroLineColor	= '#ffff'
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area()`, `Plot.BarPlot3D()`, `Plot.Box()`, `Plot.Copula3D()`, `Plot.Copula()`, `Plot.CorrMatrix()`, `Plot.Density()`, `Plot.HeatMap()`, `Plot.Histogram()`, `Plot.Line()`, `Plot.Pie()`, `Plot.River()`, `Plot.Scatter3D()`, `Plot.Scatter()`, `Plot.StackedBar()`, `Plot.Step()`, `Plot.Violin()`

Plot.BarPlot3D   *Plot.BarPlot3D*

Description

Build a 3D Bar Plot

Usage

```
Plot.BarPlot3D(
  dt,
  PreAgg = FALSE,
  AggMethod = "mean",
  XVar = NULL,
  YVar = NULL,
  ZVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  ZVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  NumberBins = 21,
  NumLevels_Y = 33,
  NumLevels_X = 33,
  Height = NULL,
  Width = NULL,
  Title = "3D Bar Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Plotly",
  EchartsTheme = "dark",
  X_Scroll = TRUE,
  Y_Scroll = TRUE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  title.fontSize = 22,
  title.fontWeight = "bold",
  title.textShadowColor = "#63aeff",
  title.textShadowBlur = 3,
  title.textShadowOffsetY = 1,
  title.textShadowOffsetX = -1,
  yaxis.fontSize = 14,
  xaxis.fontSize = 14,
  zaxis.fontSize = 14,
  Debug = FALSE
```

```
)
```

Arguments

dt	source data.table
AggMethod	'mean', 'median', 'sum', 'sd', 'coeffvar', 'count'
XVar	X-Axis variable name
YVar	Y-Axis variable name
ZVar	Z-Axis variable name
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
ZVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
NumberBins	= 21
NumLevels_Y	= 20
NumLevels_X	= 20
Height	= NULL,
Width	= NULL,
Title	"Heatmap"
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	"plotly", "echarts4r"
EchartsTheme	"dark-blue"
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	= '#001534'
FillColor	= "#0066ff"
FillColorReverse	
	character
GridColor	= '#ffffff'
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area()`, `Plot.Bar()`, `Plot.Box()`, `Plot.Copula3D()`, `Plot.Copula()`,
`Plot.CorrMatrix()`, `Plot.Density()`, `Plot.HeatMap()`, `Plot.Histogram()`, `Plot.Line()`, `Plot.Pie()`,
`Plot.River()`, `Plot.Scatter3D()`, `Plot.Scatter()`, `Plot.StackedBar()`, `Plot.Step()`, `Plot.Violin()`

Plot.BinaryMetrics   *Plot.BinaryMetrics*

Description

Line plot of evaluation metrics across thresholds

Usage

```
Plot.BinaryMetrics(
  dt = NULL,
  PreAgg = FALSE,
  AggMethod = "mean",
  SampleSize = 100000L,
  XVar = NULL,
  YVar = NULL,
  ZVar = NULL,
  Metrics = c("Utility", "MCC", "Accuracy", "F1_Score", "F2_Score", "F0.5_Score",
    "ThreatScore", "TPR", "TNR", "FNR", "FPR", "FDR", "FOR"),
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  ZVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  CostMatrixWeights = c(0, 1, 1, 0),
  NumberBins = 20,
  Height = NULL,
  Width = NULL,
  Title = "Binary Metrics",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Plotly",
  EchartsTheme = "macarons",
  EchartsLabels = FALSE,
  TimeLine = TRUE,
  X_Scroll = TRUE,
  Y_Scroll = FALSE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
```

```
    TextColor = "white",
    ZeroLineColor = "#ffff",
    ZeroLineWidth = 1.25,
    Debug = FALSE
)
```

Arguments

dt	source data.table
PreAgg	logical
AggMethod	character
SampleSize	numeric
XVar	X-Axis variable name
YVar	Y-Axis variable name
ZVar	character
Metrics	Multiple selection "Utility","MCC","Accuracy","F1_Score","F2_Score","F0.5_Score","ThreatScore"
GroupVar	Character variable
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
ZVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
NumberBins	numeric
Title	character
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	"Echarts" or "Plotly"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo" #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspired" #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum","
EchartsLabels	character
TimeLine	logical
X_Scroll	logical
Y_Scroll	logical
BackGroundColor	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character

ChartColor	hex character
FillColor	hex character
FillColorReverse	
	hex character
GridColor	hex character
TextColor	hex character
ZeroLineColor	hex character
ZeroLineWidth	numeric
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Model Evaluation: `Plot.Calibration.Box()`, `Plot.Calibration.Line()`, `Plot.ConfusionMatrix()`, `Plot.Gains()`, `Plot.Lift()`, `Plot.PartialDependence.Box()`, `Plot.PartialDependence.HeatMap()`, `Plot.PartialDependence.Line()`, `Plot.ROC()`, `Plot.Residuals.Histogram()`, `Plot.Residuals.Scatter()`, `Plot.ShapImportance()`, `Plot.VariableImportance()`

Plot.Box   *Plot.Box*

Description

Build a box plot by simply passing arguments to a single function. It will sample your data using SampleSize number of rows. Sampled data is randomized.

Usage

```
Plot.Box(
  dt = NULL,
  SampleSize = 100000L,
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  Height = NULL,
  Width = NULL,
  Title = "Box Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Plotly",
  EchartsTheme = "macarons",
```

```
        TimeLine = TimeLine,
        X_Scroll = TRUE,
        Y_Scroll = TRUE,
        BackGroundColor = "#6a6969",
        ChartColor = "#001534",
        FillColor = "#0066ff",
        FillColorReverse = "#97ff00",
        GridColor = "white",
        TextColor = "white",
        ZeroLineColor = "#ffff",
        ZeroLineWidth = 1.25,
        title.fontSize = 22,
        title.fontWeight = "bold",
        title.textShadowColor = "#63aeff",
        title.textShadowBlur = 3,
        title.textShadowOffsetY = 1,
        title.textShadowOffsetX = -1,
        xaxis.fontSize = 14,
        yaxis.fontSize = 14,
        Debug = FALSE
)
```

Arguments

`dt`	source data.table
`SampleSize`	numeric
`XVar`	X-Axis variable name
`YVar`	Y-Axis variable name
`GroupVar`	Character variable
`YVarTrans`	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
`XVarTrans`	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
`FacetRows`	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
`FacetCols`	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
`FacetLevels`	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
`Height`	= NULL,
`Width`	= NULL,
`Title`	character
`ShowLabels`	character
`Title.YAxis`	character
`Title.XAxis`	character
`Engine`	"Echarts" or "Plotly"

EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum","
TimeLine	Logical
X_Scroll	logical
Y_Scroll	logical
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	character hex
FillColor	character hex
FillColorReverse	
	character hex
GridColor	character hex
TextColor	character hex
ZeroLineColor	character hex
ZeroLineWidth	numeric
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area()`, `Plot.BarPlot3D()`, `Plot.Bar()`, `Plot.Copula3D()`, `Plot.Copula()`, `Plot.CorrMatrix()`, `Plot.Density()`, `Plot.HeatMap()`, `Plot.Histogram()`, `Plot.Line()`, `Plot.Pie()`, `Plot.River()`, `Plot.Scatter3D()`, `Plot.Scatter()`, `Plot.StackedBar()`, `Plot.Step()`, `Plot.Violin()`

Plot.Calibration.Box   *Plot.Calibration.Box*

Description

This function automatically builds calibration plots and calibration boxplots for model evaluation using regression, quantile regression, and binary and multinomial classification

Usage

```
Plot.Calibration.Box(
  dt = NULL,
  SampleSize = 100000L,
  AggMethod = "mean",
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
```

```
    XVarTrans = "Identity",
    FacetRows = 1,
    FacetCols = 1,
    FacetLevels = NULL,
    NumberBins = 21,
    Height = NULL,
    Width = NULL,
    Title = "Calibration Plot",
    ShowLabels = FALSE,
    Title.YAxis = NULL,
    Title.XAxis = NULL,
    Engine = "Echarts",
    EchartsTheme = "macarons",
    TimeLine = FALSE,
    X_Scroll = TRUE,
    Y_Scroll = TRUE,
    BackGroundColor = "#6a6969",
    ChartColor = "#001534",
    FillColor = "#0066ff",
    FillColorReverse = "#97ff00",
    GridColor = "white",
    TextColor = "white",
    ZeroLineColor = "#ffff",
    ZeroLineWidth = 1.25,
    Debug = FALSE
)
```

Arguments

dt	source data.table
SampleSize	numeric
AggMethod	character
XVar	X-Axis variable name
YVar	Y-Axis variable name
GroupVar	Character variable
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
NumberBins	numeric
Title	character
ShowLabels	character
Title.YAxis	character

Title.XAxis	character
Engine	"Echarts" or "Plotly"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red- velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum",
TimeLine	logical
X_Scroll	logical
Y_Scroll	logical
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	character hex
FillColor	character hex
FillColorReverse	
	character hex
GridColor	character hex
TextColor	"Not Implemented"
ZeroLineColor	character hex
ZeroLineWidth	numeric
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Model Evaluation: `Plot.BinaryMetrics()`, `Plot.Calibration.Line()`, `Plot.ConfusionMatrix()`,
`Plot.Gains()`, `Plot.Lift()`, `Plot.PartialDependence.Box()`, `Plot.PartialDependence.HeatMap()`,
`Plot.PartialDependence.Line()`, `Plot.ROC()`, `Plot.Residuals.Histogram()`, `Plot.Residuals.Scatter()`,
`Plot.ShapImportance()`, `Plot.VariableImportance()`

Plot.Calibration.Line   *Plot.Calibration.Line*

Description

This function automatically builds calibration plots and calibration boxplots for model evaluation
using regression, quantile regression, and binary and multinomial classification

Usage

```
Plot.Calibration.Line(
  dt = NULL,
  AggMethod = "mean",
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  NumberBins = 21,
  Height = NULL,
  Width = NULL,
  Title = "Calibration Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Echarts",
  EchartsTheme = "macarons",
  TimeLine = FALSE,
  X_Scroll = TRUE,
  Y_Scroll = TRUE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  ZeroLineColor = "#ffff",
  ZeroLineWidth = 1.25,
  Debug = FALSE
)
```

Arguments

dt	source data.table
AggMethod	character
XVar	X-Axis variable name
YVar	Y-Axis variable name
GroupVar	Character variable
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns

FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
NumberBins	numeric
Title	character
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	"Echarts" or "Plotly"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum","
TimeLine	logical
X_Scroll	logical
Y_Scroll	logical
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	character hex
FillColor	character hex
FillColorReverse	
	character hex
GridColor	character hex
TextColor	"Not Implemented"
ZeroLineColor	character hex
ZeroLineWidth	numeric
Debug	Debugging purposes
SampleSize	numeric

Author(s)

Adrian Antico

See Also

Other Model Evaluation: `Plot.BinaryMetrics()`, `Plot.Calibration.Box()`, `Plot.ConfusionMatrix()`, `Plot.Gains()`, `Plot.Lift()`, `Plot.PartialDependence.Box()`, `Plot.PartialDependence.HeatMap()`, `Plot.PartialDependence.Line()`, `Plot.ROC()`, `Plot.Residuals.Histogram()`, `Plot.Residuals.Scatter()`, `Plot.ShapImportance()`, `Plot.VariableImportance()`

Plot.ConfusionMatrix   *Plot.ConfusionMatrix*

Description

Generate variable importance plots

Usage

```
Plot.ConfusionMatrix(
  dt = NULL,
  PreAgg = FALSE,
  XVar = NULL,
  YVar = NULL,
  ZVar = "N",
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  ZVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  NumberBins = 21,
  NumLevels_X = 50,
  NumLevels_Y = 50,
  Height = NULL,
  Width = NULL,
  Title = "Confusion Matrix",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Plotly",
  EchartsTheme = "macarons",
  TimeLine = TRUE,
  X_Scroll = TRUE,
  Y_Scroll = TRUE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  ZeroLineColor = "#ffff",
  ZeroLineWidth = 1.25,
  AggMethod = "count",
  GroupVar = NULL,
  Debug = FALSE
)
```

Arguments

dt   source data.table

PreAgg	FALSE
XVar	Column name of X-Axis variable. If NULL then ignored
YVar	Column name of Y-Axis variable. If NULL then ignored
ZVar	= "N"
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
ZVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
NumberBins	= 21,
NumLevels_X	= NumLevels_Y,
NumLevels_Y	= NumLevels_X,
Title	title
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	'Plotly' or "Echarts"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo" #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum","
TimeLine	logical
BackGroundColor	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	'lightsteelblue'
FillColor	'gray'
FillColorReverse	character hex
GridColor	'white'
TextColor	'darkblue'
ZeroLineColor	= '#ffff'
AggMethod	Choose from 'mean', 'sum', 'sd', and 'median'
GroupVar	= NULL
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Model Evaluation: `Plot.BinaryMetrics()`, `Plot.Calibration.Box()`, `Plot.Calibration.Line()`, `Plot.Gains()`, `Plot.Lift()`, `Plot.PartialDependence.Box()`, `Plot.PartialDependence.HeatMap()`, `Plot.PartialDependence.Line()`, `Plot.ROC()`, `Plot.Residuals.Histogram()`, `Plot.Residuals.Scatter()`, `Plot.ShapImportance()`, `Plot.VariableImportance()`

Plot.Copula	*Plot.Copula*

Description

Build a copula plot by simply passing arguments to a single function. It will sample your data using SampleSize number of rows. Sampled data is randomized.

Usage

```
Plot.Copula(
  dt = NULL,
  SampleSize = 30000L,
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  Height = NULL,
  Width = NULL,
  Title = "Copula Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Plotly",
  EchartsTheme = "dark-blue",
  TimeLine = FALSE,
  X_Scroll = TRUE,
  Y_Scroll = TRUE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  ZeroLineColor = "#ffff",
  ZeroLineWidth = 1.25,
  yaxis.fontSize = 14,
```

```
    xaxis.fontSize = 14,
    title.fontSize = 22,
    title.fontWeight = "bold",
    title.textShadowColor = "#63aeff",
    title.textShadowBlur = 3,
    title.textShadowOffsetY = 1,
    title.textShadowOffsetX = -1,
    Debug = FALSE
)
```

Arguments

`dt`	source data.table
`SampleSize`	An integer for the number of rows to use. Sampled data is randomized. If NULL then ignored
`XVar`	X-Axis variable name
`YVar`	Y-Axis variable name
`GroupVar`	Requires an XVar and YVar already be defined
`YVarTrans`	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
`XVarTrans`	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
`FacetRows`	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
`FacetCols`	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
`FacetLevels`	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
`Height`	= NULL,
`Width`	= NULL,
`Title`	'Copula Plot'
`ShowLabels`	character
`Title.YAxis`	character
`Title.XAxis`	character
`Engine`	= "Plotly",
`EchartsTheme`	= "dark-blue",
`TimeLine`	Logical
`X_Scroll`	logical
`Y_Scroll`	logical
`BackGroundColor`	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
`ChartColor`	'lightsteelblue'
`FillColor`	'gray'
`FillColorReverse`	
	character

GridColor	'white'
TextColor	'darkblue'
ZeroLineColor	= '#ffff',
ZeroLineWidth	= 2,
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area()`, `Plot.BarPlot3D()`, `Plot.Bar()`, `Plot.Box()`, `Plot.Copula3D()`, `Plot.CorrMatrix()`, `Plot.Density()`, `Plot.HeatMap()`, `Plot.Histogram()`, `Plot.Line()`, `Plot.Pie()`, `Plot.River()`, `Plot.Scatter3D()`, `Plot.Scatter()`, `Plot.StackedBar()`, `Plot.Step()`, `Plot.Violin()`

Plot.Copula3D	*Plot.Copula3D*

Description

Build a 3D-copula plot by simply passing arguments to a single function. It will sample your data using SampleSize number of rows. Sampled data is randomized.

Usage

```
Plot.Copula3D(
  dt = NULL,
  SampleSize = 1e+05,
  XVar = NULL,
  YVar = NULL,
  ZVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  ZVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  GroupVar = NULL,
  Height = NULL,
  Width = NULL,
  Title = "Copula 3D",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Plotly",
  EchartsTheme = "dark-blue",
  TimeLine = FALSE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
```

```
    FillColor = "#0066ff",
    FillColorReverse = "#97ff00",
    GridColor = "white",
    TextColor = "white",
    ZeroLineColor = "#ffff",
    ZeroLineWidth = 1.25,
    title.fontSize = 22,
    title.fontWeight = "bold",
    title.textShadowColor = "#63aeff",
    title.textShadowBlur = 3,
    title.textShadowOffsetY = 1,
    title.textShadowOffsetX = -1,
    yaxis.fontSize = 14,
    xaxis.fontSize = 14,
    zaxis.fontSize = 14,
    Debug = FALSE
)
```

Arguments

`dt`	source data.table
`SampleSize`	An integer for the number of rows to use. Sampled data is randomized. If NULL then ignored
`XVar`	X-Axis variable name
`YVar`	Y-Axis variable name
`ZVar`	Z-Axis variable name
`YVarTrans`	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
`XVarTrans`	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
`ZVarTrans`	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
`FacetRows`	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
`FacetCols`	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
`FacetLevels`	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
`GroupVar`	Requires an XVar and YVar already be defined
`Height`	= NULL,
`Width`	= NULL,
`Title`	'Copula3D Plot'
`ShowLabels`	character
`Title.YAxis`	character
`Title.XAxis`	character
`Engine`	= "Plotly"
`EchartsTheme`	= "dark-blue"

TimeLine	Logical
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	'lightsteelblue'
FillColor	'gray'
FillColorReverse	
	character
GridColor	'white'
TextColor	'darkblue'
ZeroLineColor	= '#ffff',
ZeroLineWidth	= 2,
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area`(), `Plot.BarPlot3D`(), `Plot.Bar`(), `Plot.Box`(), `Plot.Copula`(), `Plot.CorrMatrix`(), `Plot.Density`(), `Plot.HeatMap`(), `Plot.Histogram`(), `Plot.Line`(), `Plot.Pie`(), `Plot.River`(), `Plot.Scatter3D`(), `Plot.Scatter`(), `Plot.StackedBar`(), `Plot.Step`(), `Plot.Violin`()

Plot.CorrMatrix	*Plot.CorrMatrix*

Description

Build a violin plot by simply passing arguments to a single function. It will sample your data using SampleSize number of rows. Sampled data is randomized.

Usage

```
Plot.CorrMatrix(
  dt = NULL,
  CorrVars = NULL,
  CorrVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  Method = "spearman",
  PreAgg = FALSE,
  Height = NULL,
  Width = NULL,
  Title = "Correlation Matrix",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
```

```
    Engine = "Plotly",
    EchartsTheme = "macarons",
    X_Scroll = TRUE,
    Y_Scroll = TRUE,
    BackGroundColor = "#6a6969",
    ChartColor = "#001534",
    FillColor = "#0066ff",
    FillColorReverse = "#97ff00",
    GridColor = "white",
    TextColor = "white",
    title.fontSize = 22,
    title.fontWeight = "bold",
    title.textShadowColor = "#63aeff",
    title.textShadowBlur = 3,
    title.textShadowOffsetY = 1,
    title.textShadowOffsetX = -1,
    yaxis.fontSize = 14,
    xaxis.fontSize = 14,
    Debug = FALSE
)
```

Arguments

dt	source data.table
CorrVars	vector of variable names
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
Method	character
PreAgg	logical
Height	= NULL,
Width	= NULL,
Title	character
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	"Echarts" or "Plotly"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum","
X_Scroll	logical
Y_Scroll	logical
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character

ChartColor	character hex
FillColor	character hex
FillColorReverse	
	character
GridColor	character hex
TextColor	character hex
Debug	Debugging purposes
CorrVarsTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area()`, `Plot.BarPlot3D()`, `Plot.Bar()`, `Plot.Box()`, `Plot.Copula3D()`, `Plot.Copula()`, `Plot.Density()`, `Plot.HeatMap()`, `Plot.Histogram()`, `Plot.Line()`, `Plot.Pie()`, `Plot.River()`, `Plot.Scatter3D()`, `Plot.Scatter()`, `Plot.StackedBar()`, `Plot.Step()`, `Plot.Violin()`

Plot.Density   *Plot.Density*

Description

Density plots, by groups, with transparent continuous plots

Usage

```
Plot.Density(
  dt = NULL,
  SampleSize = 100000L,
  YVar = NULL,
  XVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  Height = NULL,
  Width = NULL,
  Title = "Density Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Plotly",
  EchartsTheme = "macarons",
  TimeLine = FALSE,
  X_Scroll = TRUE,
```

```
  Y_Scroll = TRUE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  title.fontSize = 22,
  title.fontWeight = "bold",
  title.textShadowColor = "#63aeff",
  title.textShadowBlur = 3,
  title.textShadowOffsetY = 1,
  title.textShadowOffsetX = -1,
  xaxis.fontSize = 14,
  yaxis.fontSize = 14,
  Debug = FALSE
)
```

Arguments

dt	source data.table
SampleSize	= 100000L
YVar	Y-Axis variable name
XVar	X-Axis variable name
GroupVar	Character variable
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
Height	= NULL,
Width	= NULL,
Title	= "Density Plot"
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	"Echarts" or "Plotly"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum",
TimeLine	logical

X_Scroll	logical
Y_Scroll	logical
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	"#001534",
FillColor	"#0066ff",
FillColorReverse	
	"#97ff00",
GridColor	"white",
TextColor	"white",
Debug	Debugging purposes

See Also

Other Standard Plots: `Plot.Area()`, `Plot.BarPlot3D()`, `Plot.Bar()`, `Plot.Box()`, `Plot.Copula3D()`,
`Plot.Copula()`, `Plot.CorrMatrix()`, `Plot.HeatMap()`, `Plot.Histogram()`, `Plot.Line()`, `Plot.Pie()`,
`Plot.River()`, `Plot.Scatter3D()`, `Plot.Scatter()`, `Plot.StackedBar()`, `Plot.Step()`, `Plot.Violin()`

Plot.Gains *Plot.Gains*

Description

Create a cumulative gains chart

Usage

```
Plot.Gains(
  dt = NULL,
  PreAgg = FALSE,
  XVar = NULL,
  YVar = NULL,
  ZVar = "N",
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  ZVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  NumberBins = 20,
  Height = NULL,
  Width = NULL,
  Title = "Gains Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Plotly",
```

```
    EchartsTheme = "macarons",
    TimeLine = TRUE,
    X_Scroll = TRUE,
    Y_Scroll = TRUE,
    BackGroundColor = "#6a6969",
    ChartColor = "#001534",
    FillColor = "#0066ff",
    FillColorReverse = "#97ff00",
    GridColor = "white",
    TextColor = "white",
    ZeroLineColor = "#ffff",
    ZeroLineWidth = 1.25,
    Debug = FALSE
)
```

Arguments

dt	source data.table
PreAgg	logical
XVar	X-Axis variable name
YVar	Y-Axis variable name
ZVar	character
GroupVar	Character variable
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
ZVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
NumberBins	numeric
Title	character
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	"Echarts" or "Plotly"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo" #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum","
TimeLine	logical
X_Scroll	logical

```
Y_Scroll          logical
BackGroundColor
                  color outside of plot window. Rcolors and hex outside of plot window. Rcolors
                  and hex character
ChartColor        character hex
FillColor         character hex
FillColorReverse
                  character hex
GridColor         character hex
TextColor         character hex
ZeroLineColor     character hex
ZeroLineWidth     numeric
Debug             Debugging purposes
```

Author(s)

Adrian Antico

See Also

Other Model Evaluation: `Plot.BinaryMetrics()`, `Plot.Calibration.Box()`, `Plot.Calibration.Line()`, `Plot.ConfusionMatrix()`, `Plot.Lift()`, `Plot.PartialDependence.Box()`, `Plot.PartialDependence.HeatMap()` `Plot.PartialDependence.Line()`, `Plot.ROC()`, `Plot.Residuals.Histogram()`, `Plot.Residuals.Scatter()`, `Plot.ShapImportance()`, `Plot.VariableImportance()`

Plot.HeatMap   *Plot.HeatMap*

Description

Create heat maps with numeric or categorical dt

Usage

```
Plot.HeatMap(
  dt,
  PreAgg = FALSE,
  AggMethod = "mean",
  XVar = NULL,
  YVar = NULL,
  ZVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  ZVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  NumberBins = 21,
  NumLevels_Y = 33,
```

```
    NumLevels_X = 33,
    Height = NULL,
    Width = NULL,
    Title = "Heatmap",
    ShowLabels = FALSE,
    Title.YAxis = NULL,
    Title.XAxis = NULL,
    Engine = "Plotly",
    EchartsTheme = "dark",
    X_Scroll = TRUE,
    Y_Scroll = TRUE,
    BackGroundColor = "#6a6969",
    ChartColor = "#001534",
    FillColor = "#0066ff",
    FillColorReverse = "#97ff00",
    GridColor = "white",
    TextColor = "white",
    title.fontSize = 22,
    title.fontWeight = "bold",
    title.textShadowColor = "#63aeff",
    title.textShadowBlur = 3,
    title.textShadowOffsetY = 1,
    title.textShadowOffsetX = -1,
    yaxis.fontSize = 14,
    xaxis.fontSize = 14,
    Debug = FALSE
)
```

Arguments

dt	source data.table
AggMethod	'mean', 'median', 'sum', 'sd', 'coeffvar', 'count'
XVar	X-Axis variable name
YVar	Y-Axis variable name
ZVar	Z-Axis variable name
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
ZVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
NumberBins	= 21
NumLevels_Y	= 20

NumLevels_X	= 20
Height	= NULL,
Width	= NULL,
Title	"Heatmap"
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	"plotly", "echarts4r"
EchartsTheme	"dark-blue"
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	= '#001534'
FillColor	= "#0066ff"
FillColorReverse	
	character
GridColor	= '#ffffff'

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area()`, `Plot.BarPlot3D()`, `Plot.Bar()`, `Plot.Box()`, `Plot.Copula3D()`, `Plot.Copula()`, `Plot.CorrMatrix()`, `Plot.Density()`, `Plot.Histogram()`, `Plot.Line()`, `Plot.Pie()`, `Plot.River()`, `Plot.Scatter3D()`, `Plot.Scatter()`, `Plot.StackedBar()`, `Plot.Step()`, `Plot.Violin()`

Plot.Histogram *Plot.Histogram*

Description

Build a histogram plot by simply passing arguments to a single function. It will sample your data using SampleSize number of rows. Sampled data is randomized.

Usage

```
Plot.Histogram(
  dt = NULL,
  SampleSize = 30000L,
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
```

```
    FacetLevels = NULL,
    NumberBins = 30,
    Height = NULL,
    Width = NULL,
    Title = "Histogram",
    ShowLabels = FALSE,
    Title.YAxis = NULL,
    Title.XAxis = NULL,
    Engine = "Plotly",
    EchartsTheme = "macarons",
    TimeLine = FALSE,
    X_Scroll = TRUE,
    Y_Scroll = TRUE,
    BackGroundColor = "#6a6969",
    ChartColor = "#001534",
    FillColor = "#0066ff",
    FillColorReverse = "#97ff00",
    GridColor = "white",
    TextColor = "white",
    ZeroLineWidth = 1.25,
    ZeroLineColor = "white",
    title.fontSize = 22,
    title.fontWeight = "bold",
    title.textShadowColor = "#63aeff",
    title.textShadowBlur = 3,
    title.textShadowOffsetY = 1,
    title.textShadowOffsetX = -1,
    xaxis.fontSize = 14,
    yaxis.fontSize = 14,
    Debug = FALSE
)
```

Arguments

dt	source data.table
SampleSize	An integer for the number of rows to use. Sampled data is randomized. If NULL then ignored
XVar	X-Axis variable name
YVar	Y-Axis variable name
GroupVar	Column name of Group Variable for distinct colored histograms by group levels
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.

NumberBins	= 30
Height	= NULL,
Width	= NULL,
Engine	"Echarts" or "Plotly"
EchartsTheme	= EchartsTheme,
TimeLine	logical
X_Scroll	logical
Y_Scroll	logical
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	'lightsteelblue'
FillColor	'gray'
FillColorReverse	
	character
GridColor	'white'
TextColor	'darkblue'
ZeroLineWidth	= 1.25,
ZeroLineColor	= "white",
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area()`, `Plot.BarPlot3D()`, `Plot.Bar()`, `Plot.Box()`, `Plot.Copula3D()`, `Plot.Copula()`, `Plot.CorrMatrix()`, `Plot.Density()`, `Plot.HeatMap()`, `Plot.Line()`, `Plot.Pie()`, `Plot.River()`, `Plot.Scatter3D()`, `Plot.Scatter()`, `Plot.StackedBar()`, `Plot.Step()`, `Plot.Violin()`

Plot.Lift	*Plot.Lift*

Description

Create a cumulative gains chart

Usage

```
Plot.Lift(
  dt = NULL,
  PreAgg = FALSE,
  XVar = NULL,
  YVar = NULL,
  ZVar = "N",
  GroupVar = NULL,
```

```
        YVarTrans = "Identity",
        XVarTrans = "Identity",
        ZVarTrans = "Identity",
        FacetRows = 1,
        FacetCols = 1,
        FacetLevels = NULL,
        NumberBins = 20,
        Height = NULL,
        Width = NULL,
        Title = "Confusion Matrix",
        ShowLabels = FALSE,
        Title.YAxis = NULL,
        Title.XAxis = NULL,
        Engine = "Plotly",
        EchartsTheme = "macarons",
        TimeLine = TRUE,
        X_Scroll = TRUE,
        Y_Scroll = TRUE,
        BackGroundColor = "#6a6969",
        ChartColor = "#001534",
        FillColor = "#0066ff",
        FillColorReverse = "#97ff00",
        GridColor = "white",
        TextColor = "white",
        ZeroLineColor = "#ffff",
        ZeroLineWidth = 1.25,
        Debug = FALSE
)
```

Arguments

dt	source data.table
PreAgg	logical
XVar	X-Axis variable name
YVar	Y-Axis variable name
ZVar	character
GroupVar	Character variable
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
ZVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.

NumberBins	numeric
Title	character
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	"Echarts" or "Plotly"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum","
TimeLine	logical
X_Scroll	logical
Y_Scroll	logical
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	character hex
FillColor	character hex
FillColorReverse	
	character hex
GridColor	character hex
TextColor	character hex
ZeroLineColor	character hex
ZeroLineWidth	numeric
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Model Evaluation: `Plot.BinaryMetrics()`, `Plot.Calibration.Box()`, `Plot.Calibration.Line()`, `Plot.ConfusionMatrix()`, `Plot.Gains()`, `Plot.PartialDependence.Box()`, `Plot.PartialDependence.HeatMap(`, `Plot.PartialDependence.Line()`, `Plot.ROC()`, `Plot.Residuals.Histogram()`, `Plot.Residuals.Scatter()`, `Plot.ShapImportance()`, `Plot.VariableImportance()`

Plot.Line	*Plot.Line*

Description

This function automatically builds calibration plots and calibration boxplots for model evaluation using regression, quantile regression, and binary and multinomial classification

Usage

```
Plot.Line(
  dt = NULL,
  AggMethod = "mean",
  PreAgg = TRUE,
  Engine = "Echarts",
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  Height = NULL,
  Width = NULL,
  Title = "Line Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  EchartsTheme = "macarons",
  X_Scroll = FALSE,
  Y_Scroll = FALSE,
  TimeLine = TRUE,
  Area = FALSE,
  Alpha = 0.5,
  Smooth = TRUE,
  ShowSymbol = FALSE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  ZeroLineColor = "#ffff",
  ZeroLineWidth = 1.25,
  title.fontSize = 22,
  title.fontWeight = "bold",
  title.textShadowColor = "#63aeff",
  title.textShadowBlur = 3,
  title.textShadowOffsetY = 1,
  title.textShadowOffsetX = -1,
  xaxis.fontSize = 14,
  yaxis.fontSize = 14,
  DarkMode = FALSE,
  Debug = FALSE
)
```

Arguments

dt	source data.table
AggMethod	character

PreAgg	logical
Engine	"Echarts" or "Plotly"
XVar	X-Axis variable name
YVar	Y-Axis variable name
GroupVar	One Grouping Variable
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
Height	= NULL,
Width	= NULL,
Title	"Title"
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
EchartsTheme	Provide an "Echarts" theme
X_Scroll	logical
Y_Scroll	logical
TimeLine	Logical
Area	logical
Alpha	0 to 1 for setting transparency
Smooth	= TRUE
ShowSymbol	= FALSE
BackGroundColor	color outside of plot window. Rcolors and hex
ChartColor	color
FillColor	color
FillColorReverse	character
GridColor	color
TextColor	"Not Implemented"
ZeroLineColor	color
ZeroLineWidth	1
DarkMode	FALSE
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area()`, `Plot.BarPlot3D()`, `Plot.Bar()`, `Plot.Box()`, `Plot.Copula3D()`, `Plot.Copula()`, `Plot.CorrMatrix()`, `Plot.Density()`, `Plot.HeatMap()`, `Plot.Histogram()`, `Plot.Pie()`, `Plot.River()`, `Plot.Scatter3D()`, `Plot.Scatter()`, `Plot.StackedBar()`, `Plot.Step()`, `Plot.Violin()`

Plot.PartialDependence.Box

Plot.PartialDependence.Box

Description

This function automatically builds partial dependence calibration plots

Usage

```
Plot.PartialDependence.Box(
  dt = NULL,
  PreAgg = FALSE,
  SampleSize = 100000L,
  XVar = NULL,
  YVar = NULL,
  ZVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  ZVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  NumberBins = 20,
  AggMethod = "mean",
  Height = NULL,
  Width = NULL,
  Title = "Gains Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Plotly",
  EchartsTheme = "macarons",
  EchartsLabels = FALSE,
  TimeLine = TRUE,
  X_Scroll = TRUE,
  Y_Scroll = FALSE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
```

```
    FillColorReverse = "#97ff00",
    GridColor = "white",
    TextColor = "white",
    ZeroLineColor = "#ffff",
    ZeroLineWidth = 1.25,
    Debug = FALSE
)
```

Arguments

dt	source data.table
PreAgg	logical
SampleSize	numeric
XVar	X-Axis variable name
YVar	Y-Axis variable name
ZVar	character
GroupVar	Character variable
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
ZVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
NumberBins	numeric
AggMethod	character
Title	character
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	"Echarts" or "Plotly"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum",
EchartsLabels	character
TimeLine	logical
X_Scroll	logical
Y_Scroll	logical

BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	hex character
FillColor	hex character
FillColorReverse	
	hex character
GridColor	hex character
TextColor	hex character
ZeroLineColor	hex character
ZeroLineWidth	numeric
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Model Evaluation: `Plot.BinaryMetrics()`, `Plot.Calibration.Box()`, `Plot.Calibration.Line()`, `Plot.ConfusionMatrix()`, `Plot.Gains()`, `Plot.Lift()`, `Plot.PartialDependence.HeatMap()`, `Plot.PartialDependence.Line()`, `Plot.ROC()`, `Plot.Residuals.Histogram()`, `Plot.Residuals.Scatter()`, `Plot.ShapImportance()`, `Plot.VariableImportance()`

Plot.PartialDependence.HeatMap
Plot.PartialDependence.HeatMap

Description

This function automatically builds partial dependence calibration plots

Usage

```
Plot.PartialDependence.HeatMap(
  dt = NULL,
  XVar = NULL,
  YVar = NULL,
  ZVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  ZVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  NumberBins = 21,
  AggMethod = "mean",
  Height = NULL,
```

```
    Width = NULL,
    Title = "Gains Plot",
    ShowLabels = FALSE,
    Title.YAxis = NULL,
    Title.XAxis = NULL,
    Engine = "Plotly",
    EchartsTheme = "macarons",
    EchartsLabels = FALSE,
    TimeLine = TRUE,
    X_Scroll = TRUE,
    Y_Scroll = TRUE,
    BackGroundColor = "#6a6969",
    ChartColor = "#001534",
    FillColor = "#0066ff",
    FillColorReverse = "#97ff00",
    GridColor = "white",
    TextColor = "white",
    ZeroLineColor = "#ffff",
    ZeroLineWidth = 1.25,
    Debug = FALSE
)
```

Arguments

dt	source data.table
XVar	X-Axis variable name
YVar	Y-Axis variable name
ZVar	character
GroupVar	Character variable
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
ZVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
NumberBins	numeric
AggMethod	character
Title	character
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	"Echarts" or "Plotly"

EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire", #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red- velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum",
EchartsLabels	character
TimeLine	logical
X_Scroll	= TRUE,
Y_Scroll	= TRUE,
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	hex character
FillColor	hex character
FillColorReverse	
	hex character
GridColor	hex character
TextColor	hex character
ZeroLineColor	hex character
ZeroLineWidth	numeric
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Model Evaluation: `Plot.BinaryMetrics()`, `Plot.Calibration.Box()`, `Plot.Calibration.Line()`,
`Plot.ConfusionMatrix()`, `Plot.Gains()`, `Plot.Lift()`, `Plot.PartialDependence.Box()`, `Plot.PartialDependen`
`Plot.ROC()`, `Plot.Residuals.Histogram()`, `Plot.Residuals.Scatter()`, `Plot.ShapImportance()`,
`Plot.VariableImportance()`

Plot.PartialDependence.Line
                                   Plot.PartialDependence.Line

---

Description

This function automatically builds partial dependence calibration plots

Usage

```
Plot.PartialDependence.Line(
  dt = NULL,
  XVar = NULL,
  YVar = NULL,
  ZVar = NULL,
  YVarTrans = "Identity",
```

```
        XVarTrans = "Identity",
        ZVarTrans = "Identity",
        FacetRows = 1,
        FacetCols = 1,
        FacetLevels = NULL,
        GroupVar = NULL,
        NumberBins = 20,
        AggMethod = "mean",
        Height = NULL,
        Width = NULL,
        Title = "Gains Plot",
        ShowLabels = FALSE,
        Title.YAxis = NULL,
        Title.XAxis = NULL,
        Engine = "Plotly",
        EchartsTheme = "macarons",
        EchartsLabels = FALSE,
        TimeLine = TRUE,
        X_Scroll = TRUE,
        Y_Scroll = TRUE,
        BackGroundColor = "#6a6969",
        ChartColor = "#001534",
        FillColor = "#0066ff",
        FillColorReverse = "#97ff00",
        GridColor = "white",
        TextColor = "white",
        ZeroLineColor = "#ffff",
        ZeroLineWidth = 1.25,
        Debug = FALSE
    )
```

Arguments

dt	source data.table
XVar	X-Axis variable name
YVar	Y-Axis variable name
ZVar	character
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
ZVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
GroupVar	Character variable

NumberBins	numeric
AggMethod	character
Title	character
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	"Echarts" or "Plotly"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum",
EchartsLabels	character
TimeLine	logical
X_Scroll	= TRUE,
Y_Scroll	= TRUE,
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	hex character
FillColor	hex character
FillColorReverse	
	hex character
GridColor	hex character
TextColor	hex character
ZeroLineColor	hex character
ZeroLineWidth	numeric
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Model Evaluation: `Plot.BinaryMetrics()`, `Plot.Calibration.Box()`, `Plot.Calibration.Line()`, `Plot.ConfusionMatrix()`, `Plot.Gains()`, `Plot.Lift()`, `Plot.PartialDependence.Box()`, `Plot.PartialDependen` `Plot.ROC()`, `Plot.Residuals.Histogram()`, `Plot.Residuals.Scatter()`, `Plot.ShapImportance()`, `Plot.VariableImportance()`

Plot.Pie   *Plot.Pie*

Description

Build a pie chart by simply passing arguments to a single function

Usage

```
Plot.Pie(
  Engine = "Plotly",
  dt = NULL,
  PreAgg = FALSE,
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  AggMethod = "mean",
  Height = NULL,
  Width = NULL,
  Title = "Bar Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  EchartsTheme = "macarons",
  TimeLine = TRUE,
  X_Scroll = TRUE,
  Y_Scroll = TRUE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  ZeroLineColor = "#ffff",
  ZeroLineWidth = 1.25,
  title.fontSize = 22,
  title.fontWeight = "bold",
  title.textShadowColor = "#63aeff",
  title.textShadowBlur = 3,
  title.textShadowOffsetY = 1,
  title.textShadowOffsetX = -1,
  xaxis.fontSize = 14,
  yaxis.fontSize = 14,
  Debug = FALSE
)
```

Arguments

Engine	'Plotly' or "Echarts"
dt	source data.table
PreAgg	logical
XVar	X-Axis variable name
YVar	Y-Axis variable name
GroupVar	Column name of Group Variable for distinct colored histograms by group levels
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
AggMethod	Choose from 'mean', 'sum', 'sd', and 'median'
Height	= NULL,
Width	= NULL,
Title	title
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", cut","fruit","gray","green","halloween","helianthus","infographic","inspired","jazz","london","dark passion","red-velvet","red","roma","royal","sakura","shine","tech-blue","vintage","walden","wef","v
TimeLine	logical
X_Scroll	logical
Y_Scroll	logical
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	'lightsteelblue'
FillColor	'gray'
FillColorReverse	
	character
GridColor	'white'
TextColor	'darkblue'
ZeroLineColor	= '#ffff'
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area()`, `Plot.BarPlot3D()`, `Plot.Bar()`, `Plot.Box()`, `Plot.Copula3D()`, `Plot.Copula()`, `Plot.CorrMatrix()`, `Plot.Density()`, `Plot.HeatMap()`, `Plot.Histogram()`, `Plot.Line()`, `Plot.River()`, `Plot.Scatter3D()`, `Plot.Scatter()`, `Plot.StackedBar()`, `Plot.Step()`, `Plot.Violin()`

Plot.Residuals.Histogram

Plot.Residuals.Histogram

Description

Residuals Plot

Usage

```
Plot.Residuals.Histogram(
  dt = NULL,
  AggMethod = "mean",
  SampleSize = 1e+05,
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  NumberBins = 20,
  Height = NULL,
  Width = NULL,
  Title = "Calibration Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Echarts",
  EchartsTheme = "macarons",
  TimeLine = FALSE,
  X_Scroll = TRUE,
  Y_Scroll = TRUE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  ZeroLineColor = "#ffff",
```

```
        ZeroLineWidth = 1.25,
        title.fontSize = 22,
        title.fontWeight = "bold",
        title.textShadowColor = "#63aeff",
        title.textShadowBlur = 3,
        title.textShadowOffsetY = 1,
        title.textShadowOffsetX = -1,
        xaxis.fontSize = 14,
        yaxis.fontSize = 14,
        Debug = FALSE
    )
```

Arguments

dt	source data.table
AggMethod	character
SampleSize	numeric
XVar	X-Axis variable name
YVar	Y-Axis variable name
GroupVar	Character variable
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
NumberBins	numeric
Title	character
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	"Echarts" or "Plotly"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum","
TimeLine	logical
X_Scroll	logical
Y_Scroll	logical
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character

ChartColor	character hex
FillColor	character hex
FillColorReverse	
	character hex
GridColor	character hex
TextColor	Not Implemented
ZeroLineColor	character hex
ZeroLineWidth	numeric
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Model Evaluation: `Plot.BinaryMetrics()`, `Plot.Calibration.Box()`, `Plot.Calibration.Line()`, `Plot.ConfusionMatrix()`, `Plot.Gains()`, `Plot.Lift()`, `Plot.PartialDependence.Box()`, `Plot.PartialDepende`
`Plot.PartialDependence.Line()`, `Plot.ROC()`, `Plot.Residuals.Scatter()`, `Plot.ShapImportance()`,
`Plot.VariableImportance()`

Plot.Residuals.Scatter

Plot.Residuals.Scatter

Description

Residuals_2 Plot

Usage

```
Plot.Residuals.Scatter(
  dt = NULL,
  AggMethod = "mean",
  SampleSize = 1e+05,
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  Height = NULL,
  Width = NULL,
  Title = "Calibration Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Echarts",
```

```
    EchartsTheme = "macarons",
    TimeLine = FALSE,
    X_Scroll = TRUE,
    Y_Scroll = TRUE,
    BackGroundColor = "#6a6969",
    ChartColor = "#001534",
    FillColor = "#0066ff",
    FillColorReverse = "#97ff00",
    GridColor = "white",
    TextColor = "white",
    ZeroLineColor = "#ffff",
    ZeroLineWidth = 1.25,
    Debug = FALSE
)
```

Arguments

dt	source data.table
AggMethod	character
SampleSize	numeric
XVar	X-Axis variable name
YVar	Y-Axis variable name
GroupVar	Character variable
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
Title	character
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	"Echarts" or "Plotly"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum","
TimeLine	logical
X_Scroll	logical
Y_Scroll	logical
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character

ChartColor	character hex
FillColor	character hex
FillColorReverse	
	character hex
GridColor	character hex
TextColor	"Not Implemented"
ZeroLineColor	character hex
ZeroLineWidth	numeric
Debug	Debugging purposes
NumberBins	numeric

Author(s)

Adrian Antico

See Also

Other Model Evaluation: `Plot.BinaryMetrics()`, `Plot.Calibration.Box()`, `Plot.Calibration.Line()`,
`Plot.ConfusionMatrix()`, `Plot.Gains()`, `Plot.Lift()`, `Plot.PartialDependence.Box()`, `Plot.PartialDepende`
`Plot.PartialDependence.Line()`, `Plot.ROC()`, `Plot.Residuals.Histogram()`, `Plot.ShapImportance()`,
`Plot.VariableImportance()`

Plot.River	*Plot.River*

Description

This function automatically builds calibration plots and calibration boxplots for model evaluation
using regression, quantile regression, and binary and multinomial classification

Usage

```
Plot.River(
  dt = NULL,
  AggMethod = "mean",
  PreAgg = TRUE,
  Engine = "Echarts",
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  Height = NULL,
  Width = NULL,
  Title = "River Plot",
  ShowLabels = FALSE,
```

```
    Title.YAxis = NULL,
    Title.XAxis = NULL,
    EchartsTheme = "macarons",
    X_Scroll = FALSE,
    Y_Scroll = FALSE,
    TimeLine = TRUE,
    ShowSymbol = FALSE,
    BackGroundColor = "#6a6969",
    ChartColor = "#001534",
    FillColor = "#0066ff",
    FillColorReverse = "#97ff00",
    GridColor = "white",
    TextColor = "white",
    ZeroLineColor = "#ffff",
    ZeroLineWidth = 1.25,
    title.fontSize = 22,
    title.fontWeight = "bold",
    title.textShadowColor = "#63aeff",
    title.textShadowBlur = 3,
    title.textShadowOffsetY = 1,
    title.textShadowOffsetX = -1,
    xaxis.fontSize = 14,
    yaxis.fontSize = 14,
    Debug = FALSE
)
```

Arguments

`dt`	source data.table
`AggMethod`	character
`PreAgg`	logical
`Engine`	"Echarts" or "Plotly"
`XVar`	X-Axis variable name
`YVar`	Y-Axis variable name
`GroupVar`	One Grouping Variable
`YVarTrans`	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
`XVarTrans`	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
`FacetRows`	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
`FacetCols`	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
`FacetLevels`	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
`Height`	= NULL,
`Width`	= NULL,
`Title`	"Title"

ShowLabels	character
Title.YAxis	character
Title.XAxis	character
EchartsTheme	Provide an "Echarts" theme
X_Scroll	logical
Y_Scroll	logical
TimeLine	Logical
ShowSymbol	= FALSE
BackGroundColor	
	color outside of plot window. Rcolors and hex
ChartColor	color
FillColor	color
FillColorReverse	
	character
GridColor	color
TextColor	"Not Implemented"
ZeroLineColor	color
ZeroLineWidth	1
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area()`, `Plot.BarPlot3D()`, `Plot.Bar()`, `Plot.Box()`, `Plot.Copula3D()`, `Plot.Copula()`, `Plot.CorrMatrix()`, `Plot.Density()`, `Plot.HeatMap()`, `Plot.Histogram()`, `Plot.Line()`, `Plot.Pie()`, `Plot.Scatter3D()`, `Plot.Scatter()`, `Plot.StackedBar()`, `Plot.Step()`, `Plot.Violin()`

Plot.ROC	*Plot.ROC*

Description

ROC Plot

Usage

```
Plot.ROC(
  dt = NULL,
  SampleSize = 1e+05,
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
```

```
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  AggMethod = "mean",
  Height = NULL,
  Width = NULL,
  Title = "Calibration Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Echarts",
  EchartsTheme = "macarons",
  TimeLine = FALSE,
  X_Scroll = TRUE,
  Y_Scroll = TRUE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  ZeroLineColor = "#ffff",
  ZeroLineWidth = 1.25,
  Debug = FALSE
)
```

Arguments

dt	source data.table
SampleSize	numeric
XVar	X-Axis variable name
YVar	Y-Axis variable name
GroupVar	Character variable
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
AggMethod	character
Title	character
ShowLabels	character
Title.YAxis	character
Title.XAxis	character

Engine	"Echarts" or "Plotly"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum","
TimeLine	logical
X_Scroll	logical
Y_Scroll	logical
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	character hex
FillColor	character hex
FillColorReverse	
	character hex
GridColor	character hex
TextColor	character hex
ZeroLineColor	character hex
ZeroLineWidth	numeric
Debug	Debugging purposes
NumberBins	numeric

Author(s)

Adrian Antico

See Also

Other Model Evaluation: `Plot.BinaryMetrics()`, `Plot.Calibration.Box()`, `Plot.Calibration.Line()`, `Plot.ConfusionMatrix()`, `Plot.Gains()`, `Plot.Lift()`, `Plot.PartialDependence.Box()`, `Plot.PartialDependen`, `Plot.PartialDependence.Line()`, `Plot.Residuals.Histogram()`, `Plot.Residuals.Scatter()`, `Plot.ShapImportance()`, `Plot.VariableImportance()`

Plot.Scatter	*Plot.Scatter*

Description

Build a copula plot by simply passing arguments to a single function. It will sample your data using SampleSize number of rows. Sampled data is randomized.

Usage

```
Plot.Scatter(
  dt = NULL,
  SampleSize = 30000L,
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  Height = NULL,
  Width = NULL,
  Title = "Scatter Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Plotly",
  EchartsTheme = "macarons",
  TimeLine = FALSE,
  X_Scroll = TRUE,
  Y_Scroll = TRUE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  ZeroLineColor = "#ffff",
  ZeroLineWidth = 1.25,
  title.fontSize = 22,
  title.fontWeight = "bold",
  title.textShadowColor = "#63aeff",
  title.textShadowBlur = 3,
  title.textShadowOffsetY = 1,
  title.textShadowOffsetX = -1,
  yaxis.fontSize = 14,
  xaxis.fontSize = 14,
  tooltip.trigger = "axis",
  Debug = FALSE
)
```

Arguments

dt	source data.table
SampleSize	numeric
XVar	X-Axis variable name
YVar	Y-Axis variable name
GroupVar	Character variable

YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
Height	= NULL,
Width	= NULL,
Title	character
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	"Echarts" or "Plotly"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire", #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum","
TimeLine	logical
X_Scroll	logical
Y_Scroll	logical
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex characterb
ChartColor	character hex
FillColor	character hex
FillColorReverse	
	character
GridColor	character hex
TextColor	character hex
ZeroLineColor	character hex
ZeroLineWidth	numeric
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area()`, `Plot.BarPlot3D()`, `Plot.Bar()`, `Plot.Box()`, `Plot.Copula3D()`, `Plot.Copula()`, `Plot.CorrMatrix()`, `Plot.Density()`, `Plot.HeatMap()`, `Plot.Histogram()`, `Plot.Line()`, `Plot.Pie()`, `Plot.River()`, `Plot.Scatter3D()`, `Plot.StackedBar()`, `Plot.Step()`, `Plot.Violin()`

Plot.Scatter3D   *Plot.Scatter3D*

Description

Build a 3D-copula plot by simply passing arguments to a single function. It will sample your data using SampleSize number of rows. Sampled data is randomized.

Usage

```
Plot.Scatter3D(
  dt = NULL,
  SampleSize = 1e+05,
  XVar = NULL,
  YVar = NULL,
  ZVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  ZVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  Height = NULL,
  Width = NULL,
  Title = "3D Scatter",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Plotly",
  EchartsTheme = "macarons",
  TimeLine = FALSE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  ZeroLineColor = "#ffff",
  ZeroLineWidth = 1.25,
  title.fontSize = 22,
  title.fontWeight = "bold",
  title.textShadowColor = "#63aeff",
  title.textShadowBlur = 3,
  title.textShadowOffsetY = 1,
  title.textShadowOffsetX = -1,
  yaxis.fontSize = 14,
  xaxis.fontSize = 14,
  zaxis.fontSize = 14,
  Debug = FALSE
)
```

Arguments

`dt`	source data.table
`SampleSize`	An integer for the number of rows to use. Sampled data is randomized. If NULL then ignored
`XVar`	X-Axis variable name
`YVar`	Y-Axis variable name
`ZVar`	Z-Axis variable name
`GroupVar`	Requires an XVar and YVar already be defined
`YVarTrans`	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
`XVarTrans`	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
`ZVarTrans`	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
`FacetRows`	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
`FacetCols`	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
`FacetLevels`	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
`Height`	= NULL,
`Width`	= NULL,
`Title`	'Violin Plot'
`ShowLabels`	character
`Title.YAxis`	character
`Title.XAxis`	character
`Engine`	= "Plotly"
`EchartsTheme`	= "macaron"
`TimeLine`	Logical
`BackGroundColor`	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
`ChartColor`	'lightsteelblue'
`FillColor`	'gray'
`FillColorReverse`	
	character
`GridColor`	'white'
`TextColor`	'darkblue'
`ZeroLineColor`	= '#ffff',
`ZeroLineWidth`	= 2,
`Debug`	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area()`, `Plot.BarPlot3D()`, `Plot.Bar()`, `Plot.Box()`, `Plot.Copula3D()`, `Plot.Copula()`, `Plot.CorrMatrix()`, `Plot.Density()`, `Plot.HeatMap()`, `Plot.Histogram()`, `Plot.Line()`, `Plot.Pie()`, `Plot.River()`, `Plot.Scatter()`, `Plot.StackedBar()`, `Plot.Step()`, `Plot.Violin()`

Plot.ShapImportance   *Plot.ShapImportance*

Description

Plot.ShapImportance variable importance

Usage

```
Plot.ShapImportance(
  dt,
  PreAgg = FALSE,
  AggMethod = "meanabs",
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  ZVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  NumberBins = 21,
  NumLevels_X = 33,
  NumLevels_Y = 33,
  Height = NULL,
  Width = NULL,
  Title = "Shap Importance",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Plotly",
  EchartsTheme = "dark",
  X_Scroll = TRUE,
  Y_Scroll = TRUE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  Debug = FALSE
)
```

Arguments

dt	source data.table
AggMethod	"mean", "median", "sum", "sd", "skewness","kurtosis", "coeffvar", "meanabs", "medianabs", "sumabs", "sdabs", "skewnessabs", "kurtosisabs", "CoeffVarabs"
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
ZVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
NumberBins	= 21
NumLevels_X	= 20
NumLevels_Y	= 20
Title	"Heatmap"
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	"plotly", "echarts4r"
EchartsTheme	"dark-blue"
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	= '#001534'
FillColor	= "#0066ff"
FillColorReverse	
	character hex
GridColor	= '#ffffff'
Debug	= FALSE

Author(s)

Adrian Antico

See Also

Other Model Evaluation: `Plot.BinaryMetrics()`, `Plot.Calibration.Box()`, `Plot.Calibration.Line()`, `Plot.ConfusionMatrix()`, `Plot.Gains()`, `Plot.Lift()`, `Plot.PartialDependence.Box()`, `Plot.PartialDepend`, `Plot.PartialDependence.Line()`, `Plot.ROC()`, `Plot.Residuals.Histogram()`, `Plot.Residuals.Scatter()`, `Plot.VariableImportance()`

Plot.StackedBar   *Plot.StackedBar*

Description

Build a stacked bar plot vs a grouped bar plot

Usage

```
Plot.StackedBar(
  dt = NULL,
  PreAgg = FALSE,
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  AggMethod = "mean",
  Height = NULL,
  Width = NULL,
  Title = "Stacked Bar",
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  ShowLabels = FALSE,
  Engine = "Echarts",
  EchartsTheme = "macarons",
  TimeLine = TRUE,
  X_Scroll = TRUE,
  Y_Scroll = TRUE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  ZeroLineColor = "#ffff",
  ZeroLineWidth = 1.25,
  title.fontSize = 22,
  title.fontWeight = "bold",
  title.textShadowColor = "#63aeff",
  title.textShadowBlur = 3,
  title.textShadowOffsetY = 1,
  title.textShadowOffsetX = -1,
  yaxis.fontSize = 14,
  xaxis.fontSize = 14,
  Debug = FALSE
)
```

Arguments

dt	source data.table
PreAgg	logical
XVar	X-Axis variable name
YVar	Y-Axis variable name
GroupVar	Column name of Group Variable for distinct colored histograms by group levels
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
AggMethod	Choose from 'mean', 'sum', 'sd', and 'median'
Height	NULL
Width	NULL
Title	title
Title.YAxis	NULL. If NULL, YVar name will be used
Title.XAxis	NULL. If NULL, XVar name will be used
ShowLabels	logical
Engine	'Plotly' or "Echarts"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum",
TimeLine	logical
X_Scroll	logical
Y_Scroll	logical
BackGroundColor	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	'lightsteelblue'
FillColor	'gray'
FillColorReverse	character
GridColor	'white'
TextColor	'darkblue'
ZeroLineColor	'#ffff'
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area()`, `Plot.BarPlot3D()`, `Plot.Bar()`, `Plot.Box()`, `Plot.Copula3D()`, `Plot.Copula()`, `Plot.CorrMatrix()`, `Plot.Density()`, `Plot.HeatMap()`, `Plot.Histogram()`, `Plot.Line()`, `Plot.Pie()`, `Plot.River()`, `Plot.Scatter3D()`, `Plot.Scatter()`, `Plot.Step()`, `Plot.Violin()`

Plot.StandardPlots *Plot.StandardPlots*

Description

Helper for standard plots

Usage

```
Plot.StandardPlots(
  dt = NULL,
  PreAgg = FALSE,
  PlotType = "Scatter",
  SampleSize = 100000L,
  AggMethod = "mean",
  NumberBins = 30,
  YVar = NULL,
  XVar = NULL,
  ZVar = NULL,
  GroupVar = NULL,
  YVarTrans = NULL,
  XVarTrans = NULL,
  ZVarTrans = NULL,
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  Height = NULL,
  Width = NULL,
  PlotEngineType = "Plotly",
  EchartsTheme = "dark-blue",
  TimeLine = FALSE,
  Title = NULL,
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  NumLevels_Y = 75,
  NumLevels_X = 40,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
```

```
  GridColor = "white",
  TextColor = "white",
  FontSize = 14,
  Debug = FALSE
)
```

Arguments

dt	source data.table
PreAgg	FALSE
PlotType	character
SampleSize	character
AggMethod	character
NumberBins	For histograms
YVar	Y-Axis variable name
XVar	X-Axis variable name
ZVar	Z-Axis variable name
GroupVar	Character variable variable
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
ZVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
Height	NULL or valid css unit
Width	NULL or valid css unit
PlotEngineType	"Echarts" or "Plotly"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum","
TimeLine	character
Title	character
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
BackGroundColor	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character

```
ChartColor          character
FillColor           character
FillColorReverse
                    character
GridColor           character
TextColor           character
FontSize            numeric
Debug               Debugging purposes
```

Author(s)

Adrian Antico

See Also

Other Auto Plotting: `Plots.ModelEvaluation`()

Plot.Step   *Plot.Step*

Description

This function automatically builds calibration plots and calibration boxplots for model evaluation using regression, quantile regression, and binary and multinomial classification

Usage

```
Plot.Step(
  dt = NULL,
  AggMethod = "mean",
  PreAgg = TRUE,
  Engine = "Echarts",
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  Height = NULL,
  Width = NULL,
  Title = "Line Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  EchartsTheme = "macarons",
  X_Scroll = FALSE,
  Y_Scroll = FALSE,
  TimeLine = TRUE,
```

```
    ShowSymbol = FALSE,
    BackGroundColor = "#6a6969",
    ChartColor = "#001534",
    FillColor = "#0066ff",
    FillColorReverse = "#97ff00",
    GridColor = "white",
    TextColor = "white",
    ZeroLineColor = "#ffff",
    ZeroLineWidth = 1.25,
    title.fontSize = 22,
    title.fontWeight = "bold",
    title.textShadowColor = "#63aeff",
    title.textShadowBlur = 3,
    title.textShadowOffsetY = 1,
    title.textShadowOffsetX = -1,
    xaxis.fontSize = 14,
    yaxis.fontSize = 14,
    Debug = FALSE
)
```

Arguments

dt	source data.table
AggMethod	character
PreAgg	logical
Engine	"Echarts" or "Plotly"
XVar	X-Axis variable name
YVar	Y-Axis variable name
GroupVar	One Grouping Variable
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
Height	= NULL,
Width	= NULL,
Title	"Title"
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
EchartsTheme	Provide an "Echarts" theme
X_Scroll	logical

Y_Scroll	logical
TimeLine	Logical
ShowSymbol	= FALSE
BackGroundColor	
	color outside of plot window. Rcolors and hex
ChartColor	color
FillColor	color
FillColorReverse	
	character
GridColor	color
TextColor	"Not Implemented"
ZeroLineColor	color
ZeroLineWidth	1
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area()`, `Plot.BarPlot3D()`, `Plot.Bar()`, `Plot.Box()`, `Plot.Copula3D()`, `Plot.Copula()`, `Plot.CorrMatrix()`, `Plot.Density()`, `Plot.HeatMap()`, `Plot.Histogram()`, `Plot.Line()`, `Plot.Pie()`, `Plot.River()`, `Plot.Scatter3D()`, `Plot.Scatter()`, `Plot.StackedBar()`, `Plot.Violin()`

Plot.Stock	*Plot.Stock*

Description

Create a candlestick plot for stocks. See https://plotly.com/r/figure-labels/

Usage

```
Plot.Stock(
  StockDataOutput,
  Type = "candlestick",
  Metric = "Stock Price",
  PlotEngineType = "Echarts",
  Width = NULL,
  Height = NULL,
  EchartsTheme = "macarons",
  TextColor = "white",
  ShadowBlur = 0,
  ShadowColor = "black",
  ShadowOffsetX = 0,
  ShadowOffsetY = 0,
  title.fontSize = 14,
```

```
    title.fontWeight = "bold",
    title.textShadowColor = "#63aeff",
    title.textShadowBlur = 3,
    title.textShadowOffsetY = 1,
    title.textShadowOffsetX = -1,
    Color = "green",
    Color0 = "red",
    BorderColor = "transparent",
    BorderColor0 = "transparent",
    BorderColorDoji = "transparent",
    xaxis.fontSize = 14,
    yaxis.fontSize = 14,
    Debug = FALSE
)
```

Arguments

StockDataOutput
                PolyOut returned from StockData()

Type	'candlestick', 'ohlc'
PlotEngineType	= "Echarts" or "Plotly"
Width	= "1450px"
Height	= "600px"
EchartsTheme	= "macarons"
TextColor	= "white"
ShadowBlur	= 5. Chart boxes' shadow blur amount. This attribute should be used along with shadowColor,shadowOffsetX, shadowOffsetY to set shadow to component
ShadowColor	"black"
ShadowOffsetX	0
ShadowOffsetY	0
title.fontSize	= 22

title.fontWeight
                = "bold", # norma

title.textShadowColor
                = '#63aeff'

title.textShadowBlur
                = 3

title.textShadowOffsetY
                = 1

title.textShadowOffsetX
                = -1

xaxis.fontSize	= 14
yaxis.fontSize	= 14

Author(s)

Adrian Antico

See Also

Other Stock Plots: StockData()

Plot.VariableImportance

Plot.VariableImportance

Description

Generate variable importance plots

Usage

```
Plot.VariableImportance(
  dt = NULL,
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  AggMethod = "mean",
  Height = NULL,
  Width = NULL,
  Title = "Variable Importance Plot",
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  Engine = "Echarts",
  EchartsTheme = "macarons",
  TimeLine = TRUE,
  X_Scroll = TRUE,
  Y_Scroll = TRUE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  ZeroLineColor = "#ffff",
  ZeroLineWidth = 1.25,
  title.fontSize = 22,
  title.fontWeight = "bold",
  title.textShadowColor = "#63aeff",
  title.textShadowBlur = 3,
  title.textShadowOffsetY = 1,
  title.textShadowOffsetX = -1,
  xaxis.fontSize = 14,
  yaxis.fontSize = 14,
  Debug = FALSE
)
```

Arguments

dt	source data.table
XVar	Column name of X-Axis variable. If NULL then ignored
YVar	Column name of Y-Axis variable. If NULL then ignored
GroupVar	Column name of Group Variable for distinct colored histograms by group levels
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
AggMethod	Choose from 'mean', 'sum', 'sd', and 'median'
Title	title
ShowLabels	character
Title.YAxis	character
Title.XAxis	character
Engine	'Plotly' or "Echarts"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo", #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum","
TimeLine	logical
X_Scroll	logical
Y_Scroll	logical
BackGroundColor	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	'lightsteelblue'
FillColor	'gray'
FillColorReverse	character hex
GridColor	'white'
TextColor	'darkblue'
ZeroLineColor	= '#ffff'
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Model Evaluation: `Plot.BinaryMetrics()`, `Plot.Calibration.Box()`, `Plot.Calibration.Line()`,
`Plot.ConfusionMatrix()`, `Plot.Gains()`, `Plot.Lift()`, `Plot.PartialDependence.Box()`, `Plot.PartialDepende`
`Plot.PartialDependence.Line()`, `Plot.ROC()`, `Plot.Residuals.Histogram()`, `Plot.Residuals.Scatter()`,
`Plot.ShapImportance()`

Plot.Violin   *Plot.Violin*

Description

Build a violin plot by simply passing arguments to a single function. It will sample your data using
SampleSize number of rows. Sampled data is randomized.

Usage

```
Plot.Violin(
  dt = NULL,
  XVar = NULL,
  YVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  Height = NULL,
  Width = NULL,
  Title = "Violin Plot",
  SampleSize = 1e+05,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  ZeroLineColor = "#ffff",
  ZeroLineWidth = 1.25,
  Debug = FALSE
)
```

Arguments

dt	source data.table
XVar	X-Axis variable name
YVar	Y-Axis variable name
GroupVar	Requires an XVar and YVar already be defined
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standard-ize", "BoxCox", "YeoJohnson"

XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
Height	= NULL,
Width	= NULL,
Title	'Violin Plot'
SampleSize	An integer for the number of rows to use. Sampled data is randomized. If NULL then ignored
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	'lightsteelblue'
FillColor	'gray'
FillColorReverse	
	character
GridColor	'white'
TextColor	'darkblue'
ZeroLineColor	= '#ffff',
ZeroLineWidth	= 2,
Debug	Debugging purposes
ShowLabels	character
Title.YAxis	character
Title.XAxis	character

Author(s)

Adrian Antico

See Also

Other Standard Plots: `Plot.Area()`, `Plot.BarPlot3D()`, `Plot.Bar()`, `Plot.Box()`, `Plot.Copula3D()`, `Plot.Copula()`, `Plot.CorrMatrix()`, `Plot.Density()`, `Plot.HeatMap()`, `Plot.Histogram()`, `Plot.Line()`, `Plot.Pie()`, `Plot.River()`, `Plot.Scatter3D()`, `Plot.Scatter()`, `Plot.StackedBar()`, `Plot.Step()`

Plots.ModelEvaluation   *Plots.ModelEvaluation*

Description

Plot helper for model evaluation plot types

Usage

```
Plots.ModelEvaluation(
  dt = NULL,
  AggMethod = "mean",
  SampleSize = 100000L,
  PlotType = NULL,
  YVar = NULL,
  TargetLevel = NULL,
  ZVar = NULL,
  XVar = NULL,
  GroupVar = NULL,
  YVarTrans = "Identity",
  XVarTrans = "Identity",
  ZVarTrans = "Identity",
  FacetRows = 1,
  FacetCols = 1,
  FacetLevels = NULL,
  NumLevels_Y = 75,
  NumLevels_X = 40,
  Height = NULL,
  Width = NULL,
  Title = NULL,
  ShowLabels = FALSE,
  Title.YAxis = NULL,
  Title.XAxis = NULL,
  PlotEngineType = "Echarts",
  EchartsTheme = "dark-blue",
  TimeLine = FALSE,
  BackGroundColor = "#6a6969",
  ChartColor = "#001534",
  FillColor = "#0066ff",
  FillColorReverse = "#97ff00",
  GridColor = "white",
  TextColor = "white",
  FontSize = 14L,
  NumberBins = 20,
  Debug = FALSE
)
```

Arguments

dt	source data.table
AggMethod	character

SampleSize	100000L
PlotType	character
YVar	Y-Axis variable name
ZVar	Z-Axis variable name
XVar	X-Axis variable name
GroupVar	Character variable
YVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
XVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
ZVarTrans	"Asinh", "Log", "LogPlus1", "Sqrt", "Asin", "Logit", "PercRank", "Standardize", "BoxCox", "YeoJohnson"
FacetRows	Defaults to 1 which causes no faceting to occur vertically. Otherwise, supply a numeric value for the number of output grid rows
FacetCols	Defaults to 1 which causes no faceting to occur horizontally. Otherwise, supply a numeric value for the number of output grid columns
FacetLevels	Faceting rows x columns is the max number of levels allowed in a grid. If your GroupVar has more you can supply the levels to display.
NumLevels_Y	= 75
NumLevels_X	= 40
Height	= NULL,
Width	= NULL,
PlotEngineType	"Echarts" or "Plotly"
EchartsTheme	"auritus","azul","bee-inspired","blue","caravan","carp","chalk","cool","dark-bold","dark","eduardo" #' "essos","forest","fresh-cut","fruit","gray","green","halloween","helianthus","infographic","inspire #' "jazz","london","dark","macarons","macarons2","mint","purple-passion","red-velvet","red","roma","royal", #' "sakura","shine","tech-blue","vintage","walden","wef","weforum","
TimeLine	logical
BackGroundColor	
	color outside of plot window. Rcolors and hex outside of plot window. Rcolors and hex character
ChartColor	hex
FillColor	hex
FillColorReverse	
	hex
GridColor	hex
TextColor	hex
NumberBins	numeric
Debug	Debugging purposes

Author(s)

Adrian Antico

See Also

Other Auto Plotting: `Plot.StandardPlots()`

StockData *StockData*

Description

Create stock data for plotting using Plot.Stock()

Usage

```
StockData(
  PolyOut = NULL,
  Symbol = "TSLA",
  CompanyName = "Tesla Inc. Common Stock",
  Metric = "Stock Price",
  TimeAgg = "days",
  StartDate = "2022-01-01",
  EndDate = Sys.Date(),
  APIKey = NULL,
  timeElapsed = 61,
  Debug = FALSE
)
```

Arguments

PolyOut	NULL. If NULL, data is pulled. If supplied, data is not pulled.
Symbol	ticker symbol string
CompanyName	company name if you have it. ends up in title, that is all
Metric	Stock Price, Percent Returns (use symbol for percent), Percent Log Returns (use symbol for percent), Index, Quadratic Variation
TimeAgg	= 'days', 'weeks', 'months'
StartDate	Supply a start date. E.g. '2022-01-01'
EndDate	Supply an end date. E.g. 'Sys.Date()'
APIKey	Supply your polygon API key
timeElapsed	= 60
Type	'candlestick', 'ohlc'

Author(s)

Adrian Antico

See Also

Other Stock Plots: `Plot.Stock()`

UpdateDocs *UpdateDocs*

Description

Update helf files and reference manual

Usage

```
UpdateDocs(BuildVignette = FALSE, Root = NULL)
```

Author(s)

Adrian Antico

See Also

Other Utilities: BuildBinary(), Install()

Index