

affyImGUI

April 20, 2011

affyImGUI

Graphical User Interface for the limma microarray package

Description

Graphical User Interface for Affy analysis using the limma microarray package

Usage

```
AboutaffyImGUI ()
affyHelp ()
affyImGUI (BigfontsForaffyImGUIpresentation=FALSE)
affyImGUIhelp ()
affyPlotMA ()
affyPlotMAcontrast ()
ALGlimmaUsersGuide (view=TRUE)
ChooseCDF ()
ChooseContrastParameterization ()
chooseDir ()
ChooseEbayesStatistic ()
ComputeContrasts ()
ComputeLinearModelFit ()
CopyGraph (img)
DeleteContrastParameterization ()
deleteItemFromList (list1, itemName=NULL, index=NULL)
DensityPlot ()
DensityPlotAll ()
evalRcode ()
ExportHTMLreport ()
ExportNormalizedExpressionValues ()
ExportTopTable ()
fixSeps (string)
generalPlotFunction (code="", WindowTitle="")
GetComponentstoExportInHTMLreport (contrastParameterizationIndex=NULL)
GetContrast (contrastParameterizationIndex)
GetContrastNamesForHeatDiagram (numContrasts=2, ContrastNames=c ("Contrast 1", "Cont
GetContrastParameterizationName ()
GetContrasts (NumContrasts=0)
```

```
GetDEcutoff ()
GetGeneLabelsOptions ()
GetJpegOrPngParams (graphFileType)
GetJpegOrPngX11Params (graphFileType)
GetlimmaDataSetName ()
GetLogPLMDataChoice ()
GetMultipleContrasts (contrastParameterizationIndex)
GetNormalizationMethod ()
getPackageVersion (pkgName)
GetParameterizationName ()
GetPlotLabels (plottitle="", xlabel="", ylabel="")
GetPlotSize ()
GetPlotTitle (plottitle="")
GetPValueCutoff (p.value=0.01)
GetResidualTypeChoice ()
GetRNATypesFrom.ContrastsFromDropDowns.String (string)
GetSetNames (numSets=2, set1="", set2="", set3="")
GetSlideNum (all=FALSE)
GetSlideNums ()
GetWhichProbes (includeBoth=FALSE)
GetWtAreaParams ()
GetWtFlagParams ()
HeatDiagramDialog (parameterName)
HeatDiagramPlot ()
HTMLplotUsingFunction (Caption = "", File = .HTML.file, GraphRelativeDirectory =
ImageArrayPlot ()
ImageQualityResidualPlot ()
ImageQualityWeightPlot ()
initGlobals ()
IntensityHistogram ()
IntensityHistogramAll ()
limmaHelp ()
LogOddsPlot ()
NewLimmaFile ()
NormalizedIntensityBoxPlot ()
NormalizeNow ()
nstrstr (haystack, needle)
NUSEPlotAll ()
onDestroy ()
onExit ()
OpenALimmaFile (FileName)
OpenCDFandTargetsfiles ()
OpenCDFFile ()
OpenLimmaFile ()
OpenTargetsFile ()
PlotOptions ()
QQTplot ()
RawIntensityBoxPlot ()
Require (pkg)
Resize (img, plotFunction)
RLEPlotAll ()
RNADegradationPlotAll ()
```

```

SaveAsLimmaFile()
SaveGraphAsJpeg(initialfile, plotFunction)
SaveGraphAsPDF(initialfile, plotFunction)
SaveGraphAsPNG(initialfile, plotFunction)
SaveGraphAsPostscript(initialfile, plotFunction)
SaveLimmaFile()
SetupPlotKeyBindings(tt, img)
SetupPlotMenus(tt, initialfile, plotFunction, img)
SetWD()
showChangeLog(n = 20)
showCitations()
showTopTable(..., export=FALSE)
SimplifyContrastsExpression(string)
strstr(haystack, needle)
tclArrayVar()
TclRequire(tclPkg)
topTable2(fit, coef = 1, number = 10, genelist = NULL, adjust.method = "holm", so
toptable2(fit, coef = 1, number = 10, genelist = NULL, A = NULL, eb = NULL, adjus
Try(expr)
TryReadImgProcFile(expr)
UpDownOrBoth()
vennDiagramaffyImGUI(object, include = "both", names, cex = 1.5, mar = rep(1, 4)
VennDiagramPlot()
ViewContrastsMatrixAsPairs(contrastsMatrix, contrastsMatrixList, contrastParameter
ViewContrastsMatrixInTable(contrastsMatrixList, contrastParameterizationIndex =
ViewExistingContrastParameterization()
ViewRNATargets()

```

Arguments

```

BigfontsForaffyImGUIpresentation
    affyImGUI:arg1: If set to TRUE, larger fonts are used. However, some font sizes
    are not controlled by affyImGUI and so must be adjusted in the operating sys-
    tem, e.g. in the Control Panel in Windows under Display, Appearance.
...
HTMLplotUsingFunction:arg14:and:showTopTable:arg1:and:toptable2:arg9:and:vennDiagramaffyIm
Align
    HTMLplotUsingFunction:arg8
all
    GetSlideNum:arg1
BG
    HTMLplotUsingFunction:arg12
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    GetContrastNamesForHeatDiagram:arg2
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    Try:arg1:and:TryReadImgProcFile:arg1
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    HTMLplotUsingFunction:arg2
FileName
    OpenALimmaFile:arg1
GraphAbsoluteDirectory
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```

GraphBorder	HTMLplotUsingFunction:arg7
GraphFileName	HTMLplotUsingFunction:arg5
graphFileType	GetJpegOrPngParams:arg1:and:GetJpegOrPngX11Params:arg1
GraphRelativeDirectory	HTMLplotUsingFunction:arg3
GraphSaveAs	HTMLplotUsingFunction:arg6
haystack	nstrstr:arg1:and:strstr:arg1
Height	HTMLplotUsingFunction:arg11
img	Resize:arg1:and:SetupPlotMenus:arg4:and:CopyGraph:arg1:and:SetupPlotKeyBindings:arg2
includeBoth	GetWhichProbes:arg1
index	deleteItemFromList:arg3:an index
initialfile	SetupPlotMenus:arg2:and:SaveGraphAsJpeg:arg1:and:SaveGraphAsPDF:arg1:and:SaveGraphAsPNG:arg1
itemName	deleteItemFromList:arg2:an item name
list1	deleteItemFromList:arg1:a list
needle	nstrstr:arg2:and:strstr:arg2
NumContrasts	GetContrasts:arg1
numContrasts	GetContrastNamesForHeatDiagram:arg1
numSets	GetSetNames:arg1
p.value	GetPValueCutoff:arg1:A p-value cutoff.
parameterName	HeatDiagramDialog:arg1
pkgName	getPackageVersion:arg1
pkg	Require:arg1
plotFunction	Resize:arg2:and:HTMLplotUsingFunction:arg9:and:SetupPlotMenus:arg3:and:SaveGraphAsJpeg:arg1:and:SaveGraphAsPDF:arg1:and:SaveGraphAsPNG:arg1
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res	HTMLplotUsingFunction:arg13
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set2	GetSetNames:arg3
set3	GetSetNames:arg4
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tt	SetupPlotMenus:arg1:and:SetupPlotKeyBindings:arg1
view	ALGlimmaUsersGuide:arg1:A boolean determinig if the users'd guide will be viewed
Width	HTMLplotUsingFunction:arg10
WindowTitle	generalPlotFunction: arg2: a title
xlabel	GetPlotLabels:arg2
ylabel	GetPlotLabels:arg3
fit	topTable2:arg1:and:toptable2:arg1
coef	topTable2:arg2:and:toptable2:arg2

number	topTable2:arg3:and:toptable2:arg3
genelist	topTable2:arg4:and:toptable2:arg4
A	toptable2:arg5
eb	toptable2:arg6
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sort.by	topTable2:arg6:and:toptable2:arg8
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include	vennDiagramaffylmGUI:arg2
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cex	vennDiagramaffylmGUI:arg4
mar	vennDiagramaffylmGUI:arg5
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contrastsMatrixList	ViewContrastsMatrixAsPairs:arg2:and:ViewContrastsMatrixInTable:arg1
n	showChangeLog:arg1
PointSize	HTMLplotUsingFunction:arg12

Details

This function launches a Graphical User Interface for the limma package by Gordon Smyth. The GUI uses Tk widgets (via the R Tcl/Tk interface by Peter Dalgaard) in order to provide a simple interface to the limma functions for linear modelling of microarrays and identification of differentially expressed genes.

Author(s)

James Wettenhall

ALGchangeLog	<i>affylmGUI Change Log</i>
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Description

Write as text the most recent changes from the affylmGUI package changelog.

Usage

```
ALGchangeLog (n=20)
```

Arguments

n integer, number of lines to write of changelog.

Value

No value is produced, but a number of lines of text are written to standard output.

Author(s)

Gordon Smyth

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