

affylmGUI

April 19, 2009

ALGchangeLog

affylmGUI Change Log

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

affylmGUI

Graphical User Interface for the limma microarray package

Description

Graphical User Interface for Affy analysis using the limma microarray package

Usage

```

AboutaffyilmGUI()
affyHelp()
affyilmGUI(BigfontsForaffyilmGUIpresentation=FALSE)
affyilmGUIhelp()
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(FileName)
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, contrastParameterizationIndex = 1)
ViewContrastsMatrixInTable (contrastsMatrixList, contrastParameterizationIndex = 1)
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:vennDiagramaffyImGUI:arg10
Align
    HTMLplotUsingFunction:arg8
all
    GetSlideNum:arg1
BG
    HTMLplotUsingFunction:arg12
Caption
    HTMLplotUsingFunction:arg1
code
    generalPlotFunction: arg1: a code
ContrastNames
    GetContrastNamesForHeatDiagram:arg2
contrastParameterizationIndex
    GetComponentsToExportInHTMLreport:arg1:and:contrastParameterizationIndex:arg1:and:GetContrastNames:arg2
export
    showTopTable:arg2
expr
    Try:arg1:and:TryReadImgProcFile:arg1
FileName
    OpenALimmaFile:arg1:and:OpenLimmaFile:arg1
File
    HTMLplotUsingFunction:arg2
GraphAbsoluteDirectory
    HTMLplotUsingFunction:arg4
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:ar
plottitle     GetPlotLabels:arg1:and:GetPlotTitle:arg1
res           HTMLplotUsingFunction:arg13
set1          GetSetNames:arg2
set2          GetSetNames:arg3
set3          GetSetNames:arg4
string        fixSeps:arg1:A character string:and:GetRNATypesFrom.ContrastsFromDropDowns.String:arg1:and:
tclPkg        TclRequire:arg1
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
adjust.method
              topTable2:arg5:and:toptable2:arg7
sort.by       topTable2:arg6:and:toptable2:arg8
object        vennDiagramaffyImGUI:arg1
include       vennDiagramaffyImGUI:arg2
names         vennDiagramaffyImGUI:arg3
cex           vennDiagramaffyImGUI:arg4
mar           vennDiagramaffyImGUI:arg5
contrastsMatrix
              ViewContrastsMatrixAsPairs:arg1
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 TclTk 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

Index

*Topic IO

affyilmGUI, 1

*Topic documentation

ALGchangeLog, 1

AboutaffyilmGUI (*affyilmGUI*), 1

affyHelp (*affyilmGUI*), 1

affyilmGUI, 1

affyilmGUIhelp (*affyilmGUI*), 1

affyPlotMA (*affyilmGUI*), 1

affyPlotMAcontrast (*affyilmGUI*), 1

ALGchangeLog, 1

ALGlimmaUsersGuide (*affyilmGUI*), 1

ChooseCDF (*affyilmGUI*), 1

ChooseContrastParameterization
(*affyilmGUI*), 1

chooseDir (*affyilmGUI*), 1

ChooseEbayesStatistic
(*affyilmGUI*), 1

ComputeContrasts (*affyilmGUI*), 1

ComputeLinearModelFit
(*affyilmGUI*), 1

CopyGraph (*affyilmGUI*), 1

DeleteContrastParameterization
(*affyilmGUI*), 1

deleteItemFromList (*affyilmGUI*), 1

DensityPlot (*affyilmGUI*), 1

DensityPlotAll (*affyilmGUI*), 1

evalRcode (*affyilmGUI*), 1

ExportHTMLreport (*affyilmGUI*), 1

ExportNormalizedExpressionValues
(*affyilmGUI*), 1

ExportTopTable (*affyilmGUI*), 1

fixSeps (*affyilmGUI*), 1

generalPlotFunction (*affyilmGUI*), 1

GetComponentstoExportInHTMLreport
(*affyilmGUI*), 1

GetContrast (*affyilmGUI*), 1

GetContrastNamesForHeatDiagram
(*affyilmGUI*), 1

GetContrastParameterizationName
(*affyilmGUI*), 1

GetContrasts (*affyilmGUI*), 1

GetDEcutoff (*affyilmGUI*), 1

GetGeneLabelsOptions (*affyilmGUI*),
1

GetJpegOrPngParams (*affyilmGUI*), 1

GetJpegOrPngX11Params
(*affyilmGUI*), 1

GetlimmaDataSetName (*affyilmGUI*), 1

GetLogPLMDataChoice (*affyilmGUI*), 1

GetMultipleContrasts (*affyilmGUI*),
1

GetNormalizationMethod
(*affyilmGUI*), 1

getPackageVersion (*affyilmGUI*), 1

GetParameterizationName
(*affyilmGUI*), 1

GetPlotLabels (*affyilmGUI*), 1

GetPlotSize (*affyilmGUI*), 1

GetPlotTitle (*affyilmGUI*), 1

GetPValueCutoff (*affyilmGUI*), 1

GetResidualTypeChoice
(*affyilmGUI*), 1

GetRNATypesFrom.ContrastsFromDropDowns.String
(*affyilmGUI*), 1

GetSetNames (*affyilmGUI*), 1

GetSlideNum (*affyilmGUI*), 1

GetSlideNums (*affyilmGUI*), 1

GetWhichProbes (*affyilmGUI*), 1

GetWtAreaParams (*affyilmGUI*), 1

GetWtFlagParams (*affyilmGUI*), 1

HeatDiagramDialog (*affyilmGUI*), 1

HeatDiagramPlot (*affyilmGUI*), 1

HTMLplotUsingFunction
(*affyilmGUI*), 1

ImageArrayPlot (*affyilmGUI*), 1

ImageQualityResidualPlot
(*affyilmGUI*), 1

ImageQualityWeightPlot
(*affyilmGUI*), 1

initGlobals (*affyilmGUI*), 1

IntensityHistogram (*affyilmGUI*), 1
 IntensityHistogramAll
 (*affyilmGUI*), 1

 limmaHelp (*affyilmGUI*), 1
 LogOddsPlot (*affyilmGUI*), 1

 NewLimmaFile (*affyilmGUI*), 1
 NormalizedIntensityBoxPlot
 (*affyilmGUI*), 1
 NormalizeNow (*affyilmGUI*), 1
 nstrstr (*affyilmGUI*), 1
 NUSEPlotAll (*affyilmGUI*), 1

 onDestroy (*affyilmGUI*), 1
 onExit (*affyilmGUI*), 1
 OpenALimmaFile (*affyilmGUI*), 1
 OpenCDFandTargetsfiles
 (*affyilmGUI*), 1
 OpenCDFFile (*affyilmGUI*), 1
 OpenLimmaFile (*affyilmGUI*), 1
 OpenTargetsFile (*affyilmGUI*), 1

 PlotOptions (*affyilmGUI*), 1

 QQTplot (*affyilmGUI*), 1

 RawIntensityBoxPlot (*affyilmGUI*), 1
 Require (*affyilmGUI*), 1
 Resize (*affyilmGUI*), 1
 RLEPlotAll (*affyilmGUI*), 1
 RNADegradationPlotAll
 (*affyilmGUI*), 1

 SaveAsLimmaFile (*affyilmGUI*), 1
 SaveGraphAsJpeg (*affyilmGUI*), 1
 SaveGraphAsPDF (*affyilmGUI*), 1
 SaveGraphAsPNG (*affyilmGUI*), 1
 SaveGraphAsPostscript
 (*affyilmGUI*), 1
 SaveLimmaFile (*affyilmGUI*), 1
 SetupPlotKeyBindings (*affyilmGUI*),
 1
 SetupPlotMenus (*affyilmGUI*), 1
 SetWD (*affyilmGUI*), 1
 showChangeLog (*affyilmGUI*), 1
 showCitations (*affyilmGUI*), 1
 showTopTable (*affyilmGUI*), 1
 SimplifyContrastsExpression
 (*affyilmGUI*), 1
 strstr (*affyilmGUI*), 1

 tclArrayVar (*affyilmGUI*), 1
 TclRequire (*affyilmGUI*), 1

 topTable2 (*affyilmGUI*), 1
 toptable2 (*affyilmGUI*), 1
 Try (*affyilmGUI*), 1
 TryReadImgProcFile (*affyilmGUI*), 1

 UpDownOrBoth (*affyilmGUI*), 1

 vennDiagramaffyilmGUI (*affyilmGUI*),
 1
 VennDiagramPlot (*affyilmGUI*), 1
 ViewContrastsMatrixAsPairs
 (*affyilmGUI*), 1
 ViewContrastsMatrixInTable
 (*affyilmGUI*), 1
 ViewExistingContrastParameterization
 (*affyilmGUI*), 1
 ViewRNATargets (*affyilmGUI*), 1