Package 'ggROC'

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Title package for roc curve plot with ggplot2

Version 1.0

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Depends R (>= 2.14.0), ggplot2

Suggests ggplot2

Description package for roc curve plot with ggplot2

License GPL (> 2)

NeedsCompilation no

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R topics documented:

`ggROC-package` *package for roc curve plot with ggplot2*

Description

package for roc curve plot with ggplot2

Details

Package:	ggROC
Type:	Package
Version:	1.0
Date:	2013-05-24
License:	What license is it under?

Author(s)

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References

none

See Also

none

Examples

```
data(roc)
ggroc(roc, 0.01,"green",19,output="roc.pdf")
```

`ggroc` *package for roc curve plot with ggplot2*

Description

package for roc curve plot with ggplot2

Usage

```
ggroc(data = data, bin = 0.01, roccol = "green", sp = 19, output = "roc.pdf")
```

Arguments

`data`

`bin`

`roccol`

`sp`

`output`

Details

none

Value

data frame

Note

none

Author(s)

Honglong Wu

References

none

See Also

none

Examples

```
##---- Should be DIRECTLY executable !! ----
##-- ==>  Define data, use random,
##--or do  help(data=index)  for the standard data sets.

## The function is currently defined as
function (data = data, bin = 0.01, roccol = "green", sp = 19,
    output = "roc.pdf")
{
    pn <- nrow(subset(data, data[, 2] == 1))
    fn <- nrow(data) - pn
    diag = data.frame(x = seq(0, 1, by = bin), y = seq(0, 1,
        by = bin))
    cutoffs <- seq(0, 1, by = bin)
    x = 0
    y = 0
    for (i in cutoffs) {
        tpn <- nrow(subset(data, data[, 1] >= i & data[, 2] ==
            1))
        fpn <- nrow(subset(data, data[, 1] >= i & data[, 2] ==
            0))
        fnn <- pn - tpn
        tnn <- fn - fpn
        tpr <- tpn/(tpn + fnn)
        fpr <- fpn/(fpn + tnn)
        x <- c(x, fpr)
        y <- c(y, tpr)
```

```
  }
  rocdata <- data.frame(FPR = x, TPR = y)
  p <- ggplot(data = rocdata, aes(x = FPR, y = TPR)) + geom_point(color = roccol) +
      geom_line(color = roccol) + geom_line(data = diag, aes(x = x,
      y = y), color = "red")
  f <- p + geom_point(data = diag, aes(x = x, y = y), color = "red",
      shape = sp) + theme(axis.text = element_text(size = 16),
      title = element_text(size = 18)) + labs(x = "False Positive Rate",
      y = "True Positive Rate", title = "ROC curve")
  ggsave(f, filename = output, width = 8, height = 6, units = c("in"))
}
```

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roc *Some random data*

Description

A data.frame from ROCR package

Format

A data.frame

Source

Generated from `library(ROCR);data(ROCR.simple);roc <- data.frame(preds=ROCR.simple$predictions,labs=RO`

Examples

```
data(roc)
str(roc)
```

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