Package 'ROCaggregator'

January 20, 2025

Title Aggregate Multiple ROC Curves into One Global ROC

Version 1.0.1

Description Aggregates multiple Receiver Operating Characteristic (ROC) curves
obtained from different sources into one global ROC. Additionally, it's
also possible to calculate the aggregated precision-recall (PR) curve.

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Encoding UTF-8

RoxygenNote 7.1.1

Imports utils, magrittr

Suggests testthat (>= 3.0.0), mockery, mockr, knitr, rmarkdown, ROCR,
pROC, pracma, stats

Config/testthat/edition 3

VignetteBuilder knitr

URL https://gitlab.com/UM-CDS/general-tools/rocaggregator

BugReports https://gitlab.com/UM-CDS/general-tools/rocaggregator/-/issues

NeedsCompilation no

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Repository CRAN

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partial_cm	*Compute the global confusion matrix from the FPR and TPR obtained from each node*

Description

Compute the global confusion matrix from the FPR and TPR obtained from each node

Usage

```
partial_cm(
  fpr,
  tpr,
  thresholds,
  negative_count,
  total_count,
  descending = FALSE
)
```

Arguments

fpr	list - False positive rates for each individual ROC
tpr	list - True positive rates for each individual ROC
thresholds	list - Thresholds used to compute the fpr and tpr
negative_count	list - Total number of samples corresponding to the negative case
total_count	list - Total number of samples
descending	thresholds in descending order?

Value

global confusion matrix and thresholds

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precision_recall_curve

Compute the precision recall curve

Description

Compute the precision recall curve

Usage

```
precision_recall_curve(fpr, tpr, thresholds, negative_count, total_count)
```

Arguments

`fpr`	list - False positive rates for each individual ROC.
`tpr`	list - True positive rates for each individual ROC.
`thresholds`	list - Thresholds used to compute the fpr and tpr.
`negative_count`	vector - Total number of samples corresponding to the negative case.
`total_count`	vector - Total number of samples.

Value

list with the global precision, recall, and thresholds (increasing)

`roc_curve`	*Compute Receiver operating characteristic (ROC)*

Description

Compute Receiver operating characteristic (ROC)

Usage

```
roc_curve(fpr, tpr, thresholds, negative_count, total_count)
```

Arguments

`fpr`	list - False positive rates for each individual ROC
`tpr`	list - True positive rates for each individual ROC
`thresholds`	list - Thresholds used to compute the fpr and tpr
`negative_count`	vector - Total number of samples corresponding to the negative case
`total_count`	vector - Total number of samples

Value

list with the global fpr, tpr, and thresholds (decreasing)

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shift_vector   *Shift a vector left or right according to the value provided*

Description

Shift a vector left or right according to the value provided

Usage

```
shift_vector(x, n)
```

Arguments

x	the vector
n	shift

Value

the vector shifted

Examples

```
shift_vector(c(1,2,3,4), 1)
shift_vector(c(1,2,3,4), -1)
```

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