# Package 'ROCaggregator'

October 12, 2022

Title Aggregate Multiple ROC Curves into One Global ROC
Version 1.0.1
<b>Description</b> 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.
License MIT + file LICENSE
Encoding UTF-8
RoxygenNote 7.1.1
Imports utils, magrittr
<b>Suggests</b> testthat (>= 3.0.0), mockery, mockr, knitr, rmarkdown, ROCR, pROC, pracma, stats
Config/testthat/edition 3
VignetteBuilder knitr
<pre>URL https://gitlab.com/UM-CDS/general-tools/rocaggregator</pre>
BugReports https://gitlab.com/UM-CDS/general-tools/rocaggregator/-/issues
NeedsCompilation no
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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

```
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)
```

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## 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)

shift\_vector

 $shift\_vector$ 

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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