

Package ‘aloom’

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Title All Leave-One-Out Models

Version 0.1.1

Description Creates all leave-one-out models and produces predictions for test samples.

Imports glmnet, randomForest, stats, parallel

License GPL-2

Encoding UTF-8

RoxygenNote 7.2.3

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

URL <https://www.rcc.org.rs/aloom.html>

NeedsCompilation no

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R topics documented:

aloom	1
Index	3

aloom	<i>All Leave-One-Out Models</i>
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Description

Creates a predictive model for a training set, as well as all leave-one-out predictive models. Produces predictions of all models (original and all leave one-out) for a test set.

Usage

```
aloom(train.x, train.y, test.x, method, model.params, mc.cores = 1, seed = 1)
```

Arguments

<code>train.x</code>	input matrix, of dimension <code>nobs</code> x <code>nvars</code> ; each row is an observation vector.
<code>train.y</code>	response variable; binary factor of the same length as <code>nrow(train.x)</code>
<code>test.x</code>	Matrix of new values for <code>train.x</code> at which predictions are to be made. Must be a matrix.
<code>method</code>	name of the model. Currently allowed values are "rf" and "glmnet"
<code>model.params</code>	list of model parameters
<code>mc.cores</code>	number of cores
<code>seed</code>	seed number, default=1

Value

A list containing `predicted.y`, `predicted.prob.y` and `aloom.probs`

Examples

```
library(randomForest)
x1 <- matrix(rnorm(100 * 20), 100, 20)
x2 <- matrix(rnorm(30 * 20), 30, 20)
y1 <- as.factor(sample(c("POS", "NEG"), 100, replace = TRUE))
vnames <- paste0("V", seq(20))
colnames(x1) <- vnames
colnames(x2) <- vnames
rownames(x1) <- paste0("train", seq(nrow(x1)))
rownames(x2) <- paste0("test", seq(nrow(x2)))
model.params <- list(ntree=100)
fit <- aloom(x1, y1, x2, method="rf", model.params)
```

Index

aloom, 1