Package 'aloom'

July 22, 2025

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

Author Damjan Krstajic [aut, cre] (ORCID:
<https://orcid.org/0000-0002-7381-8570>)

Maintainer Damjan Krstajic <Damjan.Krstajic@rcc.org.rs>

Repository CRAN

Date/Publication 2024-01-08 19:30:02 UTC

Contents

aloom *All Leave-One-Out Models*

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

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