

Package ‘rCBA’

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Title CBA Classifier for R

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URL <https://github.com/jaroslav-kuchar/rCBA>

BugReports <https://github.com/jaroslav-kuchar/rCBA/issues>

Description Provides implementations of rule pruning algorithms based on the “Classification Based on Associations” (CBA). It can be used for building classification models from association rules. Rules are pruned in the order of precedence given by the sort criteria and a default rule is added. CBA was originally proposed by Liu, B. Hsu, W. and Ma, Y (1998). Integrating Classification and Association Rule Mining. Proceedings KDD-98, New York, 27-31 August. AAAI. pp80-86.

Depends R (>= 3.1.3), rJava, arules

License Apache License (== 2.0)

LazyData true

SystemRequirements Java (>= 8.0)

RoxygenNote 5.0.1

NeedsCompilation no

Repository CRAN

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pruning

A Pruning function

Description

A Pruning function

Usage

```
pruning(train, rules, method = "m2cba")
```

Arguments

train	data.frame with training data
rules	data.frame with rules
method	pruning method m2cba(default) m1cbaldcbrcba

Value

data.frame with pruned rules

Examples

```
library("arules")
library("rCBA")
data("iris")

train <- sapply(iris,as.factor)
train <- data.frame(train, check.names=FALSE)
txns <- as(train,"transactions")

rules = apriori(txns, parameter=list(support=0.03, confidence=0.03, minlen=2),
appearance = list(rhs=c("Species=setosa", "Species=versicolor", "Species=virginica"),default="lhs"))
rulesFrame <- as(rules,"data.frame")

print(nrow(rulesFrame))
prunedRulesFrame <- pruning(train, rulesFrame, method="m2cba")
print(nrow(prunedRulesFrame))
```

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