

Statistical comparisons considering all the tested databases and a cost of 5 for each misclassified object of the minority class for the paper entitled:

**Cost-sensitive pattern-based  
classification for class imbalance  
problems**

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## 1 Average rankings of Friedman test

Average ranks obtained by each method in the Friedman test.

Algorithm	Ranking
MetaCost+LCMine	1.5632
Metacost+DEPMiner	2.8053
Our Proposal	1.6316

Table 1: Average Rankings of the algorithms (Friedman)

Friedman statistic (distributed according to chi-square with 2 degrees of freedom): 92.626316.

P-value computed by Friedman Test: 0.

## 2 Post hoc comparison (Friedman)

P-values obtained in by applying post hoc methods over the results of Friedman procedure.

$i$	algorithm	$z = (R_0 - R_i)/SE$	$p$	Finner
2	Metacost+DEPMiner	8.56062	0	0.025321
1	Our Proposal	0.47156	0.637241	0.05

Table 2: Post Hoc comparison Table for  $\alpha = 0.05$  (FRIEDMAN)

Finner's procedure rejects those hypotheses that have an unadjusted p-value  $\leq 0.05$ .

### 3 Adjusted P-Values (Friedman)

Adjusted P-values obtained through the application of the post hoc methods (Friedman).

i	algorithm	unadjusted $p$
1	Metacost+DEPMiner	0
2	Our Proposal	0.637241

Table 3: Adjusted  $p$ -values (FRIEDMAN) (I)

i	algorithm	unadjusted $p$	$p_{Finner}$
1	Metacost+DEPMiner	0	0
2	Our Proposal	0.637241	0.637241

Table 4: Adjusted  $p$ -values (FRIEDMAN) (II)