Statistical comparisons considering all the tested databases and a cost of 10 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
CSPm+CACSP (Our Proposal)	5.0789
MetaCost+Adaboost	5.7421
MetaCost+Bagging	5.5684
MetaCost+Bayes Net	6.8263
MetaCost+C4.5	6.7316
MetaCost+kNN	5.6895
MetaCost+Logistic Regression	4.8053
MetaCost+MLP	4.6737
MetaCost+Naïve Bayes	8.0842
MetaCost+Random Forest	3.9947
MetaCost+SVM	8.8053

Table 1: Average Rankings of the algorithms (Friedman)

Friedman statistic (distributed according to chi-square with 10 degrees of freedom): 188.588517.
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
10	MetaCost+SVM	9.996387	0	0.005116
9	MetaCost+Naïve Bayes	8.498023	0	0.010206
8	MetaCost+Bayes Net	5.884088	0	0.01527
7	MetaCost+C4.5	5.687222	0	0.020308
6	MetaCost+Adaboost	3.631073	0.000282	0.025321
5	MetaCost+kNN	3.521703	0.000429	0.030307
4	MetaCost+Bagging	3.270153	0.001075	0.035268
3	CSPm+CACSP (Our Proposal)	2.253015	0.024258	0.040204
2	MetaCost+Logistic Regression	1.684293	0.092125	0.045115
1	MetaCost+MLP	1.410869	0.158283	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 ≤ 0.045115.

3 Adjusted P-Values (Friedman)

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

i	algorithm	unadjusted p
1	MetaCost+SVM	0
2	MetaCost+Naïve Bayes	0
3	MetaCost+Bayes Net	0
4	MetaCost+C4.5	0
5	MetaCost+Adaboost	0.000282
6	MetaCost+kNN	0.000429
7	MetaCost+Bagging	0.001075
8	CSPm+CACSP (Our Proposal)	0.024258
9	MetaCost+Logistic Regression	0.092125
10	MetaCost+MLP	0.158283

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

i	algorithm	unadjusted p	p_{Finner}
1	MetaCost+SVM	0	0
2	MetaCost+Naïve Bayes	0	0
3	MetaCost+Bayes Net	0	0
4	MetaCost+C4.5	0	0
5	MetaCost+Adaboost	0.000282	0.000564
6	MetaCost+kNN	0.000429	0.000715
7	MetaCost+Bagging	0.001075	0.001535
8	CSPm+CACSP (Our Proposal)	0.024258	0.03023
9	MetaCost+Logistic Regression	0.092125	0.101822
10	MetaCost+MLP	0.158283	0.158283

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