

# Output tables for 1xN statistical comparisons.

April 27, 2017

## 1 Average rankings of Friedman test

Average ranks obtained by each method in the Friedman test.

Algorithm	Ranking
AdaBoost.NC	4.9
C45	2.8
Chi-RW	5.5167
FURIA	1.8833
GAssist-Intervalar	3.4167
GFS-GCCL	5.0667
Ripper	4.4167

Table 1: Average Rankings of the algorithms (Friedman)

Friedman statistic (distributed according to chi-square with 6 degrees of freedom): 68.671429.

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	$z = (R_0 - R_i)/SE$	$p$	Holm
6	Chi-RW	6.513996	0	0.008333
5	GFS-GCCL	5.707217	0	0.01
4	AdaBoost.NC	5.408409	0	0.0125
3	Ripper	4.541869	0.000006	0.016667
2	GAssist-Intervalar	2.749026	0.005977	0.025
1	C45	1.643439	0.100292	0.05

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

Holm'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 $p$	$p_{Holm}$
1	Chi-RW	0	0
2	GFS-GCCL	0	0
3	AdaBoost.NC	0	0
4	Ripper	0.000006	0.000017
5	GAssist-Intervalar	0.005977	0.011955
6	C45	0.100292	0.100292

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

i	algorithm	unadjusted $p$
1	Chi-RW	0
2	GFS-GCCL	0
3	AdaBoost.NC	0
4	Ripper	0.000006
5	GAssist-Intervalar	0.005977
6	C45	0.100292

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