Output tables for 1xN statistical comparisons.

February 25, 2016

1 Average rankings of Friedman test

Average ranks obtained by each method in the Friedman test.

Algorithm	Ranking
SVRC	2.7895
SVR	4.2632
SVRRC	4.0526
MORF	7.1579
ST	5.4737
MTS	5.6316
MTSC	5.5263
ERC	5.5263
ERCC	4.5789

Table 1: Average Rankings of the algorithms (Friedman)

Friedman statistic (distributed according to chi-square with 8 degrees of freedom): 31.25614.

P-value computed by Friedman Test: 0.000126.

Iman and Davenport statistic (distributed according to F-distribution with 8 and 144 degrees of freedom): 4.659537.
P-value computed by Iman and Daveport Test: 0.000043728114.

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
8	MORF	4.916496	0.000001	0.00625
7	MTS	3.198684	0.001381	0.007143
6	MTSC	3.080214	0.002069	0.008333
5	ERC	3.080214	0.002069	0.01
4	ST	3.020979	0.00252	0.0125
3	ERCC	2.013986	0.044011	0.016667
2	SVR	1.658577	0.097201	0.025
1	SVRRC	1.421637	0.155132	0.05

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

Bonferroni-Dunn's procedure rejects those hypotheses that have an unadjusted p-value ≤ 0.00625.
Holm's procedure rejects those hypotheses that have an unadjusted p-value ≤ 0.016667.

3 Adjusted P-Values (Friedman)

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

i	algorithm	unadjusted p	p_{Bonf}	p_{Holm}
1	MORF	0.000001	0.000007	0.000007
2	MTS	0.001381	0.011045	0.009664
3	MTSC	0.002069	0.016548	0.012411
4	ERC	0.002069	0.016548	0.012411
5	ST	0.00252	0.020157	0.012411
6	ERCC	0.044011	0.352088	0.132033
7	SVR	0.097201	0.777609	0.194402
8	SVRRC	0.155132	1.241053	0.194402

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

i	algorithm	unadjusted p
1	MORF	0.000001
2	MTS	0.001381
3	MTSC	0.002069
4	ERC	0.002069
5	ST	0.00252
6	ERCC	0.044011
7	SVR	0.097201
8	SVRRC	0.155132

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