

Output tables for 1xN statistical comparisons.

September 9, 2024

1 Average rankings of Friedman test

Average ranks obtained by each method in the Friedman test.

| Algorithm | Ranking |
|------------|---------|
| Random | 8.375 |
| NN | 7 |
| Sweep | 8.375 |
| SaveSeq | 2.875 |
| SaveParall | 1.875 |
| MJ | 2.375 |
| CMT | 2.875 |
| Kilby | 5.75 |
| SaveMatch | 5.5 |

Table 1: Average Rankings of the algorithms (Friedman)

Friedman statistic (distributed according to chi-square with 8 degrees of freedom): 56.833333.

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 |
|-----|-----------|----------------------|----------|
| 8 | Random | 4.746929 | 0.000002 |
| 7 | Sweep | 4.746929 | 0.000002 |
| 6 | NN | 3.742771 | 0.000182 |
| 5 | Kilby | 2.8299 | 0.004656 |
| 4 | SaveMatch | 2.647326 | 0.008113 |
| 3 | SaveSeq | 0.730297 | 0.465209 |
| 2 | CMT | 0.730297 | 0.465209 |
| 1 | MJ | 0.365148 | 0.715001 |

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

3 Adjusted P-Values (Friedman)

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

| i | algorithm | unadjusted p |
|---|-----------|----------------|
| 1 | Random | 0.000002 |
| 2 | Sweep | 0.000002 |
| 3 | NN | 0.000182 |
| 4 | Kilby | 0.004656 |
| 5 | SaveMatch | 0.008113 |
| 6 | SaveSeq | 0.465209 |
| 7 | CMT | 0.465209 |
| 8 | MJ | 0.715001 |

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

| i | algorithm | unadjusted p |
|---|-----------|----------------|
| 1 | Random | 0.000002 |
| 2 | Sweep | 0.000002 |
| 3 | NN | 0.000182 |
| 4 | Kilby | 0.004656 |
| 5 | SaveMatch | 0.008113 |
| 6 | SaveSeq | 0.465209 |
| 7 | CMT | 0.465209 |
| 8 | MJ | 0.715001 |

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