

Output tables for 1xN statistical comparisons.

May 16, 2022

1 Average rankings of Friedman test

Average ranks obtained by each method in the Friedman test.

| Algorithm | Ranking |
|------------------------------|---------|
| DecisionTreeClassifier:ENANE | 2.6944 |
| DecisionTreeClassifier:ENN | 2.3889 |
| DecisionTreeClassifier:LSSm | 2.75 |
| DecisionTreeClassifier:base | 2.1667 |

Table 1: Average Rankings of the algorithms (Friedman)

Friedman statistic (distributed according to chi-square with 3 degrees of freedom): 2.416667.
P-value computed by Friedman Test: 0.49054.

2 Post hoc comparison (Friedman)

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

| <i>i</i> | algorithm | $z = (R_0 - R_i) / SE$ | <i>p</i> | Hochberg |
|----------|------------------------------|------------------------|----------|----------|
| 3 | DecisionTreeClassifier:LSSm | 1.35544 | 0.175244 | 0.016667 |
| 2 | DecisionTreeClassifier:ENANE | 1.226445 | 0.220031 | 0.025 |
| 1 | DecisionTreeClassifier:ENN | 0.516398 | 0.605577 | 0.05 |

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 | $p_{Hochberg}$ |
|---|------------------------------|----------------|----------------|
| 1 | DecisionTreeClassifier:LSSm | 0.175244 | 0.440063 |
| 2 | DecisionTreeClassifier:ENANE | 0.220031 | 0.440063 |
| 3 | DecisionTreeClassifier:ENN | 0.605577 | 0.605577 |

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

| i | algorithm | unadjusted p |
|---|------------------------------|----------------|
| 1 | DecisionTreeClassifier:LSSm | 0.175244 |
| 2 | DecisionTreeClassifier:ENANE | 0.220031 |
| 3 | DecisionTreeClassifier:ENN | 0.605577 |

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