# StAR Report for the Analysis of ROC Curves
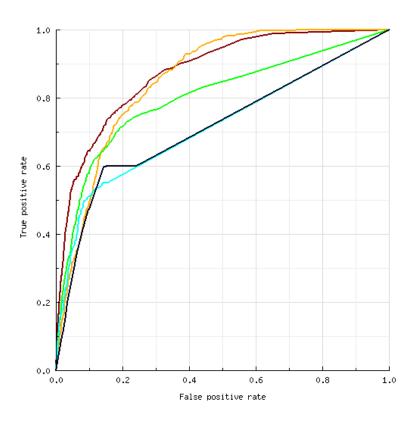
Generated at http://melolab.org/star

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# 1 ROC Plots

# 2   Summary Statistics

| Classifier | AUC | Inverted | ACC | OT | fp | tp | N | P |
|---|---|---|---|---|---|---|---|---|
| T5 | 0.8765 | + | 0.9197 | 0.2850 | 0.0269 | 0.4008 | 4754 | 489 |
| T3 | 0.8564 | + | 0.9069 | 0.9720 | 0.0032 | 0.0327 | 4754 | 489 |
| T2 | 0.8010 | + | 0.9104 | 0.9500 | 0.0179 | 0.2127 | 4754 | 489 |
| T1 | 0.7183 | + | 0.9105 | 0.5340 | 0.0095 | 0.1329 | 4754 | 489 |
| T4 | 0.7149 | + | 0.9067 | 1.0000 | 0.0000 | 0.0000 | 4754 | 489 |

AUC: area under the ROC curve. ACC: maximal accuracy.OT: optimal threshold.
fp: false positive rate at OT. tp: true positive rate at OT.
N: number of negative instances. P: number of positive instances.

# 3    Statistical Analysis I

|     | T5 | T3 | T2 | T1 | T4 |
|-----|-----|-----|-----|-----|-----|
| T5  | -   | 0.02013 | 0.07554 | 0.15825 | 0.16167 |
| T3  | <span style="color:green">0.00074</span> | -   | 0.05541 | 0.13813 | 0.14154 |
| T2  | <span style="color:green">0.00000</span> | <span style="color:green">0.00000</span> | -   | 0.08272 | 0.08613 |
| T1  | <span style="color:green">0.00000</span> | <span style="color:green">0.00000</span> | <span style="color:green">0.00000</span> | -   | 0.00341 |
| T4  | <span style="color:green">0.00000</span> | <span style="color:green">0.00000</span> | <span style="color:green">0.00000</span> | <span style="color:red">0.78860</span> | -   |

Significance Level (alpha): **0.05**
Upper Triangle: AUC differences
Bottom Triangle: p-values
<span style="color:green">**p-value**</span> $<0.05$
<span style="color:red">**p-value**</span> $>0.05$
Global p-value: 0

# 4  Statistical Analysis II

|     | T5 | T3 | T2 | T1 | T4 |
|-----|-----------|-----------|-----------|-----------|-----------|
| T5  | 6.2571e-5 | 3.8458e-5 | 7.4029e-5 | 3.9554e-5 | 5.4037e-5 |
| T3  | 3.8458e-5 | 4.9926e-5 | 2.9356e-5 | 3.8427e-5 | 4.2706e-5 |
| T2  | 7.4029e-5 | 2.9356e-5 | 1.4420e-4 | 2.4652e-5 | 6.2577e-5 |
| T1  | 3.9554e-5 | 3.8427e-5 | 2.4652e-5 | 1.5188e-4 | 7.6394e-5 |
| T4  | 5.4037e-5 | 4.2706e-5 | 6.2577e-5 | 7.6394e-5 | 1.6291e-4 |

Covariance Matrix