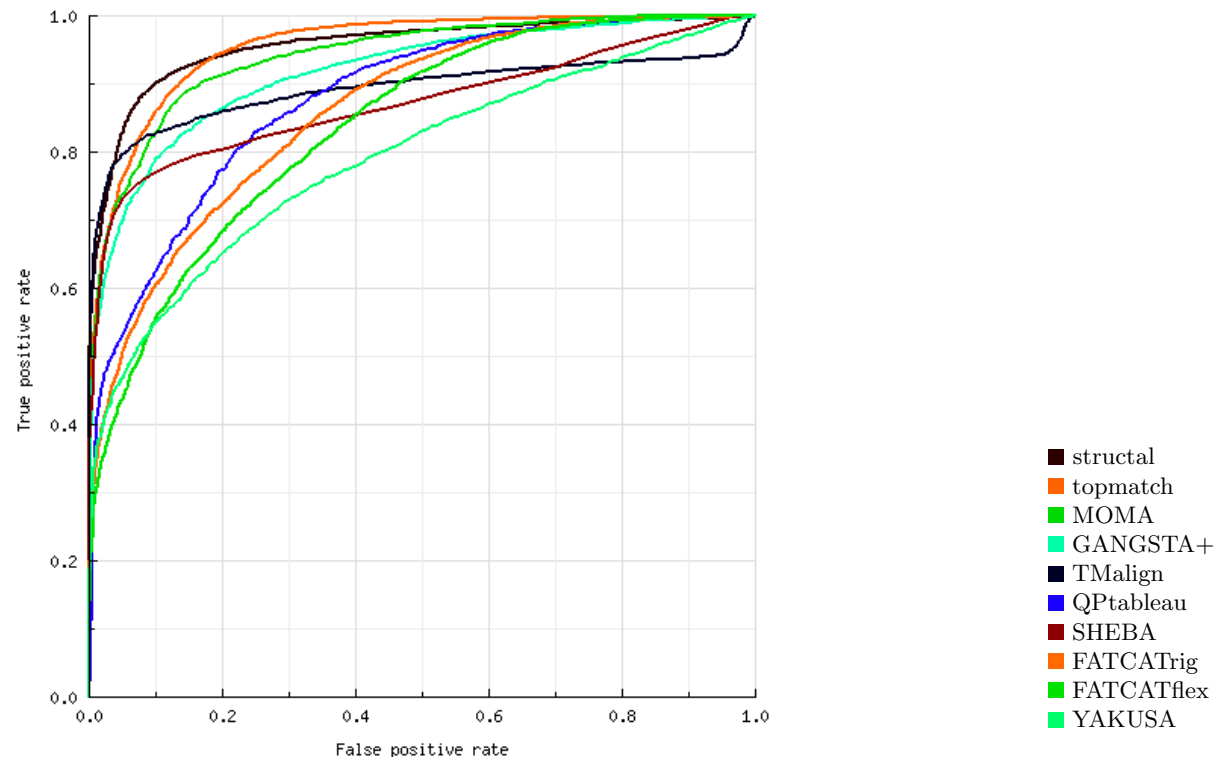


StAR Report for the Analysis of ROC Curves

Generated at <http://melolab.org/star>

November 5, 2015

1 ROC Plots



2 Summary Statistics

Classifier	AUC	Inverted	ACC	OT	fp	tp	N	P
structal	0.9557		0.9017	5.1980	0.0761	0.8796	4915	4915
topmatch	0.9555		0.8831	4.9123	0.1211	0.8873	4915	4915
MOMA	0.9401	+	0.8720	20.5000	0.1398	0.8838	4915	4915
GANGSTA+	0.9167	+	0.8449	0.4950	0.1009	0.7906	4915	4915
TMalign	0.8917	+	0.8732	0.3420	0.0488	0.7953	4915	4915
QPtableau	0.8768	+	0.7907	0.7000	0.2240	0.8055	4915	4915
SHEBA	0.8702	+	0.8411	25.0000	0.0519	0.7341	4915	4915
FATCATrig	0.8600	+	0.7639	107.9300	0.1764	0.7042	4915	4915
FATCATflex	0.8373	+	0.7429	111.8600	0.2199	0.7058	4915	4915
YAKUSA	0.7902	+	0.7268	0.6900	0.1554	0.6090	4915	4915

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

	structal	topmatch	MOMA	GANGSTA+	TMalign	QPtableau	SHEBA	FATCATrig	FATCATflex	YAKUSA
structal	-	0.00019	0.01557	0.03900	0.06396	0.07890	0.08551	0.09564	0.11838	0.16544
topmatch	0.93415	-	0.01538	0.03882	0.06377	0.07871	0.08532	0.09545	0.11819	0.16525
MOMA	0.00000	0.00000	-	0.02344	0.04839	0.06333	0.06994	0.08007	0.10281	0.14987
GANGSTA+	0.00000	0.00000	0.00000	-	0.02496	0.03990	0.04650	0.05663	0.07937	0.12643
TMalign	0.00000	0.00000	0.00000	0.00000	-	0.01494	0.02155	0.03168	0.05442	0.10148
QPtableau	0.00000	0.00000	0.00000	0.00000	0.00180	-	0.00661	0.01674	0.03948	0.08654
SHEBA	0.00000	0.00000	0.00000	0.00000	0.00001	0.14672	-	0.01013	0.03287	0.07993
FATCATrig	0.00000	0.00000	0.00000	0.00000	0.00000	0.00012	0.04953	-	0.02274	0.06980
FATCATflex	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	-	0.04706
YAKUSA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	-

Significance Level (alpha): **0.05**

Upper Triangle: AUC differences

Bottom Triangle: p-values

p-value <0.05

p-value >0.05

Global p-value: N.D. (Matrix LSL^T is singular)

4 Statistical Analysis II

	structal	topmatch	MOMA	GANGSTA+	TMalign	QPtableau	SHEBA	FATCATrig	FATCATflex	YAKUSA
structal	4.1429e-6	1.1622e-6	-7.1101e-7	-9.4551e-7	8.2092e-7	9.9520e-7	-1.0159e-6	2.0160e-6	2.0733e-6	-8.6682e-7
topmatch	1.1622e-6	3.3611e-6	2.7494e-8	-2.3653e-9	9.7586e-7	1.0267e-6	4.8502e-7	3.8342e-6	3.8547e-6	-3.7961e-7
MOMA	-7.1101e-7	2.7494e-8	5.0816e-6	4.0040e-6	5.9916e-7	1.6074e-6	5.6941e-6	2.7303e-7	2.5258e-7	3.4227e-6
GANGSTA+	-9.4551e-7	-2.3653e-9	4.0040e-6	7.7902e-6	9.6431e-7	5.6141e-7	7.7610e-6	-5.4336e-7	-8.0874e-7	4.8066e-6
TMalign	8.2092e-7	9.7586e-7	5.9916e-7	9.6431e-7	1.4640e-5	1.5236e-6	2.2831e-6	1.9686e-6	2.0358e-6	9.1346e-7
QPtableau	9.9520e-7	1.0267e-6	1.6074e-6	5.6141e-7	1.5236e-6	1.1312e-5	2.6300e-6	2.5916e-6	2.8691e-6	2.1039e-6
SHEBA	-1.0159e-6	4.8502e-7	5.6941e-6	7.7610e-6	2.2831e-6	2.6300e-6	1.4687e-5	4.2919e-7	6.5755e-8	7.0864e-6
FATCATrig	2.0160e-6	3.8342e-6	2.7303e-7	-5.4336e-7	1.9686e-6	2.5916e-6	4.2919e-7	1.2767e-5	1.3452e-5	3.6936e-8
FATCATflex	2.0733e-6	3.8547e-6	2.5258e-7	-8.0874e-7	2.0358e-6	2.8691e-6	6.5755e-8	1.3452e-5	1.4954e-5	1.7912e-7
YAKUSA	-8.6682e-7	-3.7961e-7	3.4227e-6	4.8066e-6	9.1346e-7	2.1039e-6	7.0864e-6	3.6936e-8	1.7912e-7	2.0846e-5

Covariance Matrix