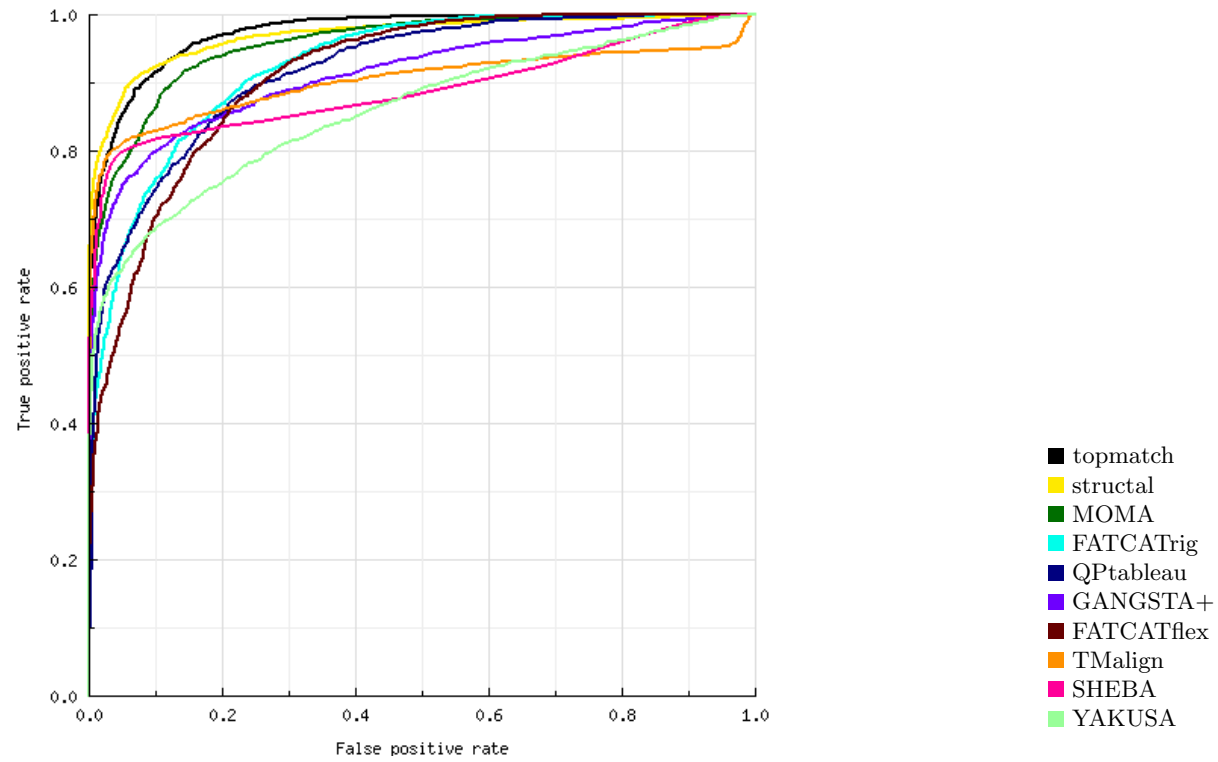


StAR Report for the Analysis of ROC Curves

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

November 5, 2015

1 ROC Plots



2 Summary Statistics

Classifier	AUC	Inverted	ACC	OT	fp	tp	N	P
topmatch	0.9737		0.9107	4.4915	0.0692	0.8906	2862	2862
structal	0.9696		0.9189	4.9840	0.0601	0.8980	2862	2862
MOMA	0.9564	+	0.8889	21.7000	0.1129	0.8906	2862	2862
FATCATrig	0.9258	+	0.8396	116.2400	0.1352	0.8145	2862	2862
QPtableau	0.9176	+	0.8311	0.8500	0.1876	0.8498	2862	2862
GANGSTA+	0.9116	+	0.8515	0.5330	0.0580	0.7610	2862	2862
FATCATflex	0.9114	+	0.8255	114.2200	0.2114	0.8623	2862	2862
TMalign	0.9019	+	0.8828	0.3560	0.0318	0.7973	2862	2862
SHEBA	0.8894	+	0.8754	26.0000	0.0423	0.7932	2862	2862
YAKUSA	0.8576	+	0.7945	1.0600	0.0877	0.6768	2862	2862

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

	topmatch	structal	MOMA	FATCATrig	QPtableau	GANGSTA+	FATCATflex	TMalign	SHEBA	YAKUSA
topmatch	-	0.00409	0.01729	0.04794	0.05606	0.06211	0.06227	0.07179	0.08431	0.11608
structal	0.07733	-	0.01319	0.04384	0.05197	0.05801	0.05817	0.06770	0.08021	0.11199
MOMA	0.00000	0.00009	-	0.03065	0.03877	0.04482	0.04498	0.05450	0.06702	0.09879
FATCATrig	0.00000	0.00000	0.00000	-	0.00813	0.01417	0.01433	0.02386	0.03637	0.06815
QPtableau	0.00000	0.00000	0.00000	0.07222	-	0.00604	0.00621	0.01573	0.02825	0.06002
GANGSTA+	0.00000	0.00000	0.00000	0.00402	0.21668	-	0.00016	0.00969	0.02220	0.05398
FATCATflex	0.00000	0.00000	0.00000	0.00000	0.18959	0.97525	-	0.00952	0.02204	0.05381
TMalign	0.00000	0.00000	0.00000	0.00001	0.00400	0.08127	0.09305	-	0.01252	0.04429
SHEBA	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00018	0.03449	-	0.03177
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

	topmatch	structal	MOMA	FATCATrig	QPtableau	GANGSTA+	FATCATflex	TMalign	SHEBA	YAKUSA
topmatch	2.8945e-6	9.8844e-7	4.6504e-8	2.8549e-6	6.4812e-7	6.8365e-7	2.6278e-6	1.2741e-6	1.3972e-6	-2.7024e-8
structal	9.8844e-7	4.4561e-6	-6.4740e-7	1.3953e-6	7.9070e-7	-7.4246e-7	1.4143e-6	1.3104e-6	-5.1977e-7	-6.2258e-7
MOMA	4.6504e-8	-6.4740e-7	5.6231e-6	-8.8509e-8	1.2407e-6	6.1996e-6	-2.6236e-7	1.0239e-6	6.2836e-6	4.2936e-6
FATCATrig	2.8549e-6	1.3953e-6	-8.8509e-8	1.0433e-5	1.0813e-6	7.2609e-7	1.0998e-5	1.7131e-6	1.2986e-6	3.0138e-7
QPtableau	6.4812e-7	7.9070e-7	1.2407e-6	1.0813e-6	1.2160e-5	1.7565e-6	1.3392e-6	2.2755e-6	2.6124e-6	1.7620e-6
GANGSTA+	6.8365e-7	-7.4246e-7	6.1996e-6	7.2609e-7	1.7565e-6	1.5292e-5	2.8327e-7	3.3411e-6	1.5266e-5	9.3374e-6
FATCATflex	2.6278e-6	1.4143e-6	-2.6236e-7	1.0998e-5	1.3392e-6	2.8327e-7	1.2912e-5	1.5106e-6	3.5225e-7	2.2031e-7
TMalign	1.2741e-6	1.3104e-6	1.0239e-6	1.7131e-6	2.2755e-6	3.3411e-6	1.5106e-6	2.2261e-5	4.8465e-6	2.2546e-6
SHEBA	1.3972e-6	-5.1977e-7	6.2836e-6	1.2986e-6	2.6124e-6	1.5266e-5	3.5225e-7	4.8465e-6	2.2484e-5	1.1437e-5
YAKUSA	-2.7024e-8	-6.2258e-7	4.2936e-6	3.0138e-7	1.7620e-6	9.3374e-6	2.2031e-7	2.2546e-6	1.1437e-5	2.5009e-5

Covariance Matrix