

1 Measures

x
1 Hamming Loss
2 Zero-One Loss
3 X1.Prec.Loss
4 X1.Rec.Loss
5 Tversky.Loss.A0.5B0.5
6 MacroPrecisionM
7 MacroRecallM
8 Macro.Tversky.A0.5.B0.5
9 MicroPrecisionM
10 MicroRecallM
11 MicroTversky.A0.5B.0.5

2 Algorithms

x
1 BR-ref
2 BR-MB
3 BR-RBC

3 Average Ranks

	1	2	3
Hamming Loss	2.052	1.845	2.103
Zero-One Loss	2.224	1.845	1.931
X1.Prec.Loss	2.121	1.707	2.172
X1.Rec.Loss	1.879	2.017	2.103
Tversky.Loss.A0.5B0.5	2.155	1.741	2.103
MacroPrecisionM	2.259	1.776	1.966
MacroRecallM	2.186	2.052	1.862
Macro.Tversky.A0.5.B0.5	2.259	1.914	1.828
MicroPrecisionM	1.983	2.017	2.000
MicroRecallM	2.086	2.017	1.897
MicroTversky.A0.5B.0.5	2.397	1.879	1.724

Table 1: Average ranks

Critical value for Nemenyi test($\alpha = 0.05$) and 29 sets: 0.61548592777733 Critical value for Dunn test($\alpha = 0.05$) and 29 sets: 0.683779959699682

4 Group Test

Test Function: function (y, ...) Test Function: UseMethod("friedman.test")

	GroupTest ~ pValue
Hamming Loss	1.000000
Zero One Loss	1.000000
X1.Prec.Loss	1.000000
X1.Rec.Loss	1.000000
Tversky Loss_A0.5B0.5	1.000000
MacroPrecisionM	1.000000
MacroRecallM	1.000000
Macro.Tversky_A0.5.B0.5	1.000000
MicroPrecisionM	1.000000
MicroRecallM	1.000000
MicroTversky_A0.5B0.5	0.292822

Table 2: Group test p-value

5 Pairwise Tests

Correction method:holm
Test Function: function(x,...)
Test Function: useMethod("wilcox.test")

	1	2	3
Rank	2.052	1.845	2.103
1		0.741	0.299
2			0.217

Table 3: Pairwise test for Hamming Loss

	1	2	3
Rank	2.224	1.845	1.931
1		0.999	1.000
2			1.000

Table 4: Pairwise test for Zero One Loss

	1	2	3
Rank	2.121	1.707	2.172
1		0.426	0.966
2			0.859

Table 5: Pairwise test for X1.Prec Loss

	1	2	3
Rank	1.879	2.017	2.103
1		1.000	1.000
2			1.000

Table 6: Pairwise test for XLRec Loss

	1	2	3
Rank	2.155	1.741	2.103
1		0.809	0.809
2			0.448

Table 7: Pairwise test for TverskyLossA0.5B0.5

	1	2	3
Rank	2.259	1.776	1.966
1		0.084	0.530
2			0.733

Table 8: Pairwise test for MacroPrecisionM

	1	2	3
Rank	2.086	2.052	1.862
1		0.600	0.467
2			0.600

Table 9: Pairwise test for MacroRecallM

	1	2	3
Rank	2.259	1.914	1.828
1		0.036	0.311
2			0.565

Table 10: Pairwise test for Macro Tversky A0.5 B0.5

	1	2	3
Rank	1.983	2.017	2.000
1		1.000	1.000
2			1.000

Table 11: Pairwise test for MicroPrecisionM

	1	2	3
Rank	2.086	2.012	1.897
1		0.570	0.570
2			0.570

Table 12: Pairwise test for MicroRecallM

	1	2	3
Rank	2.397	1.879	1.724
1		0.021	0.395
2			0.442

Table 13: Pairwise test for MicroTversky A0.5B 0.5

6 Formatted Pairwise

	1	2	3	1	2	3	1	2	3	1	2	3
Num.	Hamming			Zero-One			ExFDR			ExFNR		
Frd.	1.000e+00			1.000e+00			1.000e+00			1.000e+00		
Rank	2.052	1.845	2.103	2.224	1.845	1.931	2.121	1.707	2.172	1.879	2.017	2.103
1		0.741	0.299		0.999	1.000		0.426	0.966		1.000	1.000
2			0.217			1.000			0.859			1.000
Num.	ESF1			MGFDR			MGFNR			MaF1		
Frd.	1.000e+00			1.000e+00			1.000e+00			1.000e+00		
Rank	2.155	1.741	2.103	2.259	1.776	1.966	2.086	2.052	1.862	2.259	1.914	1.828
1		0.809	0.809		0.084	0.520		0.600	0.667		0.036	0.311
2			0.448			0.733			0.600			0.565
Num.	MIFDR			MIFNR			MIF1					
Frd.	1.000e+00			1.000e+00			2.928e-01					
Rank	1.983	2.017	2.000	2.086	2.017	1.897	2.397	1.879	1.724			
1		1.000	1.000		0.570	0.570		0.021	0.395			
2			1.000			0.570			0.442			

7 Alg Vs test

Correction method:holm
Test Function: function(x,...)
Test Function: useMethod("wilcox.test")
Algorithms: 1 vs test

	1	2	3
Rank	2.052	1.845	2.103
1		0.711	0.299

Table 14: Pairwise test for Hamming Loss

	1	2	3
Rank	2.224	1.845	1.931
1		0.666	0.670

Table 15: Pairwise test for Zero-One Loss

	1	2	3
Rank	2.121	1.707	2.172
1		0.281	0.966

Table 16: Pairwise test for X1.Prec Loss

	1	2	3
Rank	1.879	2.017	2.103
1		1.000	1.000

Table 17: Pairwise test for X1.Rec Loss

	1	2	3
Rank	2.155	1.741	2.103
1		0.809	0.809

Table 18: Pairwise test for Tversky.LossA0.5B0.5

	1	2	3
Rank	2.259	1.776	1.966
1		0.056	0.265

Table 19: Pairwise test for MacroPrecisionM

	1	2	3
Rank	2.086	2.052	1.862
1		0.311	0.311

Table 20: Pairwise test for MacroRecallM

	1	2	3
Rank	2.259	1.914	1.828
1		0.021	0.156

Table 21: Pairwise test for Macro Tversky A0.5 B0.5

	1	2	3
Rank	1.983	2.017	2.000
1		1.000	1.000

Table 22: Pairwise test for MicroPrecisionM

	1	2	3
Rank	2.086	2.017	1.897
1		0.380	0.380

Table 23: Pairwise test for MicroRecallM

	1	2	3
Rank	2.397	1.879	1.724
1		0.014	0.198

Table 24: Pairwise test for MicroTversky A0.5B 0.5

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	1	2	3	1	2	3	1	2	3	1	2	3
Nam.	Hamming			Zero-One			EsFDR			EsFNR		
Frd.	1.000e+00			1.000e+00			1.000e+00			1.000e+00		
Rank	2.052	1.845	2.103	2.224	1.845	1.931	2.121	1.707	2.172	1.879	2.017	2.103
1	0.741	0.299		0.666	0.670		0.284	0.966		1.000	1.000	
Nam.	EsF1			MaFDR			MaFNR			MaF1		
Frd.	1.000e+00			1.000e+00			1.000e+00			1.000e+00		
Rank	2.155	1.741	2.103	2.259	1.776	1.966	2.086	2.052	1.862	2.259	1.914	1.828
1	0.809	0.809		0.056	0.265		0.311	0.311		0.024	0.156	
Nam.	MiFDR			MiFNR			MiF1					
Frd.	1.000e+00			1.000e+00			2.928e-01					
Rank	1.983	2.017	2.000	2.086	2.017	1.897	2.397	1.879	1.724			
1		1.000	1.000		0.380	0.380		0.014	0.198			

9 Given pairs

Correction method:holm
Test Function: function(x,...)
Test Function: useMethod("wilcox.test")

	1	2	3
Rank	2.052	1.845	2.103
1		0.741	

Table 25: Pairwise test for Hamming Loss

	1	2	3
Rank	2.224	1.845	1.931
1		0.333	

Table 26: Pairwise test for Zero-One Loss

	1	2	3
Rank	2.121	1.707	2.172
1		0.142	

Table 27: Pairwise test for X1 Prec. Loss

	1	2	3
Rank	1.879	2.017	2.103
1		0.531	

Table 28: Pairwise test for X1.Rec Loss

	1	2	3
Rank	2.155	1.741	2.103
1		0.419	

Table 29: Pairwise test for Tversky.LossA0.5B0.5

	1	2	3
Rank	2.259	1.776	1.966
1		0.028	

Table 30: Pairwise test for MacroPrecisionM

	1	2	3
Rank	2.086	2.052	1.862
1		0.300	

Table 31: Pairwise test for MacroRecallM

	1	2	3
Rank	2.259	1.914	1.828
1		0.012	

Table 32: Pairwise test for Macro Tversky A0.5 B0.5

	1	2	3
Rank	1.983	2.017	2.000
1		0.502	

Table 33: Pairwise test for MicroPrecisionM

	1	2	3
Rank	2.086	2.017	1.897
1		0.232	

Table 34: Pairwise test for MicroRecallM

	1	2	3
Rank	2.397	1.879	1.724
1		0.007	

Table 35: Pairwise test for MicroTversky A0.5B 0.5

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	1	2	3	1	2	3	1	2	3	1	2	3
Num.	Hamming			Zero-One			ExFDR			ExFNR		
Frd.	1.000e+00			1.000e+00			1.000e+00			1.000e+00		
Rank	2.052	1.845	2.103	2.224	1.845	1.931	2.121	1.707	2.172	1.879	2.017	2.103
1	0.741			0.333			0.142			0.531		
Num.	ExF1			MaFDR			MaFNR			MaF1		
Frd.	1.000e+00			1.000e+00			1.000e+00			1.000e+00		
Rank	2.155	1.741	2.103	2.259	1.776	1.966	2.086	2.052	1.862	2.259	1.914	1.828
1	0.419			0.028			0.300			0.012		
Num.	MiFDR			MiFNR			MiF1					
Frd.	1.000e+00			1.000e+00			2.928e-01					
Rank	1.983	2.017	2.000	2.086	2.017	1.897	2.397	1.879	1.724			
1	0.502			0.232			0.007					

11 Set Names

orgSetNames	numericSetNames
1 ArisL100	1
2 Azotobacter.vinelandii	2
3 birds	3
4 Caenorhabditis.elegans	4
5 Drosophila.melanogaster	5
6 emotions	6
7 enron	7
8 flags	8
9 flare2.anClass	9
10 gmlase	10
11 Geobacter-sulfurreducens	11
12 Haloragula.marismortui	12
13 Human3160	13
14 DMDb.sub.0	14
15 LLOG-F	15
16 medical	16
17 mimilng	17
18 obstmed	18
19 Plant678	19
20 pyrococcus.furiosus	20
21 Saccharomyces.cerevisiae	21
22 scene	22
23 simpleHC	23
24 simpleHS	24
25 SLASIMDOT-F	25
26 stackex.chess	26
27 tmc2007-500.sub.0	27
28 water-quality.anClass	28
29 yeast	29

Table 36: Set names

12 Raw Means

	BR.ref	BR.MB	BR.BRC
1	0.065	0.064	0.059
2	0.110	0.135	0.183
3	0.065	0.060	0.046
4	0.101	0.090	0.086
5	0.116	0.104	0.123
6	0.223	0.220	0.196
7	0.078	0.064	0.050
8	0.235	0.261	0.278
9	0.085	0.075	0.086
10	0.002	0.002	0.009
11	0.113	0.132	0.213
12	0.117	0.144	0.167
13	0.128	0.127	0.574
14	0.087	0.087	0.852
15	0.056	0.055	0.015
16	0.014	0.014	0.011
17	0.243	0.233	0.195
18	0.064	0.064	0.057
19	0.113	0.113	0.634
20	0.117	0.132	0.358
21	0.084	0.097	0.130
22	0.138	0.134	0.091
23	0.132	0.123	0.108
24	0.215	0.247	0.441
25	0.044	0.045	0.045
26	0.071	0.073	0.080
27	0.081	0.078	0.064
28	0.351	0.314	0.346
29	0.229	0.219	0.308

Table 37: Mean value for: Hamming, Loss

	BR-ref	BR-MB	BR-RRC
1	0.508	0.925	0.598
2	0.538	0.577	0.651
3	0.539	0.526	0.481
4	0.457	0.386	0.357
5	0.456	0.381	0.418
6	0.702	0.751	0.694
7	0.913	0.899	0.873
8	0.788	0.814	0.811
9	0.217	0.196	0.206
10	0.059	0.059	0.181
11	0.567	0.623	0.678
12	0.641	0.684	0.683
13	0.897	0.895	0.917
14	0.982	0.982	0.996
15	0.847	0.842	0.780
16	0.477	0.465	0.348
17	0.716	0.695	0.692
18	0.811	0.810	0.790
19	0.862	0.861	0.936
20	0.657	0.706	0.833
21	0.475	0.512	0.598
22	0.631	0.613	0.383
23	0.754	0.720	0.658
24	0.953	0.960	0.985
25	0.680	0.667	0.707
26	0.706	0.711	0.720
27	0.817	0.787	0.735
28	1.000	0.989	0.992
29	0.892	0.835	0.819

Table 38: Mean value for: Zero-One-Loss

	BR-ref	BR-MB	BR-RRC
1	0.825	0.988	0.533
2	0.496	0.520	0.582
3	0.403	0.378	0.328
4	0.414	0.329	0.316
5	0.405	0.316	0.341
6	0.377	0.373	0.310
7	0.522	0.476	0.362
8	0.252	0.294	0.305
9	0.201	0.192	0.202
10	0.013	0.013	0.104
11	0.531	0.550	0.587
12	0.582	0.566	0.573
13	0.739	0.729	0.812
14	0.906	0.906	0.915
15	0.753	0.749	0.746
16	0.286	0.276	0.220
17	0.476	0.470	0.451
18	0.539	0.538	0.560
19	0.786	0.786	0.862
20	0.611	0.626	0.720
21	0.456	0.475	0.548
22	0.399	0.384	0.392
23	0.235	0.206	0.110
24	0.603	0.609	0.680
25	0.568	0.556	0.610
26	0.574	0.579	0.603
27	0.380	0.364	0.287
28	0.403	0.429	0.457
29	0.365	0.346	0.422

Table 39: Mean value for: X1.Prec-Loss

	BR-ref	BR-MB	BR-RRC
1	0.842	0.881	0.560
2	0.497	0.526	0.566
3	0.379	0.361	0.347
4	0.433	0.350	0.324
5	0.417	0.340	0.348
6	0.283	0.330	0.355
7	0.470	0.489	0.555
8	0.257	0.285	0.238
9	0.197	0.190	0.197
10	0.018	0.018	0.136
11	0.546	0.571	0.555
12	0.603	0.583	0.555
13	0.594	0.595	0.289
14	0.927	0.924	0.072
15	0.523	0.526	0.762
16	0.175	0.169	0.218
17	0.389	0.393	0.476
18	0.550	0.549	0.655
19	0.741	0.741	0.275
20	0.629	0.635	0.536
21	0.465	0.486	0.549
22	0.168	0.178	0.294
23	0.399	0.426	0.395
24	0.797	0.752	0.456
25	0.541	0.529	0.565
26	0.600	0.604	0.634
27	0.251	0.241	0.318
28	0.429	0.461	0.432
29	0.391	0.386	0.311

Table 40: Mean value for: X1.Rec-Loss

	BR-ref	BR-MB	BR-RRC
1	0.844	0.882	0.854
2	0.503	0.535	0.596
3	0.407	0.388	0.353
4	0.432	0.353	0.332
5	0.423	0.344	0.365
6	0.367	0.387	0.365
7	0.537	0.514	0.511
8	0.265	0.300	0.292
9	0.201	0.191	0.201
10	0.019	0.019	0.127
11	0.543	0.571	0.600
12	0.600	0.593	0.587
13	0.705	0.704	0.777
14	0.926	0.925	0.864
15	0.716	0.714	0.758
16	0.259	0.251	0.233
17	0.463	0.460	0.478
18	0.575	0.575	0.633
19	0.776	0.775	0.816
20	0.626	0.646	0.716
21	0.465	0.490	0.563
22	0.323	0.322	0.308
23	0.376	0.376	0.318
24	0.749	0.726	0.668
25	0.509	0.557	0.614
26	0.601	0.606	0.624
27	0.367	0.352	0.344
28	0.486	0.482	0.488
29	0.408	0.395	0.423

Table 41: Mean value for: Tversky-LossA0.5B0.5

	BR-ref	BR-MB	BR-RRC
1	0.550	0.654	0.621
2	0.800	0.739	0.773
3	0.620	0.692	0.513
4	0.333	0.318	0.297
5	0.569	0.378	0.519
6	0.389	0.309	0.288
7	0.765	0.723	0.655
8	0.295	0.312	0.368
9	0.753	0.781	0.732
10	0.113	0.113	0.186
11	0.894	0.747	0.776
12	0.811	0.678	0.703
13	0.786	0.785	0.909
14	0.870	0.875	0.929
15	0.681	0.681	0.629
16	0.279	0.272	0.289
17	0.479	0.460	0.358
18	0.502	0.503	0.402
19	0.770	0.770	0.905
20	0.908	0.646	0.803
21	0.787	0.727	0.799
22	0.371	0.362	0.201
23	0.254	0.167	0.101
24	0.633	0.682	0.754
25	0.445	0.461	0.403
26	0.517	0.535	0.675
27	0.512	0.501	0.344
28	0.492	0.467	0.507
29	0.550	0.523	0.603

Table 42: Mean value for: MacroPrecisionM

	BR-ref	BR-MB	BR-RRC
1	0.819	0.886	0.897
2	0.912	0.829	0.747
3	0.639	0.631	0.600
4	0.801	0.631	0.598
5	0.842	0.700	0.602
6	0.295	0.339	0.378
7	0.693	0.714	0.738
8	0.339	0.351	0.313
9	0.797	0.924	0.838
10	0.104	0.104	0.277
11	0.930	0.854	0.680
12	0.903	0.736	0.717
13	0.734	0.735	0.889
14	0.951	0.951	0.085
15	0.550	0.551	0.682
16	0.226	0.217	0.297
17	0.409	0.411	0.497
18	0.615	0.614	0.778
19	0.793	0.793	0.803
20	0.954	0.803	0.539
21	0.964	0.892	0.815
22	0.178	0.186	0.293
23	0.515	0.536	0.513
24	0.889	0.838	0.516
25	0.545	0.544	0.633
26	0.746	0.743	0.814
27	0.365	0.357	0.843
28	0.475	0.510	0.467
29	0.589	0.579	0.437

Table 43: Mean value for: MacroRecallM

	BR-ref	BR-MB	BR-RRC
1	0.792	0.855	0.860
2	0.889	0.805	0.773
3	0.670	0.653	0.588
4	0.719	0.529	0.600
5	0.777	0.694	0.573
6	0.351	0.364	0.356
7	0.762	0.743	0.732
8	0.339	0.351	0.366
9	0.780	0.902	0.843
10	0.111	0.111	0.214
11	0.919	0.824	0.757
12	0.878	0.742	0.729
13	0.812	0.811	0.856
14	0.941	0.942	0.879
15	0.661	0.661	0.672
16	0.268	0.261	0.299
17	0.458	0.447	0.440
18	0.588	0.588	0.705
19	0.808	0.808	0.848
20	0.943	0.765	0.760
21	0.944	0.852	0.810
22	0.296	0.294	0.266
23	0.424	0.415	0.373
24	0.866	0.806	0.679
25	0.524	0.526	0.594
26	0.685	0.685	0.778
27	0.473	0.461	0.489
28	0.534	0.496	0.491
29	0.582	0.564	0.549

Table 44: Mean value for: Macro Tversky A0.5 B0.5

	BR-ref	BR-MB	BR-RRC
1	0.525	0.518	0.289
2	0.422	0.676	0.758
3	0.603	0.559	0.381
4	0.270	0.303	0.282
5	0.440	0.357	0.501
6	0.374	0.355	0.294
7	0.591	0.500	0.326
8	0.240	0.270	0.300
9	0.612	0.694	0.632
10	0.021	0.021	0.009
11	0.348	0.647	0.732
12	0.308	0.597	0.657
13	0.693	0.691	0.901
14	0.806	0.806	0.928
15	0.887	0.886	0.447
16	0.291	0.287	0.183
17	0.491	0.472	0.364
18	0.416	0.417	0.238
19	0.665	0.665	0.899
20	0.401	0.584	0.778
21	0.476	0.700	0.787
22	0.418	0.407	0.225
23	0.271	0.173	0.102
24	0.398	0.526	0.730
25	0.376	0.394	0.365
26	0.431	0.466	0.534
27	0.420	0.407	0.297
28	0.484	0.428	0.478
29	0.374	0.353	0.501

Table 45: Mean value for: MicroPrecisionM

	BR-ref	BR-MB	BR-BRC
1	0.863	0.901	0.884
2	0.915	0.829	0.712
3	0.627	0.608	0.570
4	0.795	0.616	0.581
5	0.833	0.684	0.584
6	0.283	0.325	0.360
7	0.494	0.501	0.588
8	0.244	0.366	0.225
9	0.637	0.033	0.840
10	0.033	0.033	0.185
11	0.924	0.841	0.656
12	0.892	0.721	0.666
13	0.597	0.598	0.290
14	0.930	0.929	0.075
15	0.633	0.636	0.901
16	0.180	0.175	0.230
17	0.420	0.423	0.565
18	0.578	0.578	0.693
19	0.743	0.743	0.282
20	0.946	0.786	0.510
21	0.961	0.887	0.803
22	0.178	0.188	0.309
23	0.511	0.533	0.511
24	0.797	0.747	0.474
25	0.560	0.549	0.620
26	0.711	0.704	0.756
27	0.277	0.268	0.359
28	0.428	0.465	0.432
29	0.399	0.392	0.313

Table 46: Mean value for: MicroRecallM

	BR-ref	BR-MB	BR-BRC
1	0.787	0.836	0.800
2	0.852	0.781	0.751
3	0.619	0.589	0.498
4	0.682	0.506	0.472
5	0.744	0.580	0.551
6	0.333	0.343	0.329
7	0.548	0.501	0.489
8	0.243	0.268	0.268
9	0.631	0.897	0.866
10	0.027	0.027	0.106
11	0.867	0.785	0.724
12	0.818	0.675	0.670
13	0.652	0.651	0.827
14	0.898	0.896	0.866
15	0.828	0.827	0.832
16	0.240	0.236	0.207
17	0.458	0.449	0.443
18	0.510	0.510	0.562
19	0.711	0.711	0.827
20	0.903	0.722	0.731
21	0.928	0.837	0.797
22	0.319	0.315	0.270
23	0.415	0.409	0.367
24	0.697	0.671	0.645
25	0.486	0.484	0.525
26	0.617	0.620	0.683
27	0.356	0.345	0.330
28	0.458	0.447	0.457
29	0.387	0.373	0.425

Table 47: Mean value for: MicroTversky A0.5B 0.5

13 Combined Means

	Hamming_Loss_BB_ref	Hamming_Loss_BB_MB	Hamming_Loss_BB_RRC	Zero_One_Loss_BB_ref	Zero_One_Loss_BB_MB	Zero_One_Loss_BB_RRC	X1_Prec_Loss_BB_ref	X1_Prec_Loss_BB_MB	X1_Prec_Loss_BB_RRC	X1_Rec_Loss_BB_ref	X1_Rec_Loss_BB_MB	X1_Rec_Loss_BB_RRC	Tversky_LossA0.5B0.5_BB_ref	Tversky_LossA0.5B0.5_BB_MB	Tversky_LossA0.5B0.5_BB_RRC	MacroPrecisionM_BB_ref	MacroPrecisionM_BB_MB	MacroPrecisionM_BB_RRC	MacroRecallM_BB_ref	MacroRecallM_BB_MB	MacroRecallM_BB_RRC	Macro_Tversky_A0.5B0.5_BB_ref	Macro_Tversky_A0.5B0.5_BB_MB	Macro_Tversky_A0.5B0.5_BB_RRC
ArtisL100	0.065	0.064	0.059	0.908	0.925	0.898	0.825	0.868	0.833	0.842	0.881	0.860	0.844	0.882	0.854	0.550	0.550	0.654	0.621	0.819	0.886	0.897	0.792	0.892
Azotobacter_vinelandii	0.110	0.135	0.183	0.538	0.577	0.651	0.520	0.496	0.582	0.497	0.526	0.506	0.503	0.535	0.506	0.800	0.739	0.773	0.912	0.829	0.747	0.889	0.747	0.889
birds	0.065	0.060	0.046	0.539	0.526	0.483	0.403	0.375	0.328	0.379	0.361	0.347	0.407	0.388	0.353	0.620	0.639	0.602	0.513	0.639	0.631	0.600	0.670	0.670
Caenorhabditis_elegans	0.101	0.090	0.086	0.457	0.386	0.357	0.414	0.357	0.433	0.316	0.316	0.433	0.432	0.432	0.332	0.333	0.318	0.297	0.801	0.631	0.598	0.719	0.598	0.719
Drosophila_melanogaster	0.116	0.104	0.123	0.456	0.381	0.418	0.405	0.341	0.417	0.340	0.340	0.417	0.365	0.344	0.365	0.569	0.378	0.519	0.602	0.700	0.777	0.602	0.777	0.777
emotions	0.223	0.220	0.196	0.762	0.731	0.694	0.377	0.373	0.310	0.283	0.330	0.355	0.367	0.389	0.365	0.288	0.295	0.329	0.378	0.378	0.351	0.378	0.351	0.351
esron	0.078	0.064	0.050	0.913	0.899	0.873	0.522	0.476	0.362	0.470	0.489	0.555	0.537	0.514	0.511	0.765	0.723	0.655	0.693	0.714	0.758	0.762	0.758	0.762
flags	0.235	0.201	0.278	0.788	0.814	0.811	0.252	0.291	0.305	0.257	0.285	0.257	0.265	0.292	0.265	0.368	0.312	0.292	0.339	0.351	0.313	0.339	0.313	0.339
flac2_mfClass	0.085	0.075	0.086	0.217	0.196	0.206	0.201	0.192	0.197	0.190	0.197	0.197	0.201	0.191	0.201	0.753	0.791	0.732	0.797	0.824	0.838	0.797	0.824	0.797
genbase	0.002	0.002	0.009	0.059	0.059	0.181	0.013	0.013	0.104	0.018	0.136	0.018	0.019	0.019	0.127	0.113	0.113	0.186	0.104	0.104	0.277	0.111	0.111	0.277
Grobacter_sulfurreducens	0.113	0.132	0.213	0.567	0.623	0.678	0.531	0.550	0.587	0.546	0.571	0.555	0.543	0.571	0.571	0.600	0.584	0.600	0.680	0.554	0.680	0.519	0.680	0.519
Halorubella_martensii	0.117	0.141	0.167	0.641	0.684	0.683	0.582	0.566	0.573	0.603	0.583	0.555	0.600	0.593	0.587	0.811	0.678	0.703	0.903	0.766	0.717	0.878	0.717	0.878
Human3160	0.128	0.127	0.574	0.897	0.895	0.917	0.739	0.739	0.812	0.594	0.595	0.280	0.705	0.705	0.777	0.786	0.785	0.909	0.734	0.735	0.389	0.812	0.389	0.812
IMDB_sub_0	0.087	0.087	0.852	0.982	0.982	0.996	0.915	0.927	0.906	0.924	0.996	0.924	0.926	0.926	0.864	0.929	0.875	0.951	0.951	0.951	0.085	0.941	0.085	0.941
LLMC-F	0.056	0.055	0.015	0.847	0.842	0.780	0.753	0.749	0.746	0.752	0.746	0.752	0.716	0.714	0.758	0.681	0.639	0.550	0.651	0.652	0.661	0.652	0.661	0.652
medical	0.014	0.014	0.011	0.477	0.465	0.348	0.286	0.276	0.220	0.175	0.169	0.218	0.259	0.251	0.233	0.279	0.289	0.289	0.226	0.217	0.297	0.268	0.297	0.268
nmimlmg	0.243	0.233	0.195	0.716	0.695	0.602	0.476	0.451	0.389	0.463	0.393	0.463	0.460	0.478	0.478	0.460	0.460	0.460	0.411	0.411	0.497	0.458	0.497	0.458
olismmed	0.064	0.064	0.067	0.811	0.810	0.790	0.539	0.538	0.560	0.550	0.549	0.655	0.575	0.633	0.592	0.543	0.402	0.615	0.614	0.775	0.588	0.775	0.588	0.775
Plant978	0.113	0.113	0.634	0.862	0.861	0.936	0.786	0.786	0.862	0.741	0.741	0.275	0.776	0.776	0.775	0.816	0.770	0.905	0.793	0.793	0.303	0.808	0.303	0.808
pyrococcus_furiosus	0.117	0.132	0.358	0.657	0.706	0.833	0.629	0.629	0.811	0.629	0.635	0.536	0.626	0.646	0.646	0.903	0.803	0.803	0.539	0.543	0.539	0.543	0.539	0.543
Saccharomyces_cerevisiae	0.084	0.097	0.130	0.475	0.512	0.508	0.456	0.475	0.548	0.465	0.486	0.465	0.459	0.490	0.563	0.799	0.964	0.892	0.815	0.944	0.815	0.944	0.815	0.944
scene	0.138	0.134	0.091	0.631	0.613	0.383	0.390	0.384	0.302	0.741	0.294	0.323	0.323	0.322	0.308	0.371	0.178	0.293	0.186	0.293	0.293	0.293	0.293	0.293
simp4HC	0.132	0.123	0.108	0.754	0.720	0.658	0.235	0.206	0.110	0.426	0.395	0.395	0.426	0.376	0.376	0.318	0.336	0.167	0.513	0.513	0.424	0.424	0.424	0.424
simp4HS	0.215	0.237	0.441	0.953	0.960	0.985	0.603	0.609	0.680	0.752	0.456	0.683	0.749	0.683	0.682	0.889	0.838	0.838	0.838	0.838	0.838	0.838	0.838	0.838
SLASHDOT-F	0.044	0.045	0.045	0.680	0.667	0.707	0.568	0.556	0.610	0.541	0.529	0.595	0.569	0.557	0.614	0.445	0.461	0.403	0.544	0.544	0.534	0.534	0.534	0.534
stackex_crew	0.071	0.073	0.080	0.706	0.711	0.720	0.574	0.579	0.663	0.600	0.634	0.600	0.634	0.617	0.606	0.675	0.746	0.685	0.685	0.685	0.685	0.685	0.685	0.685
tns2007-500_sub_0	0.081	0.078	0.064	0.817	0.787	0.735	0.380	0.364	0.287	0.251	0.311	0.318	0.361	0.344	0.344	0.501	0.444	0.357	0.445	0.445	0.445	0.445	0.445	0.445
water-quality_mfClass	0.351	0.314	0.346	1.000	0.989	0.992	0.493	0.429	0.457	0.429	0.461	0.432	0.486	0.486	0.488	0.492	0.467	0.507	0.475	0.510	0.467	0.534	0.467	0.534
yeast	0.229	0.219	0.308	0.892	0.835	0.819	0.365	0.346	0.422	0.391	0.386	0.311	0.408	0.395	0.423	0.550	0.523	0.603	0.589	0.579	0.437	0.582	0.437	0.582

Table 48: Combined Mean values

	BR-ref	BR-MB	BR-RRC
1	3.000	2.000	1.000
2	1.000	2.000	3.000
3	3.000	2.000	1.000
4	3.000	2.000	1.000
5	2.000	1.000	3.000
6	3.000	2.000	1.000
7	3.000	2.000	1.000
8	1.000	2.000	3.000
9	2.000	1.000	3.000
10	1.500	1.500	3.000
11	1.000	2.000	3.000
12	1.000	2.000	3.000
13	2.000	1.000	3.000
14	1.000	2.000	3.000
15	3.000	2.000	1.000
16	3.000	2.000	1.000
17	3.000	2.000	1.000
18	2.000	3.000	1.000
19	2.000	1.000	3.000
20	1.000	2.000	3.000
21	1.000	2.000	3.000
22	3.000	2.000	1.000
23	3.000	2.000	1.000
24	1.000	2.000	3.000
25	1.000	3.000	2.000
26	1.000	2.000	3.000
27	3.000	2.000	1.000
28	3.000	1.000	2.000
29	2.000	1.000	3.000

Table 49: Ranks for: Hamming Loss

	BR-ref	BR-MB	BR-RRC
1	2.000	3.000	1.000
2	1.000	2.000	3.000
3	3.000	2.000	1.000
4	3.000	2.000	1.000
5	3.000	1.000	2.000
6	3.000	2.000	1.000
7	3.000	2.000	1.000
8	1.000	3.000	2.000
9	3.000	1.000	2.000
10	1.500	1.500	3.000
11	1.000	2.000	3.000
12	1.000	3.000	2.000
13	2.000	1.000	3.000
14	2.000	1.000	3.000
15	3.000	2.000	1.000
16	3.000	2.000	1.000
17	3.000	2.000	1.000
18	3.000	2.000	1.000
19	2.000	1.000	3.000
20	1.000	2.000	3.000
21	1.000	2.000	3.000
22	3.000	2.000	1.000
23	3.000	2.000	1.000
24	1.000	2.000	3.000
25	2.000	1.000	3.000
26	1.000	2.000	3.000
27	3.000	2.000	1.000
28	3.000	1.000	2.000
29	3.000	2.000	1.000

Table 50: Ranks for: ZeroOneLoss

	BR-ref	BR-MB	BR-RRC
1	1.000	3.000	2.000
2	1.000	2.000	3.000
3	3.000	2.000	1.000
4	3.000	2.000	1.000
5	3.000	1.000	2.000
6	3.000	2.000	1.000
7	3.000	2.000	1.000
8	1.000	2.000	3.000
9	2.000	1.000	3.000
10	1.500	1.500	3.000
11	1.000	2.000	3.000
12	3.000	1.000	2.000
13	2.000	1.000	3.000
14	2.000	1.000	3.000
15	3.000	2.000	1.000
16	3.000	2.000	1.000
17	3.000	2.000	1.000
18	2.000	1.000	3.000
19	1.000	2.000	3.000
20	1.000	2.000	3.000
21	1.000	2.000	3.000
22	3.000	2.000	1.000
23	3.000	2.000	1.000
24	1.000	2.000	3.000
25	2.000	1.000	3.000
26	1.000	2.000	3.000
27	3.000	2.000	1.000
28	3.000	1.000	2.000
29	2.000	1.000	3.000

Table 51: Ranks for: X1Proc Loss

	BR-ref	BR-MB	BR-RRC
1	1,000	3,000	2,000
2	1,000	2,000	3,000
3	3,000	2,000	1,000
4	3,000	2,000	1,000
5	3,000	1,000	2,000
6	1,000	2,000	3,000
7	1,000	2,000	3,000
8	2,000	3,000	1,000
9	2,000	1,000	3,000
10	1,500	1,500	3,000
11	1,000	3,000	2,000
12	3,000	2,000	1,000
13	2,000	3,000	1,000
14	3,000	2,000	1,000
15	1,000	2,000	3,000
16	2,000	1,000	3,000
17	1,000	2,000	3,000
18	2,000	1,000	3,000
19	3,000	2,000	1,000
20	2,000	3,000	1,000
21	1,000	2,000	3,000
22	1,000	2,000	3,000
23	2,000	3,000	1,000
24	3,000	2,000	1,000
25	2,000	1,000	3,000
26	1,000	2,000	3,000
27	2,000	1,000	3,000
28	1,000	3,000	2,000
29	3,000	2,000	1,000

Table 52: Ranks for: XLRec Loss

	BR-ref	BR-MB	BR-RRC
1	1,000	3,000	2,000
2	1,000	2,000	3,000
3	3,000	2,000	1,000
4	3,000	2,000	1,000
5	3,000	1,000	2,000
6	2,000	3,000	1,000
7	3,000	2,000	1,000
8	1,000	3,000	2,000
9	3,000	1,000	2,000
10	1,500	1,500	3,000
11	1,000	2,000	3,000
12	3,000	2,000	1,000
13	2,000	1,000	3,000
14	3,000	2,000	1,000
15	2,000	1,000	3,000
16	3,000	2,000	1,000
17	2,000	1,000	3,000
18	2,000	1,000	3,000
19	2,000	1,000	3,000
20	1,000	2,000	3,000
21	1,000	2,000	3,000
22	3,000	2,000	1,000
23	3,000	2,000	1,000
24	3,000	2,000	1,000
25	2,000	1,000	3,000
26	1,000	2,000	3,000
27	3,000	2,000	1,000
28	2,000	1,000	3,000
29	2,000	1,000	3,000

Table 53: Ranks for: TverskyLoss0.5B0.5

	BR-ref	BR-MB	BR-RRC
1	1,000	3,000	2,000
2	3,000	1,000	2,000
3	3,000	2,000	1,000
4	3,000	2,000	1,000
5	3,000	1,000	2,000
6	3,000	2,000	1,000
7	3,000	2,000	1,000
8	1,000	2,000	3,000
9	2,000	3,000	1,000
10	1,500	1,500	3,000
11	3,000	1,000	2,000
12	3,000	1,000	2,000
13	2,000	1,000	3,000
14	1,000	2,000	3,000
15	3,000	2,000	1,000
16	2,000	1,000	3,000
17	3,000	2,000	1,000
18	2,000	3,000	1,000
19	1,000	2,000	3,000
20	3,000	1,000	2,000
21	2,000	1,000	3,000
22	3,000	2,000	1,000
23	3,000	2,000	1,000
24	1,000	2,000	3,000
25	2,000	3,000	1,000
26	1,000	2,000	3,000
27	3,000	2,000	1,000
28	2,000	1,000	3,000
29	2,000	1,000	3,000

Table 54: Ranks for: MacroPrecisionM

	BR-ref	BR-MB	BR-RRC
1	1,000	2,000	3,000
2	3,000	2,000	1,000
3	3,000	2,000	1,000
4	3,000	2,000	1,000
5	3,000	2,000	1,000
6	1,000	2,000	3,000
7	1,000	2,000	3,000
8	2,000	3,000	1,000
9	1,000	3,000	2,000
10	1,500	1,500	3,000
11	3,000	2,000	1,000
12	3,000	2,000	1,000
13	2,000	3,000	1,000
14	2,000	3,000	1,000
15	1,000	2,000	3,000
16	2,000	1,000	3,000
17	1,000	2,000	3,000
18	2,000	1,000	3,000
19	2,000	3,000	1,000
20	3,000	2,000	1,000
21	3,000	2,000	1,000
22	1,000	2,000	3,000
23	2,000	3,000	1,000
24	3,000	2,000	1,000
25	2,000	1,000	3,000
26	2,000	1,000	3,000
27	2,000	1,000	3,000
28	2,000	3,000	1,000
29	3,000	2,000	1,000

Table 55: Ranks for: MacroRecallM

	BR-ref	BR-MB	BR-RRC
1	1.000	2.000	3.000
2	3.000	2.000	1.000
3	3.000	2.000	1.000
4	3.000	2.000	1.000
5	3.000	2.000	1.000
6	1.000	3.000	2.000
7	3.000	2.000	1.000
8	1.000	2.000	3.000
9	1.000	3.000	2.000
10	1.500	1.500	3.000
11	3.000	2.000	1.000
12	3.000	2.000	1.000
13	2.000	1.000	3.000
14	2.000	3.000	1.000
15	2.000	1.000	3.000
16	2.000	1.000	3.000
17	3.000	2.000	1.000
18	2.000	1.000	3.000
19	1.000	2.000	3.000
20	3.000	2.000	1.000
21	3.000	2.000	1.000
22	3.000	2.000	1.000
23	3.000	2.000	1.000
24	3.000	2.000	1.000
25	1.000	2.000	3.000
26	1.000	2.000	3.000
27	2.000	1.000	3.000
28	3.000	2.000	1.000
29	3.000	2.000	1.000

Table 56: Ranks for: MacroTversky A0.5 B0.5

	BR-ref	BR-MB	BR-RRC
1	1.000	2.000	1.000
2	1.000	2.000	3.000
3	3.000	2.000	1.000
4	1.000	3.000	2.000
5	2.000	1.000	3.000
6	3.000	2.000	1.000
7	3.000	2.000	1.000
8	1.000	2.000	3.000
9	1.000	3.000	2.000
10	2.500	2.500	1.000
11	1.000	2.000	3.000
12	1.000	2.000	3.000
13	2.000	1.000	3.000
14	1.000	2.000	3.000
15	3.000	2.000	1.000
16	3.000	2.000	1.000
17	3.000	2.000	1.000
18	2.000	3.000	1.000
19	1.000	2.000	3.000
20	1.000	2.000	3.000
21	1.000	2.000	3.000
22	3.000	2.000	1.000
23	3.000	2.000	1.000
24	1.000	2.000	3.000
25	2.000	3.000	1.000
26	1.000	2.000	3.000
27	3.000	2.000	1.000
28	3.000	1.000	2.000
29	2.000	1.000	3.000

Table 57: Ranks for: MicroPrecisionM

	BR-ref	BR-MB	BR-RRC
1	1.000	3.000	2.000
2	3.000	2.000	1.000
3	3.000	2.000	1.000
4	3.000	2.000	1.000
5	3.000	2.000	1.000
6	1.000	2.000	3.000
7	1.000	2.000	3.000
8	2.000	3.000	1.000
9	1.000	3.000	2.000
10	1.500	1.500	3.000
11	3.000	2.000	1.000
12	3.000	2.000	1.000
13	2.000	3.000	1.000
14	3.000	2.000	1.000
15	1.000	2.000	3.000
16	2.000	1.000	3.000
17	1.000	2.000	3.000
18	2.000	1.000	3.000
19	3.000	2.000	1.000
20	3.000	2.000	1.000
21	3.000	2.000	1.000
22	1.000	2.000	3.000
23	1.000	3.000	2.000
24	3.000	2.000	1.000
25	2.000	1.000	3.000
26	2.000	1.000	3.000
27	2.000	1.000	3.000
28	1.000	3.000	2.000
29	3.000	2.000	1.000

Table 58: Ranks for: MicroRecallM

	BR-ref	BR-MB	BR-RRC
1	1.000	3.000	2.000
2	3.000	2.000	1.000
3	3.000	2.000	1.000
4	3.000	2.000	1.000
5	3.000	2.000	1.000
6	2.000	3.000	1.000
7	3.000	2.000	1.000
8	1.000	3.000	2.000
9	1.000	3.000	2.000
10	1.500	1.500	3.000
11	3.000	2.000	1.000
12	3.000	2.000	1.000
13	2.000	1.000	3.000
14	3.000	2.000	1.000
15	2.000	1.000	3.000
16	3.000	2.000	1.000
17	3.000	2.000	1.000
18	2.000	1.000	3.000
19	1.000	2.000	3.000
20	3.000	1.000	2.000
21	3.000	2.000	1.000
22	3.000	2.000	1.000
23	3.000	2.000	1.000
24	3.000	2.000	1.000
25	2.000	1.000	3.000
26	1.000	2.000	3.000
27	3.000	2.000	1.000
28	3.000	1.000	2.000
29	2.000	1.000	3.000

Table 59: Ranks for: MicroTversky A0.5B 0.5