Table 1: Results in the different frameworks and the generalized island model

	Dataset	autoWEKA	autosklearn	random search	GAMA	Unconnected topology
0	*yeast*	0.6219	0.6953	0.4975	0.472	0.378
1	*KDDCup09_appetency*		0.9773	0.9822	0.982	0.7858
2	*covertype*	0.6573	0.957	0.8545	0.9582	0.6643
3	*amazon-commerce-reviews*	0.62	0.8173	0.8267	0.7853	0.5853
4	*Australian*	0.8493	0.8812	0.8725	0.858	0.8609
5	*wilt*	0.9788	0.9864	0.9851	0.9876	0.9769
6	*numerai28_6*	0.5166	0.514	0.5218	0.5213	0.5201
7	*phoneme*	0.9119	0.8983	0.9094	0.9083	0.9101
8	*credit-g*	0.74	0.7	0.748	0.762	0.698
9	*steel-plates-fault*	0.7821	0.8103	0.8023	0.792	0.794
10	*APSFailure*	0.991	0.9941	0.9925	0.993	0.5952
11	*dilbert*		0.985	0.9362	0.9626	0.7746
12	*fabert*	0.5941	0.732	0.708	0.7238	0.6796
13	*jasmine*	0.801	0.8261	0.8313	0.838	0.8152
14	*airlines*	0.6252	0.6047	0.6646	0.6724	0.5211
15	*dionis*		0.3426	0.5364	0.6454	0.2251
16	*albert*		0.69	0.6209	0.6697	0.7
17	*gina*	0.7196	0.9525	0.943	0.9417	0.9271
18	*ozone-level-8hr*	0.9439	0.94	0.9488	0.9464	0.7511
19	*vehicle*	0.7059	0.8235	0.8376	0.8141	0.7835
20	*madeline*	0.7887	0.9005	0.8796	0.886	0.858
21	*philippine*	0.762	0.814	0.7991	0.8258	0.8117
22	*ada*	0.8675	0.867	0.8723	0.8718	0.8598
23	*arcene*	0.66	0.82	0.86		0.87
24	*jannis*	0.6796	0.7338	0.7125	0.7134	0.6514
25	*Diabetes130US*	0.4771	0.6194	0.6071	0.6074	0.6193
26	*micro-mass*	0.869	0.9241	0.9546	0.9476	0.892
27	*eucalyptus*	0.6622	0.6784	0.6892	0.7027	0.6611
28	*blood-transfusion-service-center*	0.752		0.76	0.7707	0.6187
29	*qsar-biodeg*	0.8566	0.8736	0.8623	0.5226	0.8566
30	*cnae-9*	0.8611	0.9611	0.9519	0.95	0.9619
31	*pc4*	0.9247	0.9041	0.9055	0.9151	0.711
32	*cmc*	0.5439	0.5973	0.5556	0.5488	0.5244
33	*car*	0.9942	1.0	0.9988	0.9965	0.9676
34	*mfeat-factors*	0.9775	0.982	0.967	0.978	0.96
35	*kc1*	0.8768	0.8607	0.8607	0.8645	0.8654
36	*segment*	0.9221	0.9437	0.9524	0.9481	0.9273
37	*dna*	0.9172	0.9605	0.9649	0.9661	0.9574
38	*kr-vs-kp*	0.9625	0.9938	0.995	0.995	0.9881
39	*Internet-Advertisements*	0.9634	0.9652	0.975	0.9762	0.7726
40	*Bioresponse*	0.7374	0.8	0.8129	0.8156	0.6268
41	*churn*	0.931	0.9496	0.952	0.9552	0.942
42	*first-order-theorem-proving*	0.5801	0.5804	0.616	0.6167	0.5931
43	*GesturePhaseSegmentationProcessed*	0.6756	0.7123	0.6849	0.6847	0.6257
44	*PhishingWebsites*		0.9606	0.974	0.9736	0.9613
45	*sylvine*	0.9212	0.9481	0.9513	0.952	0.9407
46	*christine*	0.7269	0.755	0.7465	0.741	0.7306
47	*wine-quality-white*	0.6974	0.6702	0.5616	0.6102	0.4661
48	*Satellite*	0.9833	0.9886	0.9937	0.9925	0.7941
49	*Fashion-MNIST*	0.8567	0.9039	0.8601	0.8813	0.6413
50	*connect-4*	0.7238	0.8612	0.8425	0.8548	0.813

51	*Amazon_employee_access*	0.9434	0.9487	0.9489	0.9493	0.9499
52	*nomao*	0.9569	0.9726	0.9691	0.9728	0.9646
53	*jungle_chess_2pcs_raw_endgame_complete*	0.7387	0.9265	0.8934	0.894	0.844
54	*bank-marketing*	0.8879	0.9114	0.9073	0.909	0.7265
55	*adult*	0.8588	0.8676	0.8727	0.8732	0.8677
56	*helena*		0.3901	0.3358	0.3387	0.3036
57	*volkert*		0.7241	0.659	0.6874	0.4862
58	*robert*		0.54	0.389	0.426	0.23
59	*shuttle*	0.9988	0.9999	0.9999	1.0	0.9995
60	*guillermo*		0.8558	0.7788	0.83	0.7286
61	*riccardo*		0.9961	0.8791	0.9806	0.9314
62	*MiniBooNE*	0.915	0.9442	0.9361	0.9384	0.9063
63	*kick*		0.9032	0.9017	0.9015	0.9039
64	*Click_prediction_small*	0.8309	0.836	0.8335	0.8339	0.8369
65	*okcupid-stem*	0.724	0.7565	0.7527	0.7499	0.7441
66	*sf-police-incidents*		0.8785	0.877	0.8784	0.8689
67	*KDDCup99*		0.9999	0.2	0.5864	0.8409
68	*porto-seguro*		0.9635	0.9635	0.8286	0.9509
69	*Higgs*		0.7503	0.7	0.717	0.53
70	*KDDCup09-Upselling*		0.953	0.6084	0.9554	0.4773
	Dataset	**Ring topology**	**Fully topology**	**ASHA**	**TPOT**	**H2O**
0	*yeast*	0.4639	0.464	0.3821		0.349
1	*KDDCup09_appetency*	0.9822	0.8587	0.9822		0.9593
2	*covertype*	0.8107	0.7595	0.9234	0.7708	0.7694
3	*amazon-commerce-reviews*	0.4973	0.5693	0.78		0.6267
4	*Australian*	0.8848	0.8667	0.858	0.8783	0.887
5	*wilt*	0.9872	0.3955	0.9814	0.9868	0.9843
6	*numerai28_6*	0.5224	0.417	0.5171	0.3875	0.5051
7	*phoneme*	0.9001	0.9038	0.9072	0.9165	0.9009
8	*credit-g*	0.744	0.564	0.752	0.745	0.765
9	*steel-plates-fault*	0.7271	0.7652	0.7961	0.8133	0.8321
10	*APSFailure*	0.9954	0.9889	0.9931	0.9938	0.9946
11	*dilbert*	0.7418	0.913			0.9876
12	*fabert*	0.6689	0.6648	0.715		0.7238
13	*jasmine*	0.8173	0.8152	0.8233	0.814	0.8214
14	*airlines*	0.6672	0.6341		0.6718	0.3118
15	*dionis*	0.1888	0.2936	0.5608		0.1169
16	*albert*	0.7	0.7	0.6671		
17	*gina*	0.9195	0.9151	0.948	0.9504	0.9601
18	*ozone-level-8hr*	0.9485	0.9409	0.9433	0.9417	0.9331
19	*vehicle*	0.7553	0.7788	0.7718	0.8729	0.8635
20	*madeline*	0.8331	0.8382	0.879	0.8716	0.8516
21	*philippine*	0.7655	0.7638	0.7909	0.8071	0.774
22	*ada*	0.8602	0.6901	0.8699	0.8766	0.8612
23	*arcene*	0.52	0.62	0.84	0.2	0.82
24	*jannis*	0.6737	0.6872	0.7132	0.7145	0.7301
25	*Diabetes130US*	0.4819	0.5992	0.6098		0.4636
26	*micro-mass*	0.7545	0.7546	0.9335	0.931	0.8966
27	*eucalyptus*	0.6783	0.2297	0.6811	0.6973	0.6811
28	*blood-transfusion-service-center*	0.6027	0.77	0.7653	0.5667	0.72
29	*qsar-biodeg*	0.8472	0.8743	0.8604	0.4292	0.8821
30	*cnae-9*	0.5759	0.7556	0.937	0.963	0.9648
31	*pc4*	0.7137	0.9068	0.9055	0.9178	0.8918
32	*cmc*	0.519	0.5244	0.5542	0.5743	0.5892

33	*car*	1.0	0.9861	0.9988	0.8613	1.0
34	*mfeat-factors*	0.989	0.959	0.966	0.99	0.98
35	*kc1*	0.8616	0.8483	0.8607	0.8744	0.8218
36	*segment*	0.9325	0.9342	0.9463	0.9489	0.9429
37	*dna*	0.9486	0.9524	0.968	0.9603	0.953
38	*kr-vs-kp*	0.9994	0.9656	0.9919	0.9969	0.995
39	*Internet-Advertisements*	0.5835	0.586	0.9762	0.386	0.9701
40	*Bioresponse*	0.7815	0.8164	0.8166		0.8198
41	*churn*	0.9524	0.9316	0.9516	0.946	0.9526
42	*first-order-theorem-proving*	0.6175	0.6062	0.6239	0.6193	0.6127
43	*GesturePhaseSegmentationProcessed*	0.6179	0.6399	0.6887	0.6994	0.7178
44	*PhishingWebsites*	0.9602	0.9624	0.9738	0.967	0.9651
45	*sylvine*	0.9419	0.9434	0.9512	0.9545	0.9376
46	*christine*	0.5738	0.5797	0.7332		0.7428
47	*wine-quality-white*	0.5629	0.5682	0.6604	0.7133	0.6992
48	*Satellite*	0.9942	0.7945	0.9929	0.9889	0.9868
49	*Fashion-MNIST*	0.6227	0.5533	0.8681		0.541
50	*connect-4*	0.7935	0.8185	0.8525	0.8533	0.8781
51	*Amazon_employee_access*	0.9464	0.9445	0.9498	0.9465	0.9483
52	*nomao*	0.9556	0.7715	0.9735	0.9733	0.9764
53	*jungle_chess_2pcs_raw_endgame_complete*	0.8382	0.8552	0.8676	0.9277	0.9599
54	*bank-marketing*	0.9038	0.9064	0.4035	0.9111	0.9054
55	*adult*	0.8627	0.8669	0.8747	0.8719	0.871
56	*helena*	0.175	0.2603	0.3433		0.3497
57	*volkert*	0.5643	0.5723	0.6539		0.7148
58	*robert*	0.2948	0.233	0.464	0.0817	0.504
59	*shuttle*	0.9983	0.8997	0.9129	0.9998	0.9998
60	*guillermo*	0.83	0.849	0.8046	0.3924	0.838
61	*riccardo*	0.665	0.6884	0.9442	0.1812	0.4972
62	*MiniBooNE*	0.9477	0.9048	0.9376	0.9379	0.9449
63	*kick*	0.9075		0.902	0.2944	0.706
64	*Click_prediction_small*	0.8251	0.7074	0.1039		0.6941
65	*okcupid-stem*	0.7427	0.7451	0.7573	0.7607	0.7606
66	*sf-police-incidents*	0.877	0.867	0.8771		0.7681
67	*KDDCup99*	0.8798	0.8832	0.4996		
68	*porto-seguro*	0.9654	0.862	0.9635	0.9635	0.882
69	*Higgs*	0.6575	0.6354	0.7106		0.5898
70	*KDDCup09-Upselling*	0.7954	0.9562	0.8796		