

Table 1. The results of AutoML frameworks, H2O (on the left) and Weka (on the right)

#	Dataset	Model	Arguments	AUC	H2O							WEKA										
					Accuracy	Precision	Recall	F-measure	Training time	CPU usage	Memory usage	Model	Arguments	AUC	Accuracy	Precision	Recall	F-measure	Training time	CPU usage	Memory usage	
1	Adults	StackedEnsemble_AllModels_5_AutoML (bgm)		0.928394	0.895333	0.984794	0.0121669	0.024036831	13.387 sec	45%	3.6Gb	weka.classifiers.meta.Bagging	[P, 26, -I, 56, -S, 1, -W, weka.classifiers.trees.J4 8, --, -O, -B, -J, -A, -M, 18, -C, 0.5632841244815461]	0.919	0.871	0.866	0.871	0.865	127.898 seconds	16%	1.02Gb	
		StackedEnsemble_AllModels_4_AutoML		0.928255					3.395 sec													
		StackedEnsemble_AllModels_2_AutoML()		0.928228					2.434 sec													
2	Banking	StackedEnsemble_AllModels_6_AutoML (glm)		0.938649	0.951918	1	1	1	4.910 sec	75%	2.2Gb	weka.classifiers.meta.Bagging	[P, 26, -I, 56, -S, 1, -W, weka.classifiers.trees.J4 8, --, -O, -B, -J, -A, -M, 18, -C, 0.5632841244815461]	0.936	0.918	0.91	0.918	0.911	3,341 seconds	12%	1.3Gb	
		GBM_1_AutoML		0.938403					0.755 sec													
		StackedEnsemble_AllModels_3_AutoML (glm)		0.938359					1.073 sec													
3	Cars	GBM_1_AutoML		NaN	0.999422	Nan	Nan	Nan	5.548 sec	54%	2.6Gb	weka.classifiers.functions.MultilayerPerceptron	[L, 0.46130475900540124, M, 0.43506989468962987, H, t, -S, 1]	0.764	0.7	0.7	1	0.824	1,084 seconds	18%	0.9Gb	
		StackedEnsemble_BestOfFamily_4_AutoML																				
		StackedEnsemble_AllModels_5_AutoML																				
4	Amazon_employee_access	StackedEnsemble_AllModels_4_AutoML (glm)		0.9923	0.97858	1	1	0.024036831	3.794 sec	34%	1.76Gb	weka.classifiers.trees.RandomForest	[-I, 10, -K, 0, -depth, 0]	0.999	0.992	0.992	0.992	0.992	8,963 seconds	41%	1.2Gb	
		StackedEnsemble_AllModels_3_AutoML		0.860573					2.540 sec													
		StackedEnsemble_BestOfFamily_4_AutoML		0.859244					1.905 sec													
5	Australian	GBM_2_AutoML		0.946786	0.985507	1	1	0.024036831	0.227 sec	45%	2.27Gb	weka.classifiers.bayes.BayesNet	[-D, -Q, weka.classifiers.bayes.net.search.local.K2]	0.947	0.874	0.874	0.874	0.874	0.022 seconds	22%	1.2Gb	
		StackedEnsemble_BestOfFamily_4_AutoML		0.946501					0.255 sec													
		StackedEnsemble_AllModels_2_AutoML		0.945535					0.260 sec													
6	blood-transfusion-service-center	DeepLearning_grid_1_AutoML		0.760985	0.789365	1	1	0.024036831	19.249 sec	48%%	2.1Gb	weka.classifiers.lazy.LWL	[-K, 90, -A, weka.core.neighboursearch.LinearNNSearch, -W, weka.classifiers.functions.SimpleLogistic, --, -S, -W, 0]	0.673	0.816	0.802	0.816	0.796	0.001 seconds	2%	0.8Gb	
		StackedEnsemble_AllModels_4_AutoML		0.756288					0.356 sec													
		StackedEnsemble_BestOfFamily_4_AutoML		0.755155					0.260 sec													
7	christine	StackedEnsemble_AllModels_1_AutoML (glm)		0.810738	0.91399	1	1	0.024036831	0.658 sec	55%	2.3Gb	weka.classifiers.trees.RandomForest	[-I, 10, -K, 0, -depth, 0]	0.999	0.982	0.983	0.982	0.982	0.713 seconds	13%	1.2Gb	
		StackedEnsemble_AllModels_2_AutoML		0.810566					0.773 sec													
		StackedEnsemble_BestOfFamily_3_AutoML		0.810259					0.977 sec													
8	cnae-9	StackedEnsemble_BestOfFamily_2_AutoM (glm)		NaN	0.967	0.999	0.999	0.024036831	4.225 sec	52%	1.9Gb	weka.classifiers.trees.RandomForest	[-I, 10, -K, 0, -depth, 0]	0.986	0.843	0.882	0.843	0.85	0.03 seconds	14%	1.6Gb	
		StackedEnsemble_BestOfFamily_1_AutoML		NaN					8.139 sec													
		StackedEnsemble_AllModels_1_AutoML		NaN					5.937 sec													
9	fabert	H2O exception: OSErrror: Job with key \$03017f00000132d4f1fffff\$S_9eac51f4d4e09fa49281d9a199914dd8 failed with an exception: java.lang.AssertionError: Missing metrics for model StackedEnsemble_BestOfFamily_4_AutoML								56%	1.8Gb	weka.classifiers.trees.REPTree	[-M, 6, -V, 2.2530285173350354E-5, -L, -I, -P]	0.9	0.626	0.675	0.626	0.625	3.253 seconds	11%	0.8Gb	
10	helena	Results are not relevant (report is available)								52%	1.7Gb	weka.classifiers.trees.RandomForest	[-I, 10, -K, 0, -depth, 0]	1	0.991	0.991	0.991	0.991	22,074 seconds	11%	1.2Gb	
11	jannis	Results are not relevant (report is available)								61%	1.6Gb	weka.classifiers.trees.RandomForest	[-I, 10, -K, 0, -depth, 0]	0.999	0.987	0.987	0.987	0.987	5,943 seconds	6%	0.8Gb	
12	jasmine	StackedEnsemble_AllModels_4_AutoML		0.880937	0.984249	1	1	0.024036831	0.493 sec	51%	1.72Gb	weka.classifiers.rules.JRip	[-N, 3.7161254683577796, -E, -O, 5]	0.816	0.813	0.854	0.813	0.807	0.329 seconds	7%	1.1Gb	
		StackedEnsemble_AllModels_3_AutoML		0.880897					0.459 sec													
		StackedEnsemble_BestOfFamily_7_AutoML		0.880862					4.124 sec													
13	kc1	StackedEnsemble_BestOfFamily_3_AutoML		0.827465	0.934566	1	1	0.024036831	0.270 sec	48%	2.02Gb	weka.classifiers.lazy.IBk	[-E, -K, 6, -I]	0.989	0.981	0.981	0.981	0.981	0.001 seconds	6%	0.8Gb	
		StackedEnsemble_BestOfFamily_4_AutoML		0.825104					0.714 sec													
		GBM_5_AutoML		0.824983					0.261 sec													
14	kr-vs-kp	GBM_2_AutoML		NaN	0.995934				1.207 sec	46%	1.6Gb	weka.classifiers.trees.REPTree	[-M, 1, -V, 0.024603875538970133, -L, -I, -P]	0.976	0.942	0.944	0.942	0.942	0.02 seconds	6%	1.1Gb	
		GBM_grid_1_AutoML		NaN					0.893 sec													
		GBM_grid_1_AutoML		NaN					0.882 sec													
15	mfeat-factors	Results are not relevant (report is available)								42%	1.44Gb	weka.classifiers.trees.LMT	[-P, -M, 15, -W, 0, -A]	1	1	1	1	1	14.514 seconds	7%	0.8Gb	
16	MiniBooNE	StackedEnsemble_AllModels_1_AutoML		0.985814	0.987868	1	1	0.024036831	2.793 sec	51%	1.44Gb	weka.classifiers.trees.RandomForest	[-I, 10, -K, 0, -depth, 0]	1	0.994	0.994	0.994	0.994	10.96 seconds	6%	0.6Gb	
		StackedEnsemble_AllModels_2_AutoML		0.985791					3.060 sec													
		StackedEnsemble_BestOfFamily_3_AutoML		0.985751					5.496 sec													
17	nomao	StackedEnsemble_AllModels_1_AutoML		0.996174	0.998013	1	1	0.024036831	1.844 sec	44%	1.88Gb	weka.classifiers.trees.RandomForest	[-I, 10, -K, 0, -depth, 0]	0.996	0.974	0.974	0.974	0.974	0.71 seconds	7%	0.8Gb	
		StackedEnsemble_AllModels_3_AutoML		0.99616					2.137 sec													
		StackedEnsemble_AllModels_2_AutoML		0.99615					1.630 sec													
18	credit-g	StackedEnsemble_BestOfFamily_6_AutoML (glm)		0.79396	0.933	1	1	0.024036831	1.831 sec	52%	1.92Gb	weka.classifiers.lazy.LWL	[-U, 3, -A, weka.core.neighboursearch.LinearNNSearch, -W, weka.classifiers.functions.SimpleLogistic, --, -S, -W, 0, -A]	0.773	0.746	0.729	0.746	0.723	0.0 seconds	6%	1.0Gb	
		StackedEnsemble_BestOfFamily_2_AutoML		0.793598					0.362 sec													
		StackedEnsemble_BestOfFamily_3_AutoML		0.792595					0.255 sec													
19	segment	GBM_grid_1_AutoML		NaN	0.987446				5.001 sec	44%	1.29Gb	weka.classifiers.meta.AdaBoostM1	[-P, 87, -I, 58, -Q, -S, 1, -W, weka.classifiers.rules.PART, --, -N, 3, -M, 1, -R, -B]	1	1	1	1	1	1,281 seconds	13%	1.2Gb	
		StackedEnsemble_BestOfFamily_4_AutoML		NaN					6.482 sec													
		StackedEnsemble_BestOfFamily_5_AutoML		NaN					86240 sec													
20	sylvine	StackedEnsemble_AllModels_5_AutoML (gbm)		0.98757	1	1	1	0.024036831	6.868 sec	53%	1.65Gb	weka.classifiers.meta.AdaBoostM1	[P, 93, -I, 60, -S, 1, -W, weka.classifiers.trees.J4 8, --, -S, -M, 1]	1	1	1	1	1	1,082 seconds	9%	1.0Gb	
		StackedEnsemble_AllModels_2_AutoML		0.987315					0.547 sec													
		StackedEnsemble_AllModels_1_AutoML		0.987173					0.526 sec													