

Table 1: The effective choice of the studied frameworks versus ontology (ranked) suggestions along with its querying time

Dataset (instances, features)	Auto-WEKA chosen alg. ($runtime_{max}$ =15 min)	H2O chosen alg. ($runtime_{max}$ =15 min)	DM&ML ontology Chosen algorithms	Query time, ms.
adults (48842, 15)	meta.Bagging	StackedEnsemble	Bagging MultilayerPerceptron / RandomForest / REPTree	104
Amazon_employee_access (32769, 10)	trees.RandomForest	StackedEnsemble	Bagging MultilayerPerceptron RandomForest	98
Australian (690, 15)	bayes.BayesNet	GBM	LWL/MultilayerPerceptron AdaBoost / BayesNet IBK / RandomForest	117
banking (45211, 17)	meta.Bagging	StackedEnsemble	Bagging MultilayerPerceptron RandomForest / REPTree	106
blood-transfusion-service-center (748, 5)	lazy.LWL	DeepLearning_grid	LWL / MultilayerPerceptron	102
cars (1728, 7)	f.MultilayerPerceptron	GBM	LWL / MultilayerPerceptron RandomForest	94
christine (5418, 1637)	trees.RandomForest	StackedEnsemble	RandomForest / REPTree	106
cnae-9 (1080, 857)	trees.RandomForest	StackedEnsemble	JRip / LMT RandomForest / REPTree	97
fabert (8237, 801)	trees.REPTree	StackedEnsemble	RandomForest / REPTree	88
helena (65196, 28)	trees.RandomForest	StackedEnsemble	RandomForest / IBK MultilayerPerceptron BayesNet / Bagging	91
jannis (83733, 55)	trees.RandomForest	StackedEnsemble	RandomForest / IBK MultilayerPerceptron Bagging	89
jasmine (2984, 145)	rules.JRip	StackedEnsemble	JRip / LMT RandomForest / REPTree	98
kc-1 (2109, 22)	lazy.IBk	StackedEnsemble	LWL / MultilayerPerceptron AdaBoost / BayesNet IBK / RandomForestAlgorithm	100
kr-vs-kp (3196, 15)	trees.REPTree	GBM	LWL / MultilayerPerceptron RandomForest / REPTree	91
mfeat-factors (2000, 217)	trees.LMT	StackedEnsemble	JRip / LMT RandomForest / REPTree	79
MiniBooNE (130064, 51)	trees.RandomForest	StackedEnsemble	RandomForest / IBK MultilayerPerceptron BayesNet / Bagging	106
nomao (34465, 119)	trees.RandomForest	StackedEnsemble	RandomForest / REPTree	96
credit-g (1000, 21)	lazy.LWL	StackedEnsemble	LWL / MultilayerPerceptron RandomForest / REPTree	89
segment (2310, 20)	meta.AdaBoostM1	GBM	LWL / MultilayerPerceptron AdaBoostM1	84
sylvine (5124, 21)	meta.AdaBoostM1	StackedEnsemble	RandomForest / IBK MultilayerPerceptron Bagging / AdaBoostM1 REPTree	82