Appendix report on AUTO-ML experiments

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1 Phase 2 results of the experiment

Table 1: Diabetic-retinopathy-Debrecen

Fold	HP	Classifier	Search Time (s)	Algorithm run (s)	Seed	Accuracy	Precision	Recall score	F1 macro	F1 micro	AUROC
1	diabetic-fold-1	liblinear_svc	3600	1.949547	85	0.741379	0.753333	0.751202	0.741302	0.741379	0.751202
2	diabetic-fold-2	liblinear_svc	3600	2.671943	85	0.695652	0.696154	0.693182	0.693333	0.695652	0.693182
3	diabetic-fold-3	mlp	3600	14.512025	85	0.8	0.812177	0.793412	0.794977	0.8	0.793412
4	diabetic-fold-4	mlp	3600	3.628663	85	0.756522	0.756806	0.757741	0.756356	0.756522	0.757741
5	diabetic-fold-5	libsvm_svc	3600	3.040107	85	0.713043	0.71533	0.709848	0.709885	0.713043	0.709848
6	diabetic-fold-6	lda	3600	1.444958	85	0.834783	0.831648	0.833077	0.832297	0.834783	0.833077
7	diabetic-fold-7	mlp	3600	5.69365	85	0.704348	0.710686	0.717146	0.703248	0.704348	0.717146
8	diabetic-fold-8	mlp	3600	5.970929	85	0.773913	0.765012	0.774603	0.767568	0.773913	0.774603
9	diabetic-fold-9	mlp	3600	5.909112	85	0.686957	0.686014	0.680919	0.681538	0.686957	0.680919
10	diabetic-fold-10	mlp	3600	4.715008	85	0.791304	0.794577	0.790835	0.790528	0.791304	0.790835
Average	N/A	N/A	N/A	4.954	85.000	0.750	0.752	0.750	0.747	0.750	0.750

HP stands for Hyper parameter.
The metrics available here are the results of running the fitted model on unseen data using Scikit-Learn.

Table 2: Obesity Dataset raw and data syntheti

Fold	HP	Classifier	Search Time (s)	Algorithm run (s)	Seed	Accuracy	Precision	Recall score	F1 macro	F1 micro	AUROC
1	Obesity-fold-1	mlp	3600	11.461141	85	0.981132	0.980086	0.982703	0.98062	0.981132	0.998285
2	Obesity-fold-2	libsvm_svc	3600	4.359158	85	0.966825	0.969213	0.966393	0.967256	0.966825	0.997772
3	Obesity-fold-3	libsvm_svc	3600	2.054631	85	0.981043	0.98	0.978414	0.978943	0.981043	0.998559
4	Obesity-fold-4	gradient_boosting	3600	28.718295	85	0.952607	0.941224	0.951052	0.944348	0.952607	0.998331
5	Obesity-fold-5	gradient_boosting	3600	118.398558	85	0.962085	0.966786	0.962731	0.963959	0.962085	0.99929
6	Obesity-fold-6	gradient_boosting	3600	8.658575	85	0.971564	0.973159	0.970605	0.971264	0.971564	0.998206
7	Obesity-fold-7	gradient_boosting	3600	98.173289	85	0.971564	0.971683	0.967166	0.969111	0.971564	0.999412
8	Obesity-fold-8	gradient_boosting	3600	98.315042	85	0.952607	0.950478	0.950828	0.950265	0.952607	0.994687
9	Obesity-fold-9	libsvm_svc	3600	1.723263	85	0.971564	0.970726	0.967092	0.968747	0.971564	0.999489
10	Obesity-fold-10	libsvm_svc	3600	3.781635	85	0.957346	0.957312	0.956361	0.956773	0.957346	0.998864
Average	N/A	N/A	N/A	46.068	85.000	0.967	0.965	0.965	0.967	0.998	0.998

HP stands for Hyper parameter.
The metrics available here are the results of running the fitted model on unseen data using Scikit-Learn.

Table 3: Thoracic Surgery Binary Survival

Fold	HP	Classifier	Search Time (s)	Algorithm run (s)	Seed	Accuracy	Precision	Recall score	F1 macro	F1 micro	AUROC
1	Thoracic-surgery-fold-1	gradient_boosting	3600	3.284425	85	0.702128	0.56875	0.657143	0.555405	0.702128	0.657143
2	Thoracic-surgery-fold-2	gradient_boosting	3600	2.797188	85	0.765957	0.55848	0.581301	0.563713	0.765957	0.581301
3	Thoracic-surgery-fold-3	gradient_boosting	3600	6.443191	85	0.638298	0.441892	0.437135	0.439298	0.638298	0.437135
4	Thoracic-surgery-fold-4	gradient_boosting	3600	7.729846	85	0.702128	0.434211	0.392857	0.4125	0.702128	0.392857
5	Thoracic-surgery-fold-5	gradient_boosting	3600	3.362107	85	0.702128	0.49881	0.497093	0.472756	0.702128	0.497093
6	Thoracic-surgery-fold-6	random_forest	3600	4.663726	85	0.765957	0.508929	0.510163	0.509022	0.765957	0.510163
7	Thoracic-surgery-fold-7	gradient_boosting	3600	5.753471	85	0.829787	0.552381	0.552381	0.552381	0.829787	0.552381
8	Thoracic-surgery-fold-8	random_forest	3600	7.441992	85	0.638298	0.437135	0.441892	0.439298	0.638298	0.441892
9	Thoracic-surgery-fold-9	gradient_boosting	3600	2.698012	85	0.723404	0.630051	0.622619	0.625842	0.723404	0.622619
10	Thoracic-surgery-fold-10	random_forest	3600	3.141573	85	0.702128	0.518919	0.522436	0.519006	0.702128	0.522436
Average	N/A	N/A	N/A	4.73	85.00	0.72	0.51	0.52	0.51	0.72	0.52

HP stands for Hyper parameter. (Note: Hyper parameter will be available during the last analysis of the phase
The metrics available here are the results of running the fitted model on unseen data using Scikit-Learn. Note:

Table 4: Breast cancer Coimbra

" Fold	HP	Classifier	Search Time (s)	Algorithm run (s)	Seed	Accuracy	Precision	Recall score	F1 macro	F1 micro	AUROC
1	Breast-cancer-fold-1	mlp	3600	2.941772	85	0.833333	0.833333	0.875	0.828571	0.833333	0.875
2	Breast-cancer-fold-2	mlp	3600	5.376147	85	0.583333	0.5	0.5	0.495798	0.583333	0.5
3	Breast-cancer-fold-3	mlp	3600	1.938025	85	0.666667	0.777778	0.714286	0.657143	0.666667	0.714286
4	Breast-cancer-fold-4	mlp	3600	2.077632	85	0.75	0.75	0.757143	0.748252	0.75	0.757143
5	Breast-cancer-fold-5	lda	3600	2.37648	85	0.666667	0.685714	0.685714	0.666667	0.666667	0.685714
6	Breast-cancer-fold-6	libsvm_svc	3600	3.430654	85	0.833333	0.833333	0.833333	0.833333	0.833333	0.833333
7	Breast-cancer-fold-7	mlp	3600	3.109387	85	0.727273	0.708333	0.678571	0.685714	0.727273	0.678571
8	Breast-cancer-fold-8	mlp	3600	3.283341	85	0.727273	0.708333	0.678571	0.685714	0.727273	0.678571
9	Breast-cancer-fold-9	mlp	3600	1.736217	85	0.818182	0.857143	0.833333	0.816667	0.818182	0.833333
10	Breast-cancer-fold-10	passive_aggressive	3600	3.361658	85	0.636364	0.388889	0.388889	0.388889	0.636364	0.388889
Average	N/A	N/A	N/A	2.96	85.00	0.72	0.70	0.69	0.68	0.72	0.69

HP stands for Hyper parameter. (Note: Hyper parameter will be available during the last analysis of the phase
The metrics available here are the results of running the fitted model on unseen data using Scikit-Learn.

Table 5: Heart failure clinical records

Fold	HP	Classifier	Search Time (s)	Algorithm run (s)	Seed	Accuracy	Precision	Recall score	F1 macro	F1 micro	AUROC
1	Heart-failure-fold-1	extra_trees	3600	3.636536	85	0.833333	0.811005	0.825	0.81685	0.833333	0.825
2	Heart-failure-fold-2	adaboost	3600	5.273341	85	0.866667	0.856459	0.856459	0.856459	0.866667	0.856459
3	Heart-failure-fold-3	lda	3600	2.526114	85	0.8	0.875	0.75	0.761905	0.8	0.75
4	Heart-failure-fold-4	lda	3600	1.695908	85	0.8	0.744318	0.744318	0.744318	0.8	0.744318
5	Heart-failure-fold-5	random_forest	3600	2.867092	85	0.9	0.928571	0.875	0.89011	0.9	0.875
6	Heart-failure-fold-6	random_forest	3600	3.141216	85	0.866667	0.875	0.861607	0.864253	0.866667	0.861607
7	Heart-failure-fold-7	random_forest	3600	5.835248	85	0.833333	0.775	0.841615	0.794802	0.833333	0.841615
8	Heart-failure-fold-8	extra_trees	3600	4.228758	85	0.9	0.648148	0.714286	0.672727	0.9	0.714286
9	Heart-failure-fold-9	random_forest	3600	4.840377	85	0.933333	0.920635	0.920635	0.920635	0.933333	0.920635
10	Heart-failure-fold-10	gradient_boosting	3600	2.703569	85	0.862069	0.869444	0.835859	0.847368	0.862069	0.835859
Average	N/A	N/A	N/A	3.67	85.00	0.86	0.83	0.82	0.82	0.86	0.82

HP stands for Hyper parameter. (Note: Hyper parameter will be available during the last analysis of the phase
The metrics available here are the results of running the fitted model on unseen data using Scikit-Learn.

2 Phase 3 results of the experiment

Table 6: Obesity Dataset raw and data syntheti

Fold	HP	Classifier	Search Time (s)	Algorithm run (s)	Seed	Accuracy	Precision	recall	F1 score	AUROC
1	autoweka-obesity-fold-1	AdaBoostM1	3032.11	0.14	85	96.2264	0.964	0.962	0.962	0.999
2	autoweka-obesity-fold-2	AdaBoostM1	3026.3	0.13	85	96.2085	0.963	0.962	0.962	0.998
3	autoweka-obesity-fold-3	AdaBoostM1	3017.57	0.14	85	98.5782	0.987	0.986	0.986	0.999
4	autoweka-obesity-fold-4	Logistic	3059.73	0.04	85	78.673	0.787	0.787	0.786	0.967
5	autoweka-obesity-fold-5	AdaBoostM1	3069.91	0.12	85	97.6303	0.977	0.976	0.976	0.999
6	autoweka-obesity-fold-6	RandomForest	3122.27	0.06	85	91.4692	0.918	0.915	0.915	0.982
7	autoweka-obesity-fold-7	LMT	3162.25	0.04	85	86.7299	0.866	0.867	0.866	0.980
8	autoweka-obesity-fold-8	LMT	3047.7	0.03	85	97.6303	0.976	0.976	0.976	0.999
9	autoweka-obesity-fold-9	AdaBoostM1	3063.21	0.14	85	97.1223	0.974	0.971	0.971	1.000
10	autoweka-obesity-fold-10	Logistic	3095.53	0.06	85	80.5687	0.809	0.806	0.803	0.965
Average	N/A	N/A	3069.66	0.09	85.00	92.08	0.92	0.92	0.92	0.99

HP stands for Hyper parameter.

The metrics available here are the results of running the fitted model on unseen data using Auto-Weka.

Table 7: Thoracic Surgery Binary Survival

Fold	HP	Classifier	Search Time (s)	Algorithm run (s)	Seed	Accuracy	Precision	recall	F1 score	AUROC
1	autoweka-thoracic-fold-1	RandomTree	3007.24	0.03	85	85.1064	0.794	0.851	0.822	0.619
2	autoweka-thoracic-fold-2	RandomCommittee	3008.86	0.01	85	87.234	?	0.872	?	0.463
3	autoweka-thoracic-fold-3	SimpleLogistic	3007.98	0.02	85	80.8511	?	0.809	?	0.500
4	autoweka-thoracic-fold-4	KStar	3009.84	0.23	85	89.3617	?	0.894	?	0.674
5	autoweka-thoracic-fold-5	OneR	3007.39	0.02	85	91.4894	?	0.915	?	0.500
6	autoweka-thoracic-fold-6	Bagging	3012.99	0.01	85	87.234	?	0.872	?	0.492
7	autoweka-thoracic-fold-7	OneR	3006.57	0.01	85	100	1.000	1.00	1.000	?
8	autoweka-thoracic-fold-8	AdaBoostM1	3008.32	0.02	85	76.5957	0.616	0.766	0.683	0.584
9	autoweka-thoracic-fold-9	SimpleLogistic	3007.69	0.01	85	74.4681	?	0.745	?	0.500
10	autoweka-thoracic-fold-10	BayesNet	3007.64	0.01	85	80.8511	0.685	0.809	0.742	0.564
Average	N/A	N/A	3008.45	0.04	85.00	85.32	0.31	0.85	0.32	0.49

HP stands for Hyper parameter.

The metrics available here are the results of running the fitted model on unseen data using Auto-Weka.

Table 8: Breast cancer Coimbra

Fold	HP	Classifier	Search Time (s)	Algorithm run (s)	Seed	Accuracy	Precision	recall	F1 score	AUROC
1	autoweka-breast-cancer-fold-1	AdaBoostM1	3008.29	0.01	85	66.6667	0.667	0.667	0.667	0.688
2	autoweka-breast-cancer-fold-2	LMT	3077.06	0	85	50	0.500	0.500	0.500	0.391
3	autoweka-breast-cancer-fold-3	SMO	3007.96	0.02	85	75	0.844	0.750	0.745	0.786
4	autoweka-breast-cancer-fold-4	RandomForest	3008.07	0.01	85	83.3333	0.833	0.833	0.833	0.829
5	autoweka-breast-cancer-fold-5	AdaBoostM1	3007.8	0.01	85	75	0.764	0.750	0.752	0.886
6	autoweka-breast-cancer-fold-6	Bagging	3109.89	0.01	85	75	0.833	0.750	0.733	0.722
7	autoweka-breast-cancer-fold-7	Bagging	3406.07	0.01	85	72.7273	0.748	0.727	0.732	0.786
8	autoweka-breast-cancer-fold-8	Bagging	3008.06	0.01	85	72.7273	0.720	0.727	0.717	0.714
9	autoweka-breast-cancer-fold-9	Logistic	3134.68	0.01	85	63.6364	0.636	0.636	0.636	0.833
10	autoweka-breast-cancer-fold-10	RandomForest	3008.19	0.01	85	63.6364	0.636	0.636	0.636	0.194
Average	N/A	N/A	3077.61	0.01	85.00	69.77	0.72	0.70	0.70	0.68

HP stands for Hyper parameter.

The metrics available here are the results of running the fitted model on unseen data using Auto-Weka.

Table 9: Heart failure clinical records

Fold	HP	Classifier	Search Time (s)	Algorithm run (s)	Seed	Accuracy	Precision	recall	F1 score	AUROC
1	autoweka-heart-failure-fold-1	MultilayerPerceptron	3010.13	0.01	85	83.3333	0.839	0.833	0.835	0.860
2	autoweka-heart-failure-fold-2	RandomForest	3005.26	0.02	85	97.7695	0.978	0.978	0.977	0.999
3	autoweka-heart-failure-fold-3	JRip	3002.75	0.01	85	76.6667	0.771	0.767	0.768	0.817
4	autoweka-heart-failure-fold-4	RandomCommittee	3000.49	0.1	85	83.3333	0.841	0.833	0.836	0.904
5	autoweka-heart-failure-fold-5	OneR	3004.89	0.01	85	80	0.814	0.800	0.790	0.764
6	autoweka-heart-failure-fold-6	BayesNet	3002.79	0.01	85	83.3333	0.834	0.833	0.833	0.882
7	autoweka-heart-failure-fold-7	SMO	3002.36	0.05	85	73.3333	0.707	0.733	0.717	0.578
8	autoweka-heart-failure-fold-8	J48	3003.28	0.02	85	86.6667	0.867	0.867	0.867	0.696
9	autoweka-heart-failure-fold-9	RandomSubSpace	3000.69	0.03	85	93.3333	0.933	0.933	0.933	0.942
10	autoweka-heart-failure-fold-10	RandomTree	3010.06	0.02	85	82.7586	0.834	0.828	0.821	0.785
Average	N/A	N/A	3004.27	0.03	85.00	84.05	0.84	0.84	0.84	0.82

HP stands for Hyper parameter.

The metrics available here are the results of running the fitted model on unseen data using Auto-Weka.

Param name	Param value
balancing:strategy	weighting
classifier:__choice__	mlp
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	standardize
feature_preprocessor:__choice__	feature_agglomeration
classifier:mlp:activation	relu
classifier:mlp:alpha	0.0004223379883196605
classifier:mlp:batch_size	auto
classifier:mlp:beta_1	0.9
classifier:mlp:beta_2	0.999
classifier:mlp:early_stopping	train
classifier:mlp:epsilon	1e-08
classifier:mlp:hidden_layer_depth	3
classifier:mlp:learning_rate_init	0.0006638270125626774
classifier:mlp:n_iter_no_change	32
classifier:mlp:num_nodes_per_layer	115
classifier:mlp:shuffle	True
classifier:mlp:solver	adam
classifier:mlp:tol	0.0001
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.041276341769720205
feature_preprocessor:feature_agglomeration:affinity	euclidean
feature_preprocessor:feature_agglomeration:linkage	ward
feature_preprocessor:feature_agglomeration:n_clusters	267
feature_preprocessor:feature_agglomeration:pooling_func	median

Table 1: Breast-1

Param name	Param value
balancing:strategy	weighting
balancing:strategy	weighting
classifier:__choice__	qda
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	one_hot_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	quantile_transformer
feature_preprocessor:__choice__	fast_ica
classifier:qda:reg_param	0.061791893979524226
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.0005294747180296636
data_preprocessing:numerical_transformer:rescaling:quantile_transformer:n_quantiles	1148
data_preprocessing:numerical_transformer:rescaling:quantile_transformer:output_distribution	normal
feature_preprocessor:fast_ica:algorithm	parallel
feature_preprocessor:fast_ica:fun	logcosh
feature_preprocessor:fast_ica:whiten	False

Table 2: Breast-2

Param name	Param value
balancing:strategy	weighting
classifier:__choice__	mlp
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	standardize
feature_preprocessor:__choice__	extra_trees_preproc_for_classification
classifier:mlp:activation	relu
classifier:mlp:alpha	6.289915292252595e-07
classifier:mlp:batch_size	auto
classifier:mlp:beta_1	0.9
classifier:mlp:beta_2	0.999
classifier:mlp:early_stopping	train
classifier:mlp:epsilon	1e-08
classifier:mlp:hidden_layer_depth	1
classifier:mlp:learning_rate_init	0.00017173569700089028
classifier:mlp:n_iter_no_change	32
classifier:mlp:num_nodes_per_layer	32
classifier:mlp:shuffle	True
classifier:mlp:solver	adam
classifier:mlp:tol	0.0001
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.019196815845866824
feature_preprocessor:extra_trees_preproc_for_classification:bootstrap	True
feature_preprocessor:extra_trees_preproc_for_classification:criterion	entropy
feature_preprocessor:extra_trees_preproc_for_classification:max_depth	None
feature_preprocessor:extra_trees_preproc_for_classification:max_features	0.6298488871124417
feature_preprocessor:extra_trees_preproc_for_classification:max_leaf_nodes	None
feature_preprocessor:extra_trees_preproc_for_classification:min_impurity_decrease	0.0
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_leaf	1
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_split	19
feature_preprocessor:extra_trees_preproc_for_classification:min_weight_fraction_leaf	0.0
feature_preprocessor:extra_trees_preproc_for_classification:n_estimators	100

Table 3: Breast-3

Param name	Param value
balancing:strategy	none
classifier:__choice__	random_forest
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	one_hot_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	random_trees_embedding
classifier:random_forest:bootstrap	False
classifier:random_forest:criterion	entropy
classifier:random_forest:max_depth	None
classifier:random_forest:max_features	0.6442761357955407
classifier:random_forest:max_leaf_nodes	None
classifier:random_forest:min_impurity_decrease	0.0
classifier:random_forest:min_samples_leaf	6
classifier:random_forest:min_samples_split	5
classifier:random_forest:min_weight_fraction_leaf	0.0
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.010000000000000004
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.7465503075717674
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.22362136842354222
feature_preprocessor:random_trees_embedding:bootstrap	False
feature_preprocessor:random_trees_embedding:max_depth	3
feature_preprocessor:random_trees_embedding:max_leaf_nodes	None
feature_preprocessor:random_trees_embedding:min_samples_leaf	13
feature_preprocessor:random_trees_embedding:min_samples_split	18
feature_preprocessor:random_trees_embedding:min_weight_fraction_leaf	1.0
feature_preprocessor:random_trees_embedding:n_estimators	43

Table 4: Breast-4

Param name	Param value
balancing:strategy	weighting
classifier:__choice__	random_forest
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	random_trees_embedding
classifier:random_forest:bootstrap	False
classifier:random_forest:criterion	gini
classifier:random_forest:max_depth	None
classifier:random_forest:max_features	0.7695256395191846
classifier:random_forest:max_leaf_nodes	None
classifier:random_forest:min_impurity_decrease	0.0
classifier:random_forest:min_samples_leaf	14
classifier:random_forest:min_samples_split	5
classifier:random_forest:min_weight_fraction_leaf	0.0
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.26156745411840177
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.8676877458361545
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.1292957198801471
feature_preprocessor:random_trees_embedding:bootstrap	True
feature_preprocessor:random_trees_embedding:max_depth	4
feature_preprocessor:random_trees_embedding:max_leaf_nodes	None
feature_preprocessor:random_trees_embedding:min_samples_leaf	2
feature_preprocessor:random_trees_embedding:min_samples_split	9
feature_preprocessor:random_trees_embedding:min_weight_fraction_leaf	1.0
feature_preprocessor:random_trees_embedding:n_estimators	81

Table 5: Breast-5

Param name	Param value
balancing:strategy	weighting
classifier:__choice__	libsvm_svc
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	no_coalescense
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	feature_agglomeration
classifier:libsvm_svc:C	1.3186584623326854
classifier:libsvm_svc:gamma	0.00044604225135753516
classifier:libsvm_svc:kernel	poly
classifier:libsvm_svc:max_iter	-1
classifier:libsvm_svc:shrinking	True
classifier:libsvm_svc:tol	0.000911594007548699
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.8615703407178269
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.12078933012009306
feature_preprocessor:feature_agglomeration:affinity	manhattan
feature_preprocessor:feature_agglomeration:linkage	complete
feature_preprocessor:feature_agglomeration:n_clusters	298
feature_preprocessor:feature_agglomeration:pooling_func	max
classifier:libsvm_svc:coef0	0.07819885850672503
classifier:libsvm_svc:degree	5

Table 6: Heart-failure-1

Param name	Param value
balancing:strategy	weighting
balancing:strategy	weighting
classifier:__choice__	mlp
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	no_coalescense
data_preprocessing:numerical_transformer:imputation:strategy	mean
data_preprocessing:numerical_transformer:rescaling:__choice__	quantile_transformer
feature_preprocessor:__choice__	extra_trees_preproc_for_classification
classifier:mlp:activation	tanh
classifier:mlp:alpha	4.950212368922522e-05
classifier:mlp:batch_size	auto
classifier:mlp:beta_1	0.9
classifier:mlp:beta_2	0.999
classifier:mlp:early_stopping	train
classifier:mlp:epsilon	1e-08
classifier:mlp:hidden_layer_depth	3
classifier:mlp:learning_rate_init	0.0016335505280123523
classifier:mlp:n_iter_no_change	32
classifier:mlp:num_nodes_per_layer	28
classifier:mlp:shuffle	True
classifier:mlp:solver	adam
classifier:mlp:tol	0.0001
data_preprocessing:numerical_transformer:rescaling:quantile_transformer:n_quantiles	1690
data_preprocessing:numerical_transformer:rescaling:quantile_transformer:output_distribution	uniform
feature_preprocessor:extra_trees_preproc_for_classification:bootstrap	False
feature_preprocessor:extra_trees_preproc_for_classification:criterion	gini
feature_preprocessor:extra_trees_preproc_for_classification:max_depth	None
feature_preprocessor:extra_trees_preproc_for_classification:max_features	0.5786442320637193
feature_preprocessor:extra_trees_preproc_for_classification:max_leaf_nodes	None
feature_preprocessor:extra_trees_preproc_for_classification:min_impurity_decrease	0.0
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_leaf	20
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_split	14
feature_preprocessor:extra_trees_preproc_for_classification:min_weight_fraction_leaf	0.0

Table 7: Heart-failure-2

Param name	Param value
balancing:strategy	weighting
classifier:__choice__	k_nearest_neighbors
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	no_coalescense
data_preprocessing:numerical_transformer:imputation:strategy	median
data_preprocessing:numerical_transformer:rescaling:__choice__	quantile_transformer
feature_preprocessor:__choice__	extra_trees_preproc_for_classification
classifier:k_nearest_neighbors:n_neighbors	18
classifier:k_nearest_neighbors:p	1
classifier:k_nearest_neighbors:weights	uniform
data_preprocessing:numerical_transformer:rescaling:quantile_transformer:n_quantiles	1496
data_preprocessing:numerical_transformer:rescaling:quantile_transformer:output_distribution	uniform
feature_preprocessor:extra_trees_preproc_for_classification:bootstrap	True
feature_preprocessor:extra_trees_preproc_for_classification:criterion	entropy
feature_preprocessor:extra_trees_preproc_for_classification:max_depth	None
feature_preprocessor:extra_trees_preproc_for_classification:max_features	0.5100599802508429
feature_preprocessor:extra_trees_preproc_for_classification:max_leaf_nodes	None
feature_preprocessor:extra_trees_preproc_for_classification:min_impurity_decrease	0.0
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_leaf	15
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_split	16
feature_preprocessor:extra_trees_preproc_for_classification:min_weight_fraction_leaf	0.0
feature_preprocessor:extra_trees_preproc_for_classification:n_estimators	100

Table 8: Heart-failure-3

Param name	Param value
balancing:strategy	weighting
classifier:__choice__	random_forest
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	one_hot_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	no_coalescense
data_preprocessing:numerical_transformer:imputation:strategy	median
data_preprocessing:numerical_transformer:rescaling:__choice__	power_transformer
feature_preprocessor:__choice__	pca
classifier:random_forest:bootstrap	False
classifier:random_forest:criterion	entropy
classifier:random_forest:max_depth	None
classifier:random_forest:max_features	0.3834622461790784
classifier:random_forest:max_leaf_nodes	None
classifier:random_forest:min_impurity_decrease	0.0
classifier:random_forest:min_samples_leaf	19
classifier:random_forest:min_samples_split	5
classifier:random_forest:min_weight_fraction_leaf	0.0
feature_preprocessor:pca:keep_variance	0.9735824886658903
feature_preprocessor:pca:whiten	True

Table 9: Heart-failure-4

Param name	Param value
balancing:strategy	none
classifier:__choice__	k_nearest_neighbors
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	one_hot_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	mean
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	extra_trees_preproc_for_classification
classifier:k_nearest_neighbors:n_neighbors	1
classifier:k_nearest_neighbors:p	2
classifier:k_nearest_neighbors:weights	uniform
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.025014793064796603
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.75
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.25
feature_preprocessor:extra_trees_preproc_for_classification:bootstrap	True
feature_preprocessor:extra_trees_preproc_for_classification:criterion	gini
feature_preprocessor:extra_trees_preproc_for_classification:max_depth	None
feature_preprocessor:extra_trees_preproc_for_classification:max_features	0.9929881254946676
feature_preprocessor:extra_trees_preproc_for_classification:max_leaf_nodes	None
feature_preprocessor:extra_trees_preproc_for_classification:min_impurity_decrease	0.0
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_leaf	8
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_split	7
feature_preprocessor:extra_trees_preproc_for_classification:min_weight_fraction_leaf	0.0
feature_preprocessor:extra_trees_preproc_for_classification:n_estimators	100

Table 10: Heart-failure-5

Param name	Param value
balancing:strategy	weighting
classifier:__choice__	gradient_boosting
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	mean
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	select_rates_classification
classifier:gradient_boosting:early_stop	train
classifier:gradient_boosting:l2_regularization	5.540602061297802e-10
classifier:gradient_boosting:learning_rate	0.016629242218617307
classifier:gradient_boosting:loss	auto
classifier:gradient_boosting:max_bins	255
classifier:gradient_boosting:max_depth	None
classifier:gradient_boosting:max_leaf_nodes	681
classifier:gradient_boosting:min_samples_leaf	27
classifier:gradient_boosting:scoring	loss
classifier:gradient_boosting:tol	1e-07
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.00849025188292312
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.7500414374466375
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.07130349189804165
feature_preprocessor:select_rates_classification:alpha	0.16192195966955664
feature_preprocessor:select_rates_classification:score_func	f_classif
classifier:gradient_boosting:n_iter_no_change	20
feature_preprocessor:select_rates_classification:mode	fdr

Table 11: Obesity-1

Param name	Param value
balancing:strategy	weighting
classifier:__choice__	gradient_boosting
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	one_hot_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	mean
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	polynomial
classifier:gradient_boosting:early_stop	train
classifier:gradient_boosting:l2_regularization	4.773398203581013e-06
classifier:gradient_boosting:learning_rate	0.053331170020548144
classifier:gradient_boosting:loss	auto
classifier:gradient_boosting:max_bins	255
classifier:gradient_boosting:max_depth	None
classifier:gradient_boosting:max_leaf_nodes	11
classifier:gradient_boosting:min_samples_leaf	24
classifier:gradient_boosting:scoring	loss
classifier:gradient_boosting:tol	1e-07
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.050289424280298894
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.7602691805828513
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.2607657764645232
feature_preprocessor:polynomial:degree	2
feature_preprocessor:polynomial:include_bias	True
feature_preprocessor:polynomial:interaction_only	False
classifier:gradient_boosting:n_iter_no_change	18

Table 12: Obesity-2

Param name	Param value
balancing:strategy	weighting
classifier:__choice__	gradient_boosting
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	power_transformer
feature_preprocessor:__choice__	no_preprocessing
classifier:gradient_boosting:early_stop	off
classifier:gradient_boosting:l2_regularization	4.118887019787786e-10
classifier:gradient_boosting:learning_rate	0.2815497925876392
classifier:gradient_boosting:loss	auto
classifier:gradient_boosting:max_bins	255
classifier:gradient_boosting:max_depth	None
classifier:gradient_boosting:max_leaf_nodes	39
classifier:gradient_boosting:min_samples_leaf	22
classifier:gradient_boosting:scoring	loss
classifier:gradient_boosting:tol	1e-07
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.019757431822083282

Table 13: Obesity-3

Param name	Param value
balancing:strategy	weighting
classifier:__choice__	gradient_boosting
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	median
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	polynomial
classifier:gradient_boosting:early_stop	off
classifier:gradient_boosting:l2_regularization	0.004999908186359268
classifier:gradient_boosting:learning_rate	0.08220403787891753
classifier:gradient_boosting:loss	auto
classifier:gradient_boosting:max_bins	255
classifier:gradient_boosting:max_depth	None
classifier:gradient_boosting:max_leaf_nodes	69
classifier:gradient_boosting:min_samples_leaf	139
classifier:gradient_boosting:scoring	loss
classifier:gradient_boosting:tol	1e-07
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.0002955937400304694
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.8815763794273677
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.15205640294658754
feature_preprocessor:polynomial:degree	2
feature_preprocessor:polynomial:include_bias	False
feature_preprocessor:polynomial:interaction_only	False

Table 14: Obesity-4

Param name	Param value
balancing:strategy	weighting
classifier:__choice__	gradient_boosting
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	one_hot_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	median
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	polynomial
classifier:gradient_boosting:early_stop	train
classifier:gradient_boosting:l2_regularization	2.6392168195779618e-08
classifier:gradient_boosting:learning_rate	0.45559898352545136
classifier:gradient_boosting:loss	auto
classifier:gradient_boosting:max_bins	255
classifier:gradient_boosting:max_depth	None
classifier:gradient_boosting:max_leaf_nodes	11
classifier:gradient_boosting:min_samples_leaf	5
classifier:gradient_boosting:scoring	loss
classifier:gradient_boosting:tol	1e-07
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.011269569115966995
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.7764007092839482
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.18224611661624607
feature_preprocessor:polynomial:degree	2
feature_preprocessor:polynomial:include_bias	True
feature_preprocessor:polynomial:interaction_only	False
classifier:gradient_boosting:n_iter_no_change	10

Table 15: Obesity-5

Param name	Param value
balancing:strategy	none
classifier:__choice__	sgd
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	mean
data_preprocessing:numerical_transformer:rescaling:__choice__	standardize
feature_preprocessor:__choice__	select_rates_classification
classifier:sgd:alpha	2.6673093430964056e-05
classifier:sgd:average	True
classifier:sgd:fit_intercept	True
classifier:sgd:learning_rate	optimal
classifier:sgd:loss	perceptron
classifier:sgd:penalty	elasticnet
classifier:sgd:tol	6.575721780166767e-05
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.012742285933998771
feature_preprocessor:select_rates_classification:alpha	0.2968527147166261
feature_preprocessor:select_rates_classification:score_func	chi2
classifier:sgd:l1_ratio	0.6091772199866065
feature_preprocessor:select_rates_classification:mode	fwe

Table 16: Thoracic-Surgery-1

Param name	Param value
balancing:strategy	none
classifier:__choice__	bernoulli_nb
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	one_hot_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	minmax
feature_preprocessor:__choice__	extra_trees_preproc_for_classification
classifier:bernoulli_nb:alpha	0.04182741127911957
classifier:bernoulli_nb:fit_prior	True
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.0001939200751730527
feature_preprocessor:extra_trees_preproc_for_classification:bootstrap	False
feature_preprocessor:extra_trees_preproc_for_classification:criterion	gini
feature_preprocessor:extra_trees_preproc_for_classification:max_depth	None
feature_preprocessor:extra_trees_preproc_for_classification:max_features	0.8613065880330555
feature_preprocessor:extra_trees_preproc_for_classification:max_leaf_nodes	None
feature_preprocessor:extra_trees_preproc_for_classification:min_impurity_decrease	0.0
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_leaf	8
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_split	7
feature_preprocessor:extra_trees_preproc_for_classification:min_weight_fraction_leaf	0.0
feature_preprocessor:extra_trees_preproc_for_classification:n_estimators	100

Table 17: Thoracic-Surgery-2

Param name	Param value
balancing:strategy	weighting
classifier:__choice__	bernoulli_nb
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	liblinear_svc_preprocessor
classifier:bernoulli_nb:alpha	0.014828155751055698
classifier:bernoulli_nb:fit_prior	True
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.0019097668947955675
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.8897525512196269
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.23657030271793142
feature_preprocessor:liblinear_svc_preprocessor:C	13.595794473014832
feature_preprocessor:liblinear_svc_preprocessor:dual	False
feature_preprocessor:liblinear_svc_preprocessor:fit_intercept	True
feature_preprocessor:liblinear_svc_preprocessor:intercept_scaling	1
feature_preprocessor:liblinear_svc_preprocessor:loss	squared_hinge
feature_preprocessor:liblinear_svc_preprocessor:multi_class	ovr
feature_preprocessor:liblinear_svc_preprocessor:penalty	l1
feature_preprocessor:liblinear_svc_preprocessor:tol	0.0005738799491725154

Table 18: Thoracic-Surgery-3

Param name	Param value
balancing:strategy	none
classifier:__choice__	gradient_boosting
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	one_hot_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	normalize
feature_preprocessor:__choice__	extra_trees_preproc_for_classification
classifier:gradient_boosting:early_stop	valid
classifier:gradient_boosting:l2_regularization	5.759216242427118e-07
classifier:gradient_boosting:learning_rate	0.14515873247977112
classifier:gradient_boosting:loss	auto
classifier:gradient_boosting:max_bins	255
classifier:gradient_boosting:max_depth	None
classifier:gradient_boosting:max_leaf_nodes	11
classifier:gradient_boosting:min_samples_leaf	1
classifier:gradient_boosting:scoring	loss
classifier:gradient_boosting:tol	1e-07
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.005673642203881703
feature_preprocessor:extra_trees_preproc_for_classification:bootstrap	True
feature_preprocessor:extra_trees_preproc_for_classification:criterion	gini
feature_preprocessor:extra_trees_preproc_for_classification:max_depth	None
feature_preprocessor:extra_trees_preproc_for_classification:max_features	0.33685147694715717
feature_preprocessor:extra_trees_preproc_for_classification:max_leaf_nodes	None
feature_preprocessor:extra_trees_preproc_for_classification:min_impurity_decrease	0.0
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_leaf	1
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_split	5
feature_preprocessor:extra_trees_preproc_for_classification:min_weight_fraction_leaf	0.0
feature_preprocessor:extra_trees_preproc_for_classification:n_estimators	100
classifier:gradient_boosting:n_iter_no_change	18
classifier:gradient_boosting:validation_fraction	0.06967552984405034

Table 19: Thoracic-Surgery-4

Param name	Param value
balancing:strategy	none
classifier:__choice__	decision_tree
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	median
data_preprocessing:numerical_transformer:rescaling:__choice__	normalize
feature_preprocessor:__choice__	select_percentile_classification
classifier:decision_tree:criterion	gini
classifier:decision_tree:max_depth_factor	1.297268989691186
classifier:decision_tree:max_features	1.0
classifier:decision_tree:max_leaf_nodes	None
classifier:decision_tree:min_impurity_decrease	0.0
classifier:decision_tree:min_samples_leaf	4
classifier:decision_tree:min_samples_split	5
classifier:decision_tree:min_weight_fraction_leaf	0.0
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.04950551694825798
feature_preprocessor:select_percentile_classification:percentile	49.478275930295304
feature_preprocessor:select_percentile_classification:score_func	mutual_info

Table 20: Thoracic-Surgery-5

Param name	Param value
balancing:strategy	none
classifier:__choice__	mlp
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	standardize
feature_preprocessor:__choice__	feature_agglomeration
classifier:mlp:activation	tanh
classifier:mlp:alpha	0.00016250228297296022
classifier:mlp:batch_size	auto
classifier:mlp:beta_1	0.9
classifier:mlp:beta_2	0.999
classifier:mlp:early_stopping	train
classifier:mlp:epsilon	1e-08
classifier:mlp:hidden_layer_depth	3
classifier:mlp:learning_rate_init	0.00016301985342367467
classifier:mlp:n_iter_no_change	32
classifier:mlp:num_nodes_per_layer	109
classifier:mlp:shuffle	True
classifier:mlp:solver	adam
classifier:mlp:tol	0.0001
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.0073153595986416966
feature_preprocessor:feature_agglomeration:affinity	cosine
feature_preprocessor:feature_agglomeration:linkage	complete
feature_preprocessor:feature_agglomeration:n_clusters	198
feature_preprocessor:feature_agglomeration:pooling_func	max

Table 21: diabetic-retinopathy-1

Param name	Param value
balancing:strategy	weighting
balancing:strategy	weighting
classifier:__choice__	random_forest
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	one_hot_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	median
data_preprocessing:numerical_transformer:rescaling:__choice__	normalize
feature_preprocessor:__choice__	polynomial
classifier:random_forest:bootstrap	True
classifier:random_forest:criterion	entropy
classifier:random_forest:max_depth	None
classifier:random_forest:max_features	0.49345015681257887
classifier:random_forest:max_leaf_nodes	None
classifier:random_forest:min_impurity_decrease	0.0
classifier:random_forest:min_samples_leaf	1
classifier:random_forest:min_samples_split	2
classifier:random_forest:min_weight_fraction_leaf	0.0
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.010000000000000004
feature_preprocessor:polynomial:degree	2
feature_preprocessor:polynomial:include_bias	True
feature_preprocessor:polynomial:interaction_only	False

Table 22: diabetic-retinopathy-2

Param name	Param value
balancing:strategy	none
classifier:__choice__	libsvm_svc
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	no_coalescense
data_preprocessing:numerical_transformer:imputation:strategy	mean
data_preprocessing:numerical_transformer:rescaling:__choice__	quantile_transformer
feature_preprocessor:__choice__	fast_ica
classifier:libsvm_svc:C	837.3150796221995
classifier:libsvm_svc:gamma	0.009230979094428897
classifier:libsvm_svc:kernel	poly
classifier:libsvm_svc:max_iter	-1
classifier:libsvm_svc:shrinking	False
classifier:libsvm_svc:tol	0.00019102858708133416
data_preprocessing:numerical_transformer:rescaling:quantile_transformer:n_quantiles	991
data_preprocessing:numerical_transformer:rescaling:quantile_transformer:output_distribution	uniform
feature_preprocessor:fast_ica:algorithm	deflation
feature_preprocessor:fast_ica:fun	logcosh
feature_preprocessor:fast_ica:whiten	True
classifier:libsvm_svc:coef0	-0.9785769893770769
classifier:libsvm_svc:degree	3
feature_preprocessor:fast_ica:n_components	17

Table 23: diabetic-retinopathy-3

Param name	Param value
balancing:strategy	weighting
classifier:__choice__	mlp
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	median
data_preprocessing:numerical_transformer:rescaling:__choice__	standardize
feature_preprocessor:__choice__	extra_trees_preproc_for_classification
classifier:mlp:activation	relu
classifier:mlp:alpha	0.013616617857009084
classifier:mlp:batch_size	auto
classifier:mlp:beta_1	0.9
classifier:mlp:beta_2	0.999
classifier:mlp:early_stopping	train
classifier:mlp:epsilon	1e-08
classifier:mlp:hidden_layer_depth	1
classifier:mlp:learning_rate_init	0.0011645496375006228
classifier:mlp:n_iter_no_change	32
classifier:mlp:num_nodes_per_layer	262
classifier:mlp:shuffle	True
classifier:mlp:solver	adam
classifier:mlp:tol	0.0001
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.016822627499152545
feature_preprocessor:extra_trees_preproc_for_classification:bootstrap	True
feature_preprocessor:extra_trees_preproc_for_classification:criterion	gini
feature_preprocessor:extra_trees_preproc_for_classification:max_depth	None
feature_preprocessor:extra_trees_preproc_for_classification:max_features	0.7530025196864862
feature_preprocessor:extra_trees_preproc_for_classification:max_leaf_nodes	None
feature_preprocessor:extra_trees_preproc_for_classification:min_impurity_decrease	0.0
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_leaf	9
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_split	13
feature_preprocessor:extra_trees_preproc_for_classification:min_weight_fraction_leaf	0.0
feature_preprocessor:extra_trees_preproc_for_classification:n_estimators	100

Table 24: diabetic-retinopathy-4

Param name	Param value
balancing:strategy	weighting
classifier:__choice__	mlp
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	extra_trees_preproc_for_classification
classifier:mlp:activation	tanh
classifier:mlp:alpha	3.644762484888035e-07
classifier:mlp:batch_size	auto
classifier:mlp:beta_1	0.9
classifier:mlp:beta_2	0.999
classifier:mlp:early_stopping	train
classifier:mlp:epsilon	1e-08
classifier:mlp:hidden_layer_depth	1
classifier:mlp:learning_rate_init	0.00014987563208782376
classifier:mlp:n_iter_no_change	32
classifier:mlp:num_nodes_per_layer	92
classifier:mlp:shuffle	True
classifier:mlp:solver	adam
classifier:mlp:tol	0.0001
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.003806764941633366
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.7429360351619242
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.24301484102478718
feature_preprocessor:extra_trees_preproc_for_classification:bootstrap	True
feature_preprocessor:extra_trees_preproc_for_classification:criterion	gini
feature_preprocessor:extra_trees_preproc_for_classification:max_depth	None
feature_preprocessor:extra_trees_preproc_for_classification:max_features	0.6968762491393237
feature_preprocessor:extra_trees_preproc_for_classification:max_leaf_nodes	None
feature_preprocessor:extra_trees_preproc_for_classification:min_impurity_decrease	0.0
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_leaf	12
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_split	10
feature_preprocessor:extra_trees_preproc_for_classification:min_weight_fraction_leaf	0.0
feature_preprocessor:extra_trees_preproc_for_classification:n_estimators	100

Table 25: diabetic-retinopathy-5

Param name	Param value
balancing:strategy	none
balancing:strategy	none
classifier:__choice__	mlp
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	one_hot_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	mean
data_preprocessing:numerical_transformer:rescaling:__choice__	standardize
feature_preprocessor:__choice__	extra_trees_preproc_for_classification
classifier:mlp:activation	tanh
classifier:mlp:alpha	3.0136961495062173e-06
classifier:mlp:batch_size	auto
classifier:mlp:beta_1	0.9
classifier:mlp:beta_2	0.999
classifier:mlp:early_stopping	train
classifier:mlp:epsilon	1e-08
classifier:mlp:hidden_layer_depth	1
classifier:mlp:learning_rate_init	0.0014806367985218704
classifier:mlp:n_iter_no_change	32
classifier:mlp:num_nodes_per_layer	58
classifier:mlp:shuffle	True
classifier:mlp:solver	adam
classifier:mlp:tol	0.0001
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.013516753483496548
feature_preprocessor:extra_trees_preproc_for_classification:bootstrap	True
feature_preprocessor:extra_trees_preproc_for_classification:criterion	entropy
feature_preprocessor:extra_trees_preproc_for_classification:max_depth	None
feature_preprocessor:extra_trees_preproc_for_classification:max_features	0.7620367019850975
feature_preprocessor:extra_trees_preproc_for_classification:max_leaf_nodes	None
feature_preprocessor:extra_trees_preproc_for_classification:min_impurity_decrease	0.0
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_leaf	10
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_split	13
feature_preprocessor:extra_trees_preproc_for_classification:min_weight_fraction_leaf	0.0
feature_preprocessor:extra_trees_preproc_for_classification:n_estimators	100

Table 26: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	weighting
classifier:__choice__	random_forest
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	median
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	fast_ica
classifier:random_forest:bootstrap	False
classifier:random_forest:criterion	gini
classifier:random_forest:max_depth	None
classifier:random_forest:max_features	0.33592461018085756
classifier:random_forest:max_leaf_nodes	None
classifier:random_forest:min_impurity_decrease	0.0
classifier:random_forest:min_samples_leaf	1
classifier:random_forest:min_samples_split	4
classifier:random_forest:min_weight_fraction_leaf	0.0
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.000865568273154133
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.7402051728063296
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.25
feature_preprocessor:fast_ica:algorithm	parallel
feature_preprocessor:fast_ica:fun	exp
feature_preprocessor:fast_ica:whiten	True
feature_preprocessor:fast_ica:n_components	154

Table 27: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	weighting
classifier:__choice__	mlp
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	power_transformer
feature_preprocessor:__choice__	fast_ica
classifier:mlp:activation	relu
classifier:mlp:alpha	0.010546766380891874
classifier:mlp:batch_size	auto
classifier:mlp:beta_1	0.9
classifier:mlp:beta_2	0.999
classifier:mlp:early_stopping	train
classifier:mlp:epsilon	1e-08
classifier:mlp:hidden_layer_depth	3
classifier:mlp:learning_rate_init	0.00013435421984462189
classifier:mlp:n_iter_no_change	32
classifier:mlp:num_nodes_per_layer	126
classifier:mlp:shuffle	True
classifier:mlp:solver	adam
classifier:mlp:tol	0.0001
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.010442880556298939
feature_preprocessor:fast_ica:algorithm	deflation
feature_preprocessor:fast_ica:fun	cube
feature_preprocessor:fast_ica:whiten	True
feature_preprocessor:fast_ica:n_components	88

Table 28: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	none
classifier:__choice__	libsvm_svc
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	one_hot_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	mean
data_preprocessing:numerical_transformer:rescaling:__choice__	quantile_transformer
feature_preprocessor:__choice__	fast_ica
classifier:libsvm_svc:C	22476.27967249346
classifier:libsvm_svc:gamma	0.0013668476516367344
classifier:libsvm_svc:kernel	sigmoid
classifier:libsvm_svc:max_iter	-1
classifier:libsvm_svc:shrinking	True
classifier:libsvm_svc:tol	0.0003164779331113468
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.0006360532967817255
data_preprocessing:numerical_transformer:rescaling:quantile_transformer:n_quantiles	981
data_preprocessing:numerical_transformer:rescaling:quantile_transformer:output_distribution	uniform
feature_preprocessor:fast_ica:algorithm	parallel
feature_preprocessor:fast_ica:fun	exp
feature_preprocessor:fast_ica:whiten	True
classifier:libsvm_svc:coef0	0.013829892421996393
feature_preprocessor:fast_ica:n_components	17

Table 29: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	none
classifier:__choice__	passive_aggressive
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	one_hot_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	power_transformer
feature_preprocessor:__choice__	nystroem_sampler
classifier:passive_aggressive:C	3.504745162112378
classifier:passive_aggressive:average	True
classifier:passive_aggressive:fit_intercept	True
classifier:passive_aggressive:loss	squared_hinge
classifier:passive_aggressive:tol	3.564319470838793e-05
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.0026630879754488243
feature_preprocessor:nystroem_sampler:kernel	cosine
feature_preprocessor:nystroem_sampler:n_components	164

Table 30: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	none
classifier:__choice__	liblinear_svc
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	normalize
feature_preprocessor:__choice__	kitchen_sinks
classifier:liblinear_svc:C	1912.6102554991123
classifier:liblinear_svc:dual	False
classifier:liblinear_svc:fit_intercept	True
classifier:liblinear_svc:intercept_scaling	1
classifier:liblinear_svc:loss	squared_hinge
classifier:liblinear_svc:multi_class	ovr
classifier:liblinear_svc:penalty	l2
classifier:liblinear_svc:tol	0.0008747927725254777
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.0036661257643298257
feature_preprocessor:kitchen_sinks:gamma	0.005541758623607619
feature_preprocessor:kitchen_sinks:n_components	100

Table 31: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	none
classifier:__choice__	mlp
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	mean
data_preprocessing:numerical_transformer:rescaling:__choice__	standardize
feature_preprocessor:__choice__	extra_trees_preproc_for_classification
classifier:mlp:activation	tanh
classifier:mlp:alpha	2.558367562176497e-06
classifier:mlp:batch_size	auto
classifier:mlp:beta_1	0.9
classifier:mlp:beta_2	0.999
classifier:mlp:early_stopping	train
classifier:mlp:epsilon	1e-08
classifier:mlp:hidden_layer_depth	2
classifier:mlp:learning_rate_init	0.0002525818922781705
classifier:mlp:n_iter_no_change	32
classifier:mlp:num_nodes_per_layer	136
classifier:mlp:shuffle	True
classifier:mlp:solver	adam
classifier:mlp:tol	0.0001
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.1625027515851791
feature_preprocessor:extra_trees_preproc_for_classification:bootstrap	False
feature_preprocessor:extra_trees_preproc_for_classification:criterion	entropy
feature_preprocessor:extra_trees_preproc_for_classification:max_depth	None
feature_preprocessor:extra_trees_preproc_for_classification:max_features	0.12821953553928941
feature_preprocessor:extra_trees_preproc_for_classification:max_leaf_nodes	None
feature_preprocessor:extra_trees_preproc_for_classification:min_impurity_decrease	0.0
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_leaf	9
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_split	18
feature_preprocessor:extra_trees_preproc_for_classification:min_weight_fraction_leaf	0.0
feature_preprocessor:extra_trees_preproc_for_classification:n_estimators	100

Table 32: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	none
classifier:__choice__	mlp
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	median
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	fast_ica
classifier:mlp:activation	relu
classifier:mlp:alpha	0.00012906739579308693
classifier:mlp:batch_size	auto
classifier:mlp:beta_1	0.9
classifier:mlp:beta_2	0.999
classifier:mlp:early_stopping	train
classifier:mlp:epsilon	1e-08
classifier:mlp:hidden_layer_depth	1
classifier:mlp:learning_rate_init	0.001213195447069635
classifier:mlp:n_iter_no_change	32
classifier:mlp:num_nodes_per_layer	245
classifier:mlp:shuffle	True
classifier:mlp:solver	adam
classifier:mlp:tol	0.0001
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.012277606134378819
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.7524820823309201
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.25422702191174495
feature_preprocessor:fast_ica:algorithm	parallel
feature_preprocessor:fast_ica:fun	logcosh
feature_preprocessor:fast_ica:whiten	True
feature_preprocessor:fast_ica:n_components	16

Table 33: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	none
classifier:__choice__	lda
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	no_coalescense
data_preprocessing:numerical_transformer:imputation:strategy	most_frequent
data_preprocessing:numerical_transformer:rescaling:__choice__	normalize
feature_preprocessor:__choice__	kernel_pca
classifier:lda:shrinkage	auto
classifier:lda:tol	1.5139135908118525e-05
feature_preprocessor:kernel_pca:kernel	poly
feature_preprocessor:kernel_pca:n_components	50
feature_preprocessor:kernel_pca:coef0	0.057651967632558865
feature_preprocessor:kernel_pca:degree	3
feature_preprocessor:kernel_pca:gamma	0.0035172938501532077

Table 34: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	none
classifier:__choice__	mlp
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	one_hot_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	median
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	extra_trees_preproc_for_classification
classifier:mlp:activation	relu
classifier:mlp:alpha	0.08505938840339394
classifier:mlp:batch_size	auto
classifier:mlp:beta_1	0.9
classifier:mlp:beta_2	0.999
classifier:mlp:early_stopping	train
classifier:mlp:epsilon	1e-08
classifier:mlp:hidden_layer_depth	1
classifier:mlp:learning_rate_init	0.0005611576250614035
classifier:mlp:n_iter_no_change	32
classifier:mlp:num_nodes_per_layer	37
classifier:mlp:shuffle	True
classifier:mlp:solver	adam
classifier:mlp:tol	0.0001
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.008215192959639532
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.969672370108094
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.28354560528597655
feature_preprocessor:extra_trees_preproc_for_classification:bootstrap	True
feature_preprocessor:extra_trees_preproc_for_classification:criterion	gini
feature_preprocessor:extra_trees_preproc_for_classification:max_depth	None
feature_preprocessor:extra_trees_preproc_for_classification:max_features	0.26754750999714916
feature_preprocessor:extra_trees_preproc_for_classification:max_leaf_nodes	None
feature_preprocessor:extra_trees_preproc_for_classification:min_impurity_decrease	0.0
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_leaf	5
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_split	6
feature_preprocessor:extra_trees_preproc_for_classification:min_weight_fraction_leaf	0.0
feature_preprocessor:extra_trees_preproc_for_classification:n_estimators	100

Table 35: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	weighting
classifier:__choice__	gradient_boosting
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	no_coalescense
data_preprocessing:numerical_transformer:imputation:strategy	mean
data_preprocessing:numerical_transformer:rescaling:__choice__	power_transformer
feature_preprocessor:__choice__	liblinear_svc_preprocessor
classifier:gradient_boosting:early_stop	off
classifier:gradient_boosting:l2_regularization	1.3346669897233486e-10
classifier:gradient_boosting:learning_rate	0.03152730675640789
classifier:gradient_boosting:loss	auto
classifier:gradient_boosting:max_bins	255
classifier:gradient_boosting:max_depth	None
classifier:gradient_boosting:max_leaf_nodes	291
classifier:gradient_boosting:min_samples_leaf	27
classifier:gradient_boosting:scoring	loss
classifier:gradient_boosting:tol	1e-07
feature_preprocessor:liblinear_svc_preprocessor:C	2.429396285807153
feature_preprocessor:liblinear_svc_preprocessor:dual	False
feature_preprocessor:liblinear_svc_preprocessor:fit_intercept	True
feature_preprocessor:liblinear_svc_preprocessor:intercept_scaling	1
feature_preprocessor:liblinear_svc_preprocessor:loss	squared_hinge
feature_preprocessor:liblinear_svc_preprocessor:multi_class	ovr
feature_preprocessor:liblinear_svc_preprocessor:penalty	l1
feature_preprocessor:liblinear_svc_preprocessor:tol	0.004637612713316916

Table 36: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	weighting
classifier:__choice__	libsvm_svc
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	no_coalescense
data_preprocessing:numerical_transformer:imputation:strategy	median
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	select_rates_classification
classifier:libsvm_svc:C	566.6840052213279
classifier:libsvm_svc:gamma	0.0019647850141763412
classifier:libsvm_svc:kernel	rbf
classifier:libsvm_svc:max_iter	-1
classifier:libsvm_svc:shrinking	True
classifier:libsvm_svc:tol	0.0012292213570589683
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.7590668743404532
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.2382188278316001
feature_preprocessor:select_rates_classification:alpha	0.38609551513581725
feature_preprocessor:select_rates_classification:score_func	f_classif
feature_preprocessor:select_rates_classification:mode	fdr

Table 37: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	weighting
classifier:__choice__	libsvm_svc
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	no_coalescense
data_preprocessing:numerical_transformer:imputation:strategy	mean
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	polynomial
classifier:libsvm_svc:C	6505.4924577406855
classifier:libsvm_svc:gamma	0.0006074416872293961
classifier:libsvm_svc:kernel	poly
classifier:libsvm_svc:max_iter	-1
classifier:libsvm_svc:shrinking	True
classifier:libsvm_svc:tol	0.0009308867112882096
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.7732405392203467
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.1500113868661228
feature_preprocessor:polynomial:degree	2
feature_preprocessor:polynomial:include_bias	True
feature_preprocessor:polynomial:interaction_only	False
classifier:libsvm_svc:coef0	-0.6333837418430242
classifier:libsvm_svc:degree	2

Table 38: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	none
classifier:__choice__	gradient_boosting
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	no_coalescense
data_preprocessing:numerical_transformer:imputation:strategy	mean
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	polynomial
classifier:gradient_boosting:early_stop	train
classifier:gradient_boosting:l2_regularization	7.251003784976175e-10
classifier:gradient_boosting:learning_rate	0.021904376801893864
classifier:gradient_boosting:loss	auto
classifier:gradient_boosting:max_bins	255
classifier:gradient_boosting:max_depth	None
classifier:gradient_boosting:max_leaf_nodes	13
classifier:gradient_boosting:min_samples_leaf	25
classifier:gradient_boosting:scoring	loss
classifier:gradient_boosting:tol	1e-07
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.7070253912764541
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.2600158290858444
feature_preprocessor:polynomial:degree	2
feature_preprocessor:polynomial:include_bias	False
feature_preprocessor:polynomial:interaction_only	True
classifier:gradient_boosting:n_iter_no_change	10

Table 39: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	weighting
classifier:__choice__	gradient_boosting
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	no_coalescense
data_preprocessing:numerical_transformer:imputation:strategy	mean
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	polynomial
classifier:gradient_boosting:early_stop	train
classifier:gradient_boosting:l2_regularization	0.0009075732041845809
classifier:gradient_boosting:learning_rate	0.0847679148804484
classifier:gradient_boosting:loss	auto
classifier:gradient_boosting:max_bins	255
classifier:gradient_boosting:max_depth	None
classifier:gradient_boosting:max_leaf_nodes	124
classifier:gradient_boosting:min_samples_leaf	25
classifier:gradient_boosting:scoring	loss
classifier:gradient_boosting:tol	1e-07
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.8375275468198223
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.2264885913461948
feature_preprocessor:polynomial:degree	3
feature_preprocessor:polynomial:include_bias	True
feature_preprocessor:polynomial:interaction_only	False
classifier:gradient_boosting:n_iter_no_change	14

Table 40: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	weighting
classifier:__choice__	gradient_boosting
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	no_coalescense
data_preprocessing:numerical_transformer:imputation:strategy	median
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	polynomial
classifier:gradient_boosting:early_stop	off
classifier:gradient_boosting:l2_regularization	1.2675536600447819e-10
classifier:gradient_boosting:learning_rate	0.06250681383314831
classifier:gradient_boosting:loss	auto
classifier:gradient_boosting:max_bins	255
classifier:gradient_boosting:max_depth	None
classifier:gradient_boosting:max_leaf_nodes	4
classifier:gradient_boosting:min_samples_leaf	29
classifier:gradient_boosting:scoring	loss
classifier:gradient_boosting:tol	1e-07
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.7998509950514749
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.24320191705870936
feature_preprocessor:polynomial:degree	2
feature_preprocessor:polynomial:include_bias	False
feature_preprocessor:polynomial:interaction_only	False

Table 41: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	weighting
classifier:__choice__	gradient_boosting
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	mean
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	extra_trees_preproc_for_classification
classifier:gradient_boosting:early_stop	off
classifier:gradient_boosting:l2_regularization	1e-10
classifier:gradient_boosting:learning_rate	0.16731650635122736
classifier:gradient_boosting:loss	auto
classifier:gradient_boosting:max_bins	255
classifier:gradient_boosting:max_depth	None
classifier:gradient_boosting:max_leaf_nodes	26
classifier:gradient_boosting:min_samples_leaf	14
classifier:gradient_boosting:scoring	loss
classifier:gradient_boosting:tol	1e-07
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.0077640206470712715
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.7655169184871327
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.23934832754654853
feature_preprocessor:extra_trees_preproc_for_classification:bootstrap	False
feature_preprocessor:extra_trees_preproc_for_classification:criterion	gini
feature_preprocessor:extra_trees_preproc_for_classification:max_depth	None
feature_preprocessor:extra_trees_preproc_for_classification:max_features	0.7256612266789291
feature_preprocessor:extra_trees_preproc_for_classification:max_leaf_nodes	None
feature_preprocessor:extra_trees_preproc_for_classification:min_impurity_decrease	0.0
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_leaf	1
feature_preprocessor:extra_trees_preproc_for_classification:min_samples_split	4
feature_preprocessor:extra_trees_preproc_for_classification:min_weight_fraction_leaf	0.0
feature_preprocessor:extra_trees_preproc_for_classification:n_estimators	100

Table 42: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	weighting
classifier:__choice__	gradient_boosting
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	minority_coalescer
data_preprocessing:numerical_transformer:imputation:strategy	mean
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	polynomial
classifier:gradient_boosting:early_stop	train
classifier:gradient_boosting:l2_regularization	1.985374061174202e-10
classifier:gradient_boosting:learning_rate	0.016865201664460684
classifier:gradient_boosting:loss	auto
classifier:gradient_boosting:max_bins	255
classifier:gradient_boosting:max_depth	None
classifier:gradient_boosting:max_leaf_nodes	24
classifier:gradient_boosting:min_samples_leaf	32
classifier:gradient_boosting:scoring	loss
classifier:gradient_boosting:tol	1e-07
data_preprocessing:categorical_transformer:category_coalescence:minority_coalescer:minimum_fraction	0.022334681891724814
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.7963245020113036
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.27231295803982
feature_preprocessor:polynomial:degree	2
feature_preprocessor:polynomial:include_bias	True
feature_preprocessor:polynomial:interaction_only	False
classifier:gradient_boosting:n_iter_no_change	16

Table 43: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	weighting
classifier:__choice__	libsvm_svc
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	no_coalescense
data_preprocessing:numerical_transformer:imputation:strategy	median
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	select_rates_classification
classifier:libsvm_svc:C	566.6840052213279
classifier:libsvm_svc:gamma	0.0019647850141763412
classifier:libsvm_svc:kernel	rbf
classifier:libsvm_svc:max_iter	-1
classifier:libsvm_svc:shrinking	True
classifier:libsvm_svc:tol	0.0012292213570589683
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.7590668743404532
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.2382188278316001
feature_preprocessor:select_rates_classification:alpha	0.38609551513581725
feature_preprocessor:select_rates_classification:score_func	f_classif
feature_preprocessor:select_rates_classification:mode	fdr

Table 44: Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
balancing:strategy	none
balancing:strategy	weighting
classifier:__choice__	libsvm_svc
data_preprocessing:categorical_transformer:categorical_encoding:__choice__	no_encoding
data_preprocessing:categorical_transformer:category_coalescence:__choice__	no_coalescense
data_preprocessing:numerical_transformer:imputation:strategy	median
data_preprocessing:numerical_transformer:rescaling:__choice__	robust_scaler
feature_preprocessor:__choice__	select_rates_classification
classifier:libsvm_svc:C	566.6840052213279
classifier:libsvm_svc:gamma	0.0019647850141763412
classifier:libsvm_svc:kernel	rbf
classifier:libsvm_svc:max_iter	-1
classifier:libsvm_svc:shrinking	True
classifier:libsvm_svc:tol	0.0012292213570589683
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_max	0.7590668743404532
data_preprocessing:numerical_transformer:rescaling:robust_scaler:q_min	0.2382188278316001
feature_preprocessor:select_rates_classification:alpha	0.38609551513581725
feature_preprocessor:select_rates_classification:score_func	f_classif
feature_preprocessor:select_rates_classification:mode	fdr

Table 45: ObesityDataset-10 - Param name depicts an hyper parameter available within the algorithm Param value depicts the value set to this parameter by the Auto-ML pipeline.

Param name	Param value
Classifier chosen	weka.classifiers.functions.Logistic
Classifier arguments	[-R, 1.4352634476412934E-8]
[Pre-Process]attribute search	weka.attributeSelection.GreedyStepwise
[Pre-Process]attribute search arguments	[-B, -R]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-L]

Table 46: autoweka-diabetic-fold-1

Param name	Param value
Classifier chosen	weka.classifiers.meta.Bagging
Classifier arguments	[-P, 77, -I, 127, -S, 1, -W, weka.classifiers.functions.SGD, –, -F, 1, -L, 1.5891309821796528E-4, -R, 1.0721996069074824E-6, -N, -M]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 47: autoweka-diabetic-fold-2

Param name	Param value
Classifier chosen	weka.classifiers.meta.Bagging
Classifier arguments	[-P, 77, -I, 127, -S, 1, -W, weka.classifiers.functions.SGD, –, -F, 1, -L, 1.5891309821796528E-4, -R, 1.0721996069074824E-6, -N, -M]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 48: autoweka-diabetic-fold-3

Param name	Param value
Classifier chosen	weka.classifiers.functions.Logistic
Classifier arguments	[-R, 1.3125546009206435E-6]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 49: autoweka-diabetic-fold-4

Param name	Param value
Classifier chosen	weka.classifiers.lazy.LWL
Classifier arguments	[-U, 3, -A, weka.core.neighboursearch.LinearNNSearch, -W, weka.classifiers.functions.Logistic, –, -R, 3.219992074949572E-12]
[Pre-Process]attribute search	weka.attributeSelection.GreedyStepwise
[Pre-Process]attribute search arguments	[-C, -B, -R]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-L]

Table 50: autoweka-diabetic-fold-5

Param name	Param value
Classifier chosen	weka.classifiers.lazy.LWL
Classifier arguments	[-U, 3, -A, weka.core.neighboursearch.LinearNNSearch, -W, weka.classifiers.functions.Logistic, –, -R, 3.219992074949572E-12]
[Pre-Process]attribute search	weka.attributeSelection.GreedyStepwise
[Pre-Process]attribute search arguments	[-C, -B, -R]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-L]

Table 51: autoweka-diabetic-fold-6

Param name	Param value
Classifier chosen	weka.classifiers.functions.Logistic
Classifier arguments	[-R, 1.0267505621575885E-10]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 52: autoweka-diabetic-fold-7

Param name	Param value
Classifier chosen	weka.classifiers.functions.Logistic
Classifier arguments	[-R, 1.3125546009206435E-6]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 1: autoweka-diabetic-fold-8

Param name	Param value
Classifier chosen	weka.classifiers.lazy.LWL
Classifier arguments	[-U, 3, -A, weka.core.neighboursearch.LinearNNSearch, -W, weka.classifiers.functions.Logistic, –, -R, 3.219992074949572E-12]
[Pre-Process]attribute search	weka.attributeSelection.GreedyStepwise
[Pre-Process]attribute search arguments	[-C, -B, -R]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-L]

Table 2: autoweka-diabetic-fold-9

Param name	Param value
Classifier chosen	weka.classifiers.functions.SMO
Classifier arguments	[-C, 1.4459431466423454, -N, 0, -K, weka.classifiers.functions.supportVector.PolyKernel -E 2 .5831457101183566 -L]
[Pre-Process]attribute search	weka.attributeSelection.GreedyStepwise
[Pre-Process]attribute search arguments	[-B, -R]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M, -L]

Table 3: autoweka-diabetic-fold-10

Param name	Param value
Classifier chosen	weka.classifiers.meta.AdaBoostM1
Classifier arguments	[-P, 100, -I, 41, -Q, -S, 1, -W, weka.classifiers.trees.J48, –, -B, -A, -M, 12]
[Pre-Process]attribute search	weka.attributeSelection.GreedyStepwise
[Pre-Process]attribute search arguments	[-C, -B, -R]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M, -L]

Table 4: autoweka-obesity-fold-1

Param name	Param value
Classifier chosen	weka.classifiers.meta.AdaBoostM1
Classifier arguments	[-P, 100, -I, 41, -Q, -S, 1, -W, weka.classifiers.trees.J48, –, -B, -A, -M, 12]
[Pre-Process]attribute search	weka.attributeSelection.GreedyStepwise
[Pre-Process]attribute search arguments	[-C, -B, -R]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M, -L]

Table 5: autoweka-obesity-fold-2

Param name	Param value
Classifier chosen	weka.classifiers.meta.AdaBoostM1
Classifier arguments	[-P, 100, -I, 41, -Q, -S, 1, -W, weka.classifiers.trees.J48, –, -B, -A, -M, 12]
[Pre-Process]attribute search	weka.attributeSelection.GreedyStepwise
[Pre-Process]attribute search arguments	[-C, -B, -R]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M, -L]

Table 6: autoweka-obesity-fold-3

Param name	Param value
Classifier chosen	weka.classifiers.functions.Logistic
Classifier arguments	[-R, 7.176574207230079E-10]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 7: autoweka-obesity-fold-4

Param name	Param value
Classifier chosen	weka.classifiers.meta.AdaBoostM1
Classifier arguments	[-P, 100, -I, 41, -Q, -S, 1, -W, weka.classifiers.trees.J48, –, -B, -A, -M, 12]
[Pre-Process]attribute search	weka.attributeSelection.GreedyStepwise
[Pre-Process]attribute search arguments	[-C, -B, -R]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M, -L]

Table 8: autoweka-obesity-fold-5

Param name	Param value
Classifier chosen	weka.classifiers.trees.RandomForest
Classifier arguments	[-I, 10, -K, 0, -depth, 0]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 9: autoweka-obesity-fold-6

Param name	Param value
Classifier chosen	weka.classifiers.trees.LMT
Classifier arguments	[-R, -P, -M, 1, -W, 0, -A]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 10: autoweka-obesity-fold-7

Param name	Param value
Classifier chosen	weka.classifiers.trees.LMT
Classifier arguments	[-M, 5, -W, 0, -A]
[Pre-Process]attribute search	weka.attributeSelection.GreedyStepwise
[Pre-Process]attribute search arguments	[-R]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M]

Table 11: autoweka-obesity-fold-8

Param name	Param value
Classifier chosen	weka.classifiers.meta.AdaBoostM1
Classifier arguments	[-P, 100, -I, 41, -Q, -S, 1, -W, weka.classifiers.trees.J48, –, -B, -A, -M, 12]
[Pre-Process]attribute search	weka.attributeSelection.GreedyStepwise
[Pre-Process]attribute search arguments	[-C, -B, -R]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M, -L]

Table 12: autoweka-obesity-fold-9

Param name	Param value
Classifier chosen	weka.classifiers.functions.Logistic
Classifier arguments	[-R, 8.545088887809794E-11]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 13: autoweka-obesity-fold-10

Param name	Param value
Classifier chosen	weka.classifiers.trees.RandomTree
Classifier arguments	[-M, 1, -K, 0, -depth, 2, -N, 2]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 14: autoweka-thoracic-fold-1

Param name	Param value
Classifier chosen	weka.classifiers.meta.RandomCommittee
Classifier arguments	[-I, 15, -S, 1, -W, weka.classifiers.functions.SGD, –, -F, 1, -L, 0.06176689752266038, -R, 2 .0636659429088966, -M]
[Pre-Process]attribute search	weka.attributeSelection.BestFirst
[Pre-Process]attribute search arguments	[-D, 0, -N, 6]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-L]

Table 15: autoweka-thoracic-fold-2

Param name	Param value
Classifier chosen	weka.classifiers.functions.SimpleLogistic
Classifier arguments	[-W, 0]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 16: autoweka-thoracic-fold-3

Param name	Param value
Classifier chosen	weka.classifiers.lazy.KStar
Classifier arguments	[-B, 41, -E, -M, n]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 17: autoweka-thoracic-fold-4

Param name	Param value
Classifier chosen	weka.classifiers.rules.OneR
Classifier arguments	[-B, 4]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 18: autoweka-thoracic-fold-5

Param name	Param value
Classifier chosen	weka.classifiers.meta.Bagging
Classifier arguments	[-P, 39, -I, 3, -S, 1, -W, weka.classifiers.functions.MultilayerPerceptron, –, -L, 0.5694633600992264, -M, 0.935097875125993, -B, -H, o, -S, 1]
[Pre-Process]attribute search	weka.attributeSelection.GreedyStepwise
[Pre-Process]attribute search arguments	[-R]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M]

Table 19: autoweka-thoracic-fold-6

Param name	Param value
Classifier chosen	weka.classifiers.rules.OneR
Classifier arguments	[-B, 28]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 20: autoweka-thoracic-fold-7

Param name	Param value
Classifier chosen	weka.classifiers.meta.AdaBoostM1
Classifier arguments	[-P, 100, -I, 14, -S, 1, -W, weka.classifiers.rules.JRip, –, -N, 2.221057319541204, -E, -O, 2]
[Pre-Process]attribute search	weka.attributeSelection.BestFirst
[Pre-Process]attribute search arguments	[-D, 1, -N, 4]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-L]

Table 21: autoweka-thoracic-fold-8

Param name	Param value
Classifier chosen	weka.classifiers.functions.SimpleLogistic
Classifier arguments	[-W, 0.6253523817456732]
[Pre-Process]attribute search	weka.attributeSelection.GreedyStepwise
[Pre-Process]attribute search arguments	[-B, -R]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M, -L]

Table 22: autoweka-thoracic-fold-9

Param name	Param value
Classifier chosen	weka.classifiers.bayes.BayesNet
Classifier arguments	[-Q, weka.classifiers.bayes.net.search.local.SimulatedAnnealing]
[Pre-Process]attribute search	weka.attributeSelection.BestFirst
[Pre-Process]attribute search arguments	[-D, 2, -N, 5]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M]

Table 23: autoweka-thoracic-fold-10

Param name	Param value
Classifier chosen	weka.classifiers.meta.AdaBoostM1
Classifier arguments	[-P, 84, -I, 3, -S, 1, -W, weka.classifiers.lazy.IBk, –, -E, -K, 5, -I]
[Pre-Process]attribute search	weka.attributeSelection.BestFirst
[Pre-Process]attribute search arguments	[-D, 2, -N, 2]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M, -L]

Table 24: autoweka-breast-cancer-fold-1

Param name	Param value
Classifier chosen	weka.classifiers.trees.LMT
Classifier arguments	[-B, -R, -C, -M, 1, -W, 0]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 25: autoweka-breast-cancer-fold-2

Param name	Param value
Classifier chosen	weka.classifiers.functions.SMO
Classifier arguments	[-C, 1.0627553520919253, -N, 1, -K, weka.classifiers.functions.supportVector.Puk -S 1.5032395337884743 -O 0.7567717274995831]
[Pre-Process]attribute search	weka.attributeSelection.GreedyStepwise
[Pre-Process]attribute search arguments	[-C, -R]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M]

Table 26: autoweka-breast-cancer-fold-3

Param name	Param value
Classifier chosen	weka.classifiers.trees.RandomForest
Classifier arguments	[-I, 63, -K, 29, -depth, 0]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 27: autoweka-breast-cancer-fold-4

Param name	Param value
Classifier chosen	weka.classifiers.meta.AdaBoostM1
Classifier arguments	[-P, 80, -I, 8, -Q, -S, 1, -W, weka.classifiers.trees.RandomForest, –, -I, 23, -K, 0, -depth, 18]
[Pre-Process]attribute search	weka.attributeSelection.GreedyStepwise
[Pre-Process]attribute search arguments	[-C, -B, -R]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-L]

Table 28: autoweka-breast-cancer-fold-5

Param name	Param value
Classifier chosen	weka.classifiers.meta.Bagging
Classifier arguments	[-P, 83, -I, 75, -S, 1, -W, weka.classifiers.trees.REPTree, –, -M, 1, -V, 0.010906672296335835, -L, -1]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 29: autoweka-breast-cancer-fold-6

Param name	Param value
Classifier chosen	weka.classifiers.meta.Bagging
Classifier arguments	[-P, 85, -I, 94, -S, 1, -W, weka.classifiers.trees.J48, –, -O, -U, -B, -M, 6]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 30: autoweka-breast-cancer-fold-7

Param name	Param value
Classifier chosen	weka.classifiers.meta.Bagging
Classifier arguments	[-P, 52, -I, 14, -S, 1, -W, weka.classifiers.functions.SimpleLogistic, –, -W, 0, -A]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 31: autoweka-breast-cancer-fold-8

Param name	Param value
Classifier chosen	weka.classifiers.functions.Logistic
Classifier arguments	[-R, 5.605699207668992E-5]
[Pre-Process]attribute search	weka.attributeSelection.BestFirst
[Pre-Process]attribute search arguments	[-D, 2, -N, 10]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-L]

Table 32: autoweka-breast-cancer-fold-9

Param name	Param value
Classifier chosen	weka.classifiers.trees.RandomForest
Classifier arguments	[-I, 14, -K, 1, -depth, 0]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 33: autoweka-breast-cancer-fold-10

Param name	Param value
Classifier chosen	weka.classifiers.functions.MultilayerPerceptron
Classifier arguments	[-L, 0.13894230714861677, -M, 0.9289936943883971, -B, -H, i, -C, -S, 1]
[Pre-Process]attribute search	weka.attributeSelection.BestFirst
[Pre-Process]attribute search arguments	[-D, 1, -N, 10]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M]

Table 34: autoweka-heart-failure-fold-1

Param name	Param value
Classifier chosen	weka.classifiers.trees.RandomForest
Classifier arguments	[-I, 10, -K, 0, -depth, 0]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 35: autoweka-heart-failure-fold-2

Param name	Param value
Classifier chosen	weka.classifiers.rules.JRip
Classifier arguments	[-N, 3.2016009086796435, -O, 3]
[Pre-Process]attribute search	weka.attributeSelection.BestFirst
[Pre-Process]attribute search arguments	[-D, 1, -N, 5]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[]

Table 36: autoweka-heart-failure-fold-3

Param name	Param value
Classifier chosen	weka.classifiers.meta.RandomCommittee
Classifier arguments	[-I, 14, -S, 1, -W, weka.classifiers.trees.RandomForest, –, -I, 23, -K, 3, -depth, 13]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 37: autoweka-heart-failure-fold-4

Param name	Param value
Classifier chosen	weka.classifiers.rules.OneR
Classifier arguments	[-B, 5]
[Pre-Process]attribute search	weka.attributeSelection.BestFirst
[Pre-Process]attribute search arguments	[-D, 2, -N, 4]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M]

Table 38: autoweka-heart-failure-fold-5

Param name	Param value
Classifier chosen	weka.classifiers.bayes.BayesNet
Classifier arguments	[-Q, weka.classifiers.bayes.net.search.local.LAGDHillClimber]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 39: autoweka-heart-failure-fold-6

Param name	Param value
Classifier chosen	weka.classifiers.functions.SMO
Classifier arguments	[-C, 0.9019765254533808, -N, 2, -K, weka.classifiers.functions.supportVector.RBFKernel -G 6.921767803936556E-4]
[Pre-Process]attribute search	weka.attributeSelection.BestFirst
[Pre-Process]attribute search arguments	[-D, 2, -N, 3]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M]

Table 40: autoweka-heart-failure-fold-7

Param name	Param value
Classifier chosen	weka.classifiers.trees.J48
Classifier arguments	[-O, -U, -B, -A, -M, 62]
[Pre-Process]attribute search	weka.attributeSelection.BestFirst
[Pre-Process]attribute search arguments	[-D, 2, -N, 6]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-L]

Table 41: autoweka-heart-failure-fold-8

Param name	Param value
Classifier chosen	weka.classifiers.meta.RandomSubSpace
Classifier arguments	[-I, 12, -P, 0.8319723106953512, -S, 1, -W, weka.classifiers.trees.RandomForest, –, -I, 7, -K, 0, -depth, 20]
[Pre-Process]attribute search	null
[Pre-Process]attribute search arguments	[]
[Pre-Process]attribute evaluation	null
[Pre-Process]attribute evaluation arguments	[]

Table 42: autoweka-heart-failure-fold-9

Param name	Param value
Classifier chosen	weka.classifiers.trees.RandomTree
Classifier arguments	[-M, 1, -K, 21, -depth, 0, -N, 2]
[Pre-Process]attribute search	weka.attributeSelection.BestFirst
[Pre-Process]attribute search arguments	[-D, 2, -N, 6]
[Pre-Process]attribute evaluation	weka.attributeSelection.CfsSubsetEval
[Pre-Process]attribute evaluation arguments	[-M]

Table 43: autoweka-heart-failure-fold-10