

Learner Name	Parameters	Default	antV0	antV1	antV2	camelV0	camelV1	ivy	jeditV0	jeditV1	jeditV2	log4j	lucene	poiV0	poiV1	synapse	velocity	xercesV0	xercesV1
Where based Learner	threshold	0.5	0.98	0.98	0.43	0.24	0.64	1	1	0.98	0.98	1	1	0.87	0.59	0.98	1	0.98	0.98
	infoPrune	0.33	0.05	0.05	0.71	0.54	0.45	0.41	0.3	0.05	0.05	0.54	0.84	0.01	1	0.05	0.68	0.43	0.05
	min_sample_size	4	7	7	9	8	6	10	1	5	7	8	7	9	3	7	7	1	7
	min_Size	0.5	0.51	0.51	0.59	0.46	0.13	0.38	0.66	0.27	0.51	0.46	0.47	0.77	0.48	0.51	0.66	0.22	0.51
	wriggle	0.2	0.6	0.6	0.83	0.52	0.19	0.01	0.26	0.6	0.6	0.52	0.19	0.83	0.01	0.6	0.26	0.55	0.6
	depthMin	2	1	1	2	3	5	2	3	3	1	1	2	4	2	1	3	2	1
	depthMax	10	8	8	13	19	19	18	7	8	8	19	1	19	18	8	11	18	8
	wherePrune	False	False	False	False	False	True	True	False	False	False	False	False	True	True	False	False	True	False
	treePrune	True	False	False	False	True	True	True	False	False	False	True	True	False	False	False	False	True	False
CART	threshold	0.5	0.69	0.99	1	0.3	0.83	1	0.99	0.58	0.72	1	0.71	0.46	0.72	1	0.85	1	0.64
	max_feature	None	0.01	0.58	0.65	0.66	0.73	0.67	0.56	0.01	0.97	0.54	0.52	0.32	0.01	0.74	0.73	0.01	0.1
	min_samples_split	2	7	16	18	5	11	6	15	6	17	4	16	12	5	14	11	4	10
	min_samples_leaf	1	13	14	10	4	3	15	16	9	6	7	6	1	4	6	7	11	7
	max_depth	None	14	1	41	34	1	22	29	1	1	1	14	19	8	40	4	1	1
Random Forests	threshold	0.5	0.84	0.9	0.83	0.33	1	0.99	0.91	1	1	0.83	0.98	0.9	0.86	0.83	1	1	1
	max_feature	None	0.61	0.13	0.89	0.37	0.01	0.98	0.52	0.75	0.35	0.01	0.98	0.84	0.73	0.01	0.48	0.51	0.01
	max_leaf_nodes	None	37	35	38	21	36	45	10	38	10	30	20	43	11	13	15	39	10
	min_samples_split	2	8	16	17	13	14	2	3	2	2	18	19	9	4	4	9	20	1
	min_samples_leaf	1	19	5	2	4	2	4	7	17	7	16	12	2	3	2	2	2	3
	n_estimators	100	138	112	77	74	125	130	107	85	96	111	103	82	59	149	150	63	58

Table 1: Parameters tuned on different models over the objective of precision.

Learner Name	Parameters	Default	antV0	antV1	antV2	camelV0	camelV1	ivy	jeditV0	jeditV1	jeditV2	log4j	lucene	poiV0	poiV1	synapse	velocity	xercesV0	xercesV1
Where based Learner	threshold	0.5	0.04	0.44	0.44	0.98	0.65	0.77	1	0.65	0.98	0.44	0.44	0.87	0.04	0.77	0.24	0.44	0.77
	infoPrune	0.33	0.51	0.68	0.88	0.47	0.07	0.31	0.48	0.68	0.57	0.12	0.68	0.01	0.51	0.14	0.54	0.68	0.14
	min_sample_size	4	6	4	6	1	6	8	8	4	6	7	4	9	6	2	8	4	8
	min_Size	0.5	0.18	0.4	0.59	0.51	0.65	0.59	0.97	0.4	0.51	0.8	0.4	0.77	0.18	0.62	0.46	0.4	0.66
	wriggle	0.2	0.25	0.29	0.76	0.6	0.63	0.26	1	0.51	0.17	0.36	0.51	0.83	0.25	0.5	0.52	0.29	0.26
	depthMin	2	3	3	3	1	5	3	2	3	5	5	3	4	3	3	3	3	3
	depthMax	10	16	15	15	8	19	10	7	15	5	15	15	19	16	6	19	15	10
	wherePrune	False	False	True	True	True	True	True	False	False	False	True	True	True	False	True	False	False	True
	treePrune	True	False	True	True	False	False	False	False	True	True	True	True	False	False	True	True	True	False
CART	threshold	0.5	0.34	0.25	0.01	0.01	0.73	0.53	0.92	0.8	0.74	0.54	0.03	0.91	0.01	0.01	0.55	1	0.01
	max_feature	None	0.01	0.01	0.29	0.01	0.46	0.75	0.79	0.74	0.41	0.81	0.61	0.72	0.01	0.01	0.01	0.25	0.18
	min_samples_split	2	18	20	12	2	15	11	2	18	13	9	17	16	10	4	8	3	15
	min_samples_leaf	1	19	16	15	17	1	1	13	10	4	3	7	5	20	7	8	1	6
	max_depth	None	12	2	15	1	41	20	44	15	13	5	23	14	1	5	17	47	13
Random Forests	threshold	0.5	0.01	0.35	0.3	0.01	0.9	0.97	0.63	1	0.73	0.68	0.01	1.0	0.01	0.07	0.22	1	0.82
	max_feature	None	0.63	0.17	0.01	0.01	0.88	0.74	0.76	0.73	0.01	0.03	0.39	0.02	0.01	0.56	0.36	0.51	0.89
	max_leaf_nodes	None	40	33	46	22	11	16	38	34	30	31	12	49	25	47	15	39	24
	min_samples_split	2	10	16	20	1	1	1	1	4	20	19	11	14	2	17	19	20	19
	min_samples_leaf	1	4	15	9	13	18	11	3	16	17	6	10	7	19	13	11	2	14
	n_estimators	100	120	73	75	130	97	144	125	97	80	111	96	101	50	67	74	63	66

Table 2: Parameters tuned on different models over the objective of “F”.