

Model	Parameters	Class	Training - all features				Test - all features			
			Accuracy	F1	Precision	Recall	Accuracy	F1	Precision	Recall
KNN-Base	n_neighbor = 5 , p =1	0	0.905	0.95	0.91	0.99	0.883	0.94	0.9	0.99
		1		0.39	0.79	0.26		0.21	0.49	0.14
		2		0.45	0.83	0.31		0.29	0.6	0.19
		3		0.42	0.89	0.27		0.41	0.83	0.27
DecisionTree-Base (discretized variables) Split Training\Test set precomputed researcher	min_samples_split: 10, min_samples_leaf: 10, max_depth: 9, criterion: gini	0	0.924	0.96	0.94	0.98	0.897	0.95	0.92	0.98
		1		0.45	0.76	0.32		0.05	0.14	0.04
		2		0.69	0.7	0.69		0.5	0.54	0.48
		3		0.47	0.89	0.32		0.01	0.22	0.01
DecisionTree-Base (continuous variables) Split Training\Test set precomputed researcher	min_samples_split: 10, min_samples_leaf: 10, max_depth: 9, criterion: gini	0	0.924	0.96	0.95	0.98	0.87	0.93	0.93	0.95
		1		0.49	0.74	0.36		0.13	0.12	0.13
		2		0.7	0.7	0.7		0.41	0.49	0.37
		3		0.52	0.91	0.36		0.01	0.03	0.01
DecisionTree-Base (discretized variables) Random Split Training\Test set	min_samples_split: 100, min_samples_leaf: 100, max_depth: 8, criterion: entropy	0	0.907	0.95	0.93	0.98	0.905	0.95	0.93	0.98
		1		0.27	0.52	0.18		0.23	0.47	0.16
		2		0.63	0.66	0.61		0.63	0.65	0.61
		3		0.36	0.71	0.24		0.32	0.67	0.21
KNN-RandomUnders	n_neighbor = 5, p =1, random_state=42,	0	0.44	0.6	0.94	0.44	0.44	0.6	0.93	0.44
		1		0.16	0.1	0.46		0.14	0.09	0.4
		2		0.21	0.14	0.44		0.19	0.13	0.39
		3		0.1	0.05	0.81		0.09	0.05	0.7
KNN-RandomOvers	n_neighbor = 5, p =1, random_state = 42	0	0.86	0.92	1	0.84	0.74	0.85	0.95	0.78
		1		0.65	0.48	1		0.29	0.21	0.48
		2		0.65	0.48	1		0.35	0.25	0.57
		3		0.66	0.49	1		0.31	0.23	0.47
KNN-SMOTEOverS	n_neighbor = 5, p =1	0	0.79	0.86	1	0.76	0.65	0.78	0.95	0.67
		1		0.54	0.37	1		0.25	0.17	0.5
		2		0.6	0.42	1		0.3	0.21	0.56
		3		0.34	0.21	1		0.16	0.09	0.55
KNN-Weighted	n_neighbor = 5, p =1, weights = distance	0	1	1	1	1	0.88	0.94	0.9	0.98
		1		1	1	1		0.27	0.5	0.19
		2		1	1	1		0.34	0.56	0.24
		3		1	1	1		0.42	0.73	0.29
DecisionTree-Weighted	min_samples_split: 10, min_samples_leaf: 10, max_depth: 9, criterion: gini, weight:{0: 0.28, 1: 4.70, 2: 3.60, 3: 31.46}	0	0.65	0.77	0.99	0.64	0.69	0.82	0.96	0.71
		1		0.26	0.16	0.71		0.18	0.12	0.35
		2		0.59	0.49	0.74		0.49	0.39	0.66
		3		0.12	0.07	0.89		0.1	0.05	0.48