Model	Parameters	Class	Training - all features				Test - all features				Training - 10 features				Test - 10 features			
			Accuracy	F1	Precision	Recall	Accuracy	F1	Precision	Recall	Accuracy	F1	Precision	Recall	Accuracy	F1	Precision	Recall
Naïve-Bayes (Gaussian)		0	0.7	0.82	0.97	0.72	0.69	0.82	0.97	0.72	0.81	0.9	0.94	0.86	0.81	0.9	0.94	0.86
		1		0.21	0.16	0.29		0.23	0.18	0.32		0.14	0.15	0.13		0.14	0.15	0.13
		2		0.36	0.23	0.78		0.35	0.23	0.78		0.49	0.37	0.74		0.5	0.37	0.75
		3		0.08	0.05	0.19		0.09	0.05	0.21		0.06	0.04	0.11		0.04	0.03	0.08
Naïve-Bayes (Categorical)		0	0.93	0.97	0.97	0.96	0.91	0.95	0.97	0.94	0.88	0.94	0.93	0.95	0.85	0.93	0.92	0.94
		1		0.71	0.75	0.66		0.52	0.59	0.46		0.22	0.66	0.13		0.04	0.11	0.03
		2		0.78	0.69	0.89		0.72	0.62	0.85		0.52	0.44	0.63		0.43	0.37	0.52
		3		0.55	0.47	0.66		0.39	0.3	0.57		0.17	0.69	0.1		0.02	0.11	0.01
Logistic Regression [album, non-album]	C=0.1, penalty='l2'	0	0.904	0.95	0.92	0.97	0.903	0.95	0.92	0.95	0.887	0.94	0.92	0.96	0.886	0.94	0.92	0.95
		1		0.53	0.7	0.43		0.53	0.69	0.53		0.48	0.57	0.41		0.48	0.57	0.41
SVM Linear Binary [album, non-album]	C=100, random_state=42, max_iter=25000, loss=squared_hinge	0	0.87	0.92	0.95	0.9	0.87	0.92	0.95	0.9	0.89	0.94	0.93	0.94	0.89	0.94	0.93	0.94
		1		0.55	0.49	0.64		0.55	0.48	0.64		0.53	0.57	0.5		0.53	0.55	0.5
SVM Linear	C= 0.01,random_state=42, max_iter = 3000,loss="squared_hinge"	0	0.85	0.93	0.89	0.97	0.85	0.93	0.89	0.96	0.84	0.92	0.88	0.96	0.84	0.91	0.88	0.95
		1		0.12	0.13	0.11		0.11	0.11	0.1		0.01	0.25	0		0	0.12	0
		2		0.13	0.58	0.08		0.14	0.6	0.08		0.14	0.49	0.08		0.15	0.51	0.09
		3		0	0	0		0	0	0		0.02	0.01	0.04		0.02	0.01	0.05
SVM NonLinear	kernel = rbf, gamma= auto	0	0.92	0.96	0.94	0.99	0.91	0.96	0.93	0.98	0.88	0.94	0.91	0.97	0.88	0.94	0.91	0.97
		1		0.28	0.82	0.17		0.26	0.77	0.16		0.04	0.61	0.02		0.04	0.59	0.02
		2		0.67	0.67	0.67		0.65	0.65	0.65		0.48	0.48	0.48		0.48	0.47	0.48
		3		0.58	0.97	0.42		0.5	0.95	0.34		0	0	0		0	0	0
SVM NonLinear	kernel = polynomial, gamma= auto	0	0.92	0.96	0.94	0.98	0.92	0.96	0.94	0.98	0.88	0.94	0.91	0.97	0.88	0.94	0.91	0.97
		1		0.32	0.83	0.2		0.3	0.77	0.19		0.02	0.61	0.01		0.02	0.77	0.01
		2		0.67	0.67	0.67		0.66	0.66	0.66		0.49	0.47	0.52		0.49	0.47	0.52
		3		0.67	0.97	0.51		0.55	0.88	0.4		0.02	1	0.01		0.01	1	0.01
Rule-Based Classifier	k=1, prune_size=0.33	0	0.922	0.95	0.92	1	0.921	0.93	0.93	0.99	0.874	0.93	0.88	1	0.873	0.93	0.88	0.99
		1		0.44	0.94	0.29		0.41	0.84	0.28		0.01	0.62	0.01		0.01	0.43	0.01
		2		0.64	0.91	0.5		0.66	0.88	0.53		0.04	0.5	0.02		0.104	0.46	0.06
		3		0.57	0.94	0.41		0.52	0.8	0.39		0.01	0.29	0.01		0.01	0.07	0.01
EC Random Forest	n_estimators=100, criterion="gini", max_depth=17, min_samples_split=3, min_samples_leaf=3, max_features="auto", random_state=10, class_weight="balanced"	0	0.95	0.97	1	0.95	0.94	**0.97**	0.99	0.95	0.82	0.9	0.98	0.84	0.78	0.88	0.95	0.82
		1		0.81	0.72	0.92		**0.74**	0.66	0.84		0.35	0.27	0.51		0.17	0.13	0.24
		2		0.83	0.72	0.97		**0.79**	0.69	0.93		0.59	0.45	0.86		0.52	0.39	0.76
		3		0.83	0.72	0.99		**0.7**	0.66	0.75		0.41	0.27	0.92		0.16	0.11	0.33
EC-Bagging (Decision Tree)	criterion="gini", max_depth=9, min_samples_split=10, min_samples_leaf=10	0	0.93	0.96	0.94	0.99	0.92	0.96	0.94	0.99	0.89	0.94	0.91	0.98	0.88	0.94	0.91	0.97
		1		0.42	0.8	0.28		0.43	0.78	0.3		0.07	0.74	0.04		0.06	0.59	0.03
		2		0.71	0.74	0.69		0.69	0.71	0.68		0.48	0.51	0.45		0.45	0.47	0.43
		3		0.44	1	0.28		0.4	1	0.25		0.26	0.89	0.15		0.21	0.88	0.12
EC-Boosting (Decision Tree)	criterion="gini", max_depth=9, min_samples_split=10, min_samples_leaf=10	0	0.98	0.99	0.99	0.99	0.94	0.97	0.96	0.99	0.89	0.95	0.95	0.95	0.83	0.92	0.91	0.93
		1		0.88	0.91	0.85		0.65	0.76	0.57		0.45	0.43	0.47		0.12	0.13	0.12
		2		0.9	0.91	0.89		0.75	0.8	0.7		0.55	0.56	0.54		0.34	0.37	0.32
		3		0.98	0.98	0.97		0.6	0.92	0.44		0.75	0.78	0.72		0.15	0.28	0.1
EC-Bagging (Random Forest)	n_estimators=100, criterion="gini", max_depth=17, min_samples_split=3, min_samples_leaf=3, max_features="auto", random_state=10, class_weight="balanced"	0	0.95	0.97	0.99	0.95	0.94	**0.97**	0.99	0.95	0.84	0.92	0.96	0.87	0.82	0.91	0.95	0.87
		1		0.79	0.72	0.87		**0.74**	0.68	0.8		0.34	0.3	0.39		0.19	0.17	0.21
		2		0.8	0.69	0.95		**0.77**	0.66	0.93		0.57	0.44	0.83		0.52	0.4	0.76
		3		0.83	0.76	0.91		**0.67**	0.69	0.66		0.43	0.34	0.58		0.22	0.18	0.28
EC-Boosting (Random Forest)	n_estimators=100, criterion="gini", max_depth=17, min_samples_split=3, min_samples_leaf=3, max_features="auto", random_state=10, class_weight="balanced"	0	0.99	1	0.99	1	0.96	0.98	0.97	0.99	0.97	0.99	0.99	0.99	0.86	0.93	0.91	0.95
		1		0.96	0.99	0.94		0.78	0.94	0.66		0.9	0.91	0.89		0.14	0.2	0.11
		2		0.95	0.96	0.94		0.85	0.88	0.81		0.86	0.83	0.89		0.4	0.42	0.38
		3		1	1	1		0.69	0.96	0.54		0.99	0.99	1		0.23	0.54	0.14
Single hidden layer Neural Network	activation: identity learning_rate_inits: 0.02 hidden_layer_size: 40	0	0.89	0.95	0.91	0.99	0.91	0.96	0.94	0.98	0.87	0.94	0.92	0.96	0.88	0.94	0.92	0.96
		1		0.17	0.34	0.11		0.21	0.33	0.16		0.02	0.3	0.01		0.01	0.27	0
		2		0.51	0.67	0.41		0.56	0.58	0.55		0.48	0.42	0.54		0.46	0.4	0.55
		3		0	0	0		0.04	0.75	0.02		0	0	0		0	0	0
Single hidden layer Neural Network	activation: identity learning_rate_inits: 0.001 hidden_layer_size: 350	0	0.89	0.95	0.92	0.97	0.9	0.95	0.94	0.97	0.87	0.93	0.88	1	0.89	0.94	0.9	1
		1		0.13	0.38	0.08		0.19	0.44	0.12		0	0	0		0	0	0
		2		0.57	0.57	0.57		0.59	0.52	0.69		0.18	0.54	0.11		0.17	0.45	0.1
		3		0.01	0.03	0.01		0.04	0.26	0.02		0	0	0		0	0	0
Deep Neural Network	activation: identity learning_rate_inits: 0.001 hidden_layer_sizes: 40, 40	0	0.89	0.95	0.92	0.98	0.91	0.96	0.94	0.97	0.87	0.94	0.9	0.97	0.89	0.94	0.92	0.97
		1		0.15	0.35	0.1		0.2	0.38	0.13		0.01	0.28	0.01		0	1	0
		2		0.55	0.6	0.5		0.58	0.53	0.64		0.44	0.46	0.42		0.43	0.43	0.43
		3		0	0	0		0	0	0		0	0	0		0	0	0
Deep Neural Network	activation: identity learning_rate_inits: 0.001 hidden_layer_sizes: 40, 20, 8	0	0.89	0.95	0.92	0.98	0.91	0.96	0.93	0.98	0.87	0.93	0.87	1	0.89	0.94	0.89	1
		1		0.11	0.41	0.07		0.12	0.45	0.07		0	0	0		0	0	0
		2		0.56	0.61	0.51		0.59	0.55	0.62		0.09	0.47	0.05		0.06	0.34	0.03
		3		0	0	0		0	0	0		0	0	0		0	0	0