

In [56]: compare_models()

	Model	Accuracy	AUC	Recall	Prec.	F1	Kappa	MCC	TT (Sec)
gbc	Gradient Boosting Classifier	0.9216	0.9638	0.8908	0.9153	0.9022	0.8369	0.8380	0.0180
catboost	CatBoost Classifier	0.9181	0.9659	0.8891	0.9085	0.8980	0.8297	0.8307	0.9590
rf	Random Forest Classifier	0.9167	0.9624	0.8821	0.9103	0.8955	0.8263	0.8272	0.0960
lr	Logistic Regression	0.9132	0.9539	0.8527	0.9285	0.8884	0.8177	0.8202	0.0030
ada	Ada Boost Classifier	0.9125	0.9596	0.8804	0.9026	0.8910	0.8179	0.8186	0.0130
ridge	Ridge Classifier	0.9097	0.0000	0.8353	0.9362	0.8825	0.8096	0.8134	0.0020
svm	SVM - Linear Kernel	0.9090	0.0000	0.8648	0.9083	0.8852	0.8099	0.8115	0.0030
lda	Linear Discriminant Analysis	0.9075	0.9566	0.8319	0.9342	0.8797	0.8051	0.8090	0.0030
lightgbm	Light Gradient Boosting Machine	0.9061	0.9563	0.8838	0.8859	0.8843	0.8053	0.8061	0.1570
nb	Naive Bayes	0.9040	0.9488	0.8717	0.8912	0.8807	0.8005	0.8014	0.0030
et	Extra Trees Classifier	0.9033	0.9567	0.8596	0.8995	0.8785	0.7983	0.7995	0.0970
qda	Quadratic Discriminant Analysis	0.9012	0.9462	0.8666	0.8892	0.8771	0.7946	0.7956	0.0030
knn	K Neighbors Classifier	0.9005	0.9405	0.8510	0.8996	0.8741	0.7920	0.7934	0.0270
dt	Decision Tree Classifier	0.8899	0.8780	0.8698	0.8618	0.8650	0.7721	0.7731	0.0030
dummy	Dummy Classifier	0.5928	0.5000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0020

Out [56]: GradientBoostingClassifier(ccp_alpha=0.0, criterion='friedman_mse', init=None,

Supplementary Fig. 2. Models of deep learning to discriminate between normal and abnormal tympanic membranes. AUC, area under the curve; Prec, precision; MCC, Matthews correlation coefficient; TT, training time.