

A. Logistic Regression
{'C': (1e-4, 1e+4, 'log-uniform'), 'class_weight': [None, "balanced"], 'penalty': ['l1', 'l2'] },
B. Decision Tree Classifier
{'max_depth': Integer(1, 50), 'max_features': Integer(1, 20), 'class_weight': [None, "balanced"], },
C. Random Forest Classifier
{'max_depth': Integer(1, 30), 'max_features': Integer(1, 20), 'class_weight': ["balanced", None], },
D. LGBM Classifier
{'n_estimators': [50, 100, 150, 200, 250, 300, 350, 400, 450, 500], 'max_depth': Integer(1, 70), 'class_weight': ['balanced', None], },

S1 Fig. Parameters used for Bayesian optimization tuning of different machine learning algorithms via 5-fold cross-validation.