model_decision_tree

Params: {'criterion': 'gini', 'max_depth': 3, 'min_samples_leaf': 1, 'min_samples_split': 2} | Mean F1: 0.936

Params: {'criterion': 'gini', 'max_depth': 3, 'min_samples_leaf': 1, 'min_samples_split': 5} | Mean F1: 0.936

Params: {'criterion': 'gini', 'max_depth': 3, 'min_samples_leaf': 1, 'min_samples_split': 10} | Mean F1: 0.938

Params: {'criterion': 'gini', 'max_depth': 3, 'min_samples_leaf': 2, 'min_samples_split': 2} | Mean F1: 0.936

Params: {'criterion': 'gini', 'max_depth': 3, 'min_samples_leaf': 2, 'min_samples_split': 5} | Mean F1: 0.936

Params: {'criterion': 'gini', 'max_depth': 3, 'min_samples_leaf': 2, 'min_samples_split': 10} | Mean F1: 0.938

Params: {'criterion': 'gini', 'max_depth': 3, 'min_samples_leaf': 4, 'min_samples_split': 2} | Mean F1: 0.936

Params: {'criterion': 'gini', 'max_depth': 3, 'min_samples_leaf': 4, 'min_samples_split': 5} | Mean F1: 0.936

Params: {'criterion': 'gini', 'max_depth': 3, 'min_samples_leaf': 4, 'min_samples_split': 10} | Mean F1: 0.937

Params: {'criterion': 'gini', 'max_depth': 5, 'min_samples_leaf': 1, 'min_samples_split': 2} | Mean F1: 0.936

Params: {'criterion': 'gini', 'max_depth': 5, 'min_samples_leaf': 1, 'min_samples_split': 5} | Mean F1: 0.934

Params: {'criterion': 'gini', 'max_depth': 5, 'min_samples_leaf': 1, 'min_samples_split': 10} | Mean F1: 0.932

Params: {'criterion': 'gini', 'max_depth': 5, 'min_samples_leaf': 2, 'min_samples_split': 2} | Mean F1: 0.938

Params: {'criterion': 'gini', 'max_depth': 5, 'min_samples_leaf': 2, 'min_samples_split': 5} | Mean F1: 0.936

Params: {'criterion': 'gini', 'max_depth': 5, 'min_samples_leaf': 2, 'min_samples_split': 10} | Mean F1: 0.934

Params: {'criterion': 'gini', 'max_depth': 5, 'min_samples_leaf': 4, 'min_samples_split': 2} | Mean F1: 0.924

Params: {'criterion': 'gini', 'max_depth': 5, 'min_samples_leaf': 4, 'min_samples_split': 5} | Mean F1: 0.924

Params: {'criterion': 'gini', 'max_depth': 5, 'min_samples_leaf': 4, 'min_samples_split': 10} | Mean F1: 0.928

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 2} | Mean F1: 0.943

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 5} | Mean F1: 0.943

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 10} | Mean F1: 0.934

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 2} | Mean F1: 0.941

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 5} | Mean F1: 0.941

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 10} | Mean F1: 0.934

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 2} | Mean F1: 0.927

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 5} | Mean F1: 0.927

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 10} | Mean F1: 0.931

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 2} | Mean F1: 0.943

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 5} | Mean F1: 0.943

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 10} | Mean F1: 0.934

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 2} | Mean F1: 0.941

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 5} | Mean F1: 0.941

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 10} | Mean F1: 0.934

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 2} | Mean F1: 0.927

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 5} | Mean F1: 0.927

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 10} | Mean F1: 0.931

Params: {'criterion': 'entropy', 'max_depth': 3, 'min_samples_leaf': 1, 'min_samples_split': 2} | Mean F1: 0.952

Params: {'criterion': 'entropy', 'max_depth': 3, 'min_samples_leaf': 1, 'min_samples_split': 5} | Mean F1: 0.952

Params: {'criterion': 'entropy', 'max_depth': 3, 'min_samples_leaf': 1, 'min_samples_split': 10} | Mean F1: 0.952

Params: {'criterion': 'entropy', 'max_depth': 3, 'min_samples_leaf': 2, 'min_samples_split': 2} | Mean F1: 0.950

Params: {'criterion': 'entropy', 'max_depth': 3, 'min_samples_leaf': 2, 'min_samples_split': 5} | Mean F1: 0.950

Params: {'criterion': 'entropy', 'max_depth': 3, 'min_samples_leaf': 2, 'min_samples_split': 10} | Mean F1: 0.950

Params: {'criterion': 'entropy', 'max_depth': 3, 'min_samples_leaf': 4, 'min_samples_split': 2} | Mean F1: 0.945

Params: {'criterion': 'entropy', 'max_depth': 3, 'min_samples_leaf': 4, 'min_samples_split': 5} | Mean F1: 0.945

Params: {'criterion': 'entropy', 'max_depth': 3, 'min_samples_leaf': 4, 'min_samples_split': 10} | Mean F1: 0.945

Params: {'criterion': 'entropy', 'max_depth': 5, 'min_samples_leaf': 1, 'min_samples_split': 2} | Mean F1: 0.937

Params: {'criterion': 'entropy', 'max_depth': 5, 'min_samples_leaf': 1, 'min_samples_split': 5} | Mean F1: 0.938

Params: {'criterion': 'entropy', 'max_depth': 5, 'min_samples_leaf': 1, 'min_samples_split': 10} | Mean F1: 0.940

Params: {'criterion': 'entropy', 'max_depth': 5, 'min_samples_leaf': 2, 'min_samples_split': 2} | Mean F1: 0.938

Params: {'criterion': 'entropy', 'max_depth': 5, 'min_samples_leaf': 2, 'min_samples_split': 5} | Mean F1: 0.938

Params: {'criterion': 'entropy', 'max_depth': 5, 'min_samples_leaf': 2, 'min_samples_split': 10} | Mean F1: 0.939

Params: {'criterion': 'entropy', 'max_depth': 5, 'min_samples_leaf': 4, 'min_samples_split': 2} | Mean F1: 0.938

Params: {'criterion': 'entropy', 'max_depth': 5, 'min_samples_leaf': 4, 'min_samples_split': 5} | Mean F1: 0.938

Params: {'criterion': 'entropy', 'max_depth': 5, 'min_samples_leaf': 4, 'min_samples_split': 10} | Mean F1: 0.938

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 2} | Mean F1: 0.934

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 5} | Mean F1: 0.936

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 10} | Mean F1: 0.942

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 2} | Mean F1: 0.936

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 5} | Mean F1: 0.936

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 10} | Mean F1: 0.938

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 2} | Mean F1: 0.928

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 5} | Mean F1: 0.928

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 10} | Mean F1: 0.938

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 2} | Mean F1: 0.934

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 5} | Mean F1: 0.936

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 10} | Mean F1: 0.942

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 2} | Mean F1: 0.936

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 5} | Mean F1: 0.936

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 10} | Mean F1: 0.938

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 2} | Mean F1: 0.928

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 5} | Mean F1: 0.928

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 10} | Mean F1: 0.938

model_random_forest

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.965

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.964

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.960

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.967

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 100} | Mean F1: 0.965

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.960

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.967

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 200} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.965

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.964

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.965

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 100} | Mean F1: 0.964

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.964

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.965

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.964

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 10, 'n_estimators': 200} | Mean F1: 0.960

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.956

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.958

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 5, 'n_estimators': 100} | Mean F1: 0.956

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.958

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.956

Params: {'criterion': 'gini', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 200} | Mean F1: 0.958

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.965

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.964

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.960

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.967

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 100} | Mean F1: 0.965

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.960

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.967

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 200} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.965

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.964

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.965

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 100} | Mean F1: 0.964

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.964

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.965

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.964

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 10, 'n_estimators': 200} | Mean F1: 0.960

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 4, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 4, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.956

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 4, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.958

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 4, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 4, 'min_samples_split': 5, 'n_estimators': 100} | Mean F1: 0.956

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 4, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.958

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.956

Params: {'criterion': 'gini', 'max_depth': 20, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 200} | Mean F1: 0.958

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.965

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.964

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.960

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.967

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 100} | Mean F1: 0.965

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.960

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.967

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 200} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.965

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.964

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.965

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 100} | Mean F1: 0.964

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.964

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.965

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.964

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 10, 'n_estimators': 200} | Mean F1: 0.960

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.956

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.958

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 5, 'n_estimators': 100} | Mean F1: 0.956

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.958

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.962

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.956

Params: {'criterion': 'gini', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 200} | Mean F1: 0.958

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.972

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.971

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.969

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.971

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 100} | Mean F1: 0.965

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.969

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.960

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 200} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.972

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.967

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.969

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.967

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 100} | Mean F1: 0.967

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.969

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 2, 'min_samples_split': 10, 'n_estimators': 200} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.966

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.966

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 5, 'n_estimators': 100} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.960

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.960

Params: {'criterion': 'entropy', 'max_depth': 10, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 200} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.972

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.971

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.969

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.971

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 100} | Mean F1: 0.965

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.969

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.960

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 200} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.972

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.967

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.969

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.967

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 100} | Mean F1: 0.967

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.969

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 2, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.962

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Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 4, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.966

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 4, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.962

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Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 4, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.960

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.960

Params: {'criterion': 'entropy', 'max_depth': 20, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 200} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.972

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.971

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.969

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.971

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Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.969

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.962

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 1, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.960

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Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 50} | Mean F1: 0.972

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 100} | Mean F1: 0.967

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 2, 'n_estimators': 200} | Mean F1: 0.969

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 50} | Mean F1: 0.967

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 100} | Mean F1: 0.967

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 5, 'n_estimators': 200} | Mean F1: 0.969

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 2, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.962

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Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 50} | Mean F1: 0.960

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 100} | Mean F1: 0.960

Params: {'criterion': 'entropy', 'max_depth': None, 'min_samples_leaf': 4, 'min_samples_split': 10, 'n_estimators': 200} | Mean F1: 0.962

model_adaboost

Params: {'algorithm': 'SAMME', 'learning_rate': 0.01, 'n_estimators': 50} | Mean F1: 0.941

Params: {'algorithm': 'SAMME', 'learning_rate': 0.01, 'n_estimators': 100} | Mean F1: 0.937

Params: {'algorithm': 'SAMME', 'learning_rate': 0.01, 'n_estimators': 200} | Mean F1: 0.950

Params: {'algorithm': 'SAMME', 'learning_rate': 0.1, 'n_estimators': 50} | Mean F1: 0.964

Params: {'algorithm': 'SAMME', 'learning_rate': 0.1, 'n_estimators': 100} | Mean F1: 0.967

Params: {'algorithm': 'SAMME', 'learning_rate': 0.1, 'n_estimators': 200} | Mean F1: 0.967

Params: {'algorithm': 'SAMME', 'learning_rate': 1.0, 'n_estimators': 50} | Mean F1: 0.978

Params: {'algorithm': 'SAMME', 'learning_rate': 1.0, 'n_estimators': 100} | Mean F1: 0.980

Params: {'algorithm': 'SAMME', 'learning_rate': 1.0, 'n_estimators': 200} | Mean F1: 0.974

Params: {'algorithm': 'SAMME.R', 'learning_rate': 0.01, 'n_estimators': 50} | Mean F1: 0.941

Params: {'algorithm': 'SAMME.R', 'learning_rate': 0.01, 'n_estimators': 100} | Mean F1: 0.937

Params: {'algorithm': 'SAMME.R', 'learning_rate': 0.01, 'n_estimators': 200} | Mean F1: 0.954

Params: {'algorithm': 'SAMME.R', 'learning_rate': 0.1, 'n_estimators': 50} | Mean F1: 0.962

Params: {'algorithm': 'SAMME.R', 'learning_rate': 0.1, 'n_estimators': 100} | Mean F1: 0.964

Params: {'algorithm': 'SAMME.R', 'learning_rate': 0.1, 'n_estimators': 200} | Mean F1: 0.971

Params: {'algorithm': 'SAMME.R', 'learning_rate': 1.0, 'n_estimators': 50} | Mean F1: 0.971

Params: {'algorithm': 'SAMME.R', 'learning_rate': 1.0, 'n_estimators': 100} | Mean F1: 0.976

Params: {'algorithm': 'SAMME.R', 'learning_rate': 1.0, 'n_estimators': 200} | Mean F1: 0.979