Classification Accuracy of Different Models

training_time of Different Models

test_time of Different Models

2) feature selection:

       1)Anova =This technique is used when target is consists of categories and numerical features then takes most significant

       Chi_sqaured= This technique is used when target is consists of categories and categorical features then takes most significant features

3) hyperparameter:

Grid Search is hyperparameter tuning technique take different hyperparameter and values for each and select best combination to give you best accuracy for the model,

It has a great effect when model overfitting so start to change values of some hyperparameter to decrease model complexity or when underfitting change values in order to increase complexity of model and train better.

Xgboost overfits without tuning so I increase the values of lambda and alpha in order to decrease complexity and balance between train and test accutacy.