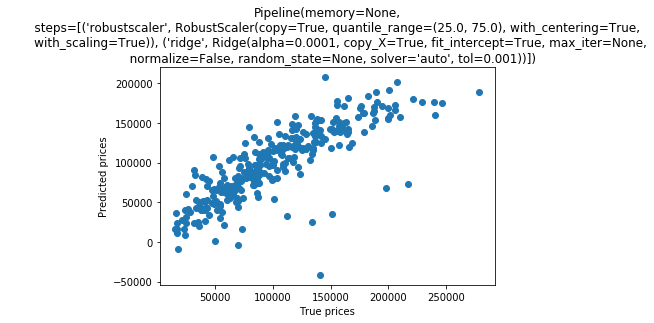
# ridge regression

# manually tune alpha(s)

alpha\_list =[0.0001,0.001,0.01,0.1,1,10,100]



RMS: 61005.37 r2\_score: 0.6694165072439878

param\_grid = {

'bootstrap': [True],

'max\_depth': [80, 90, 100, 110],

'max\_features': [9, 40],

'min\_samples\_leaf': [3, 4, 5],

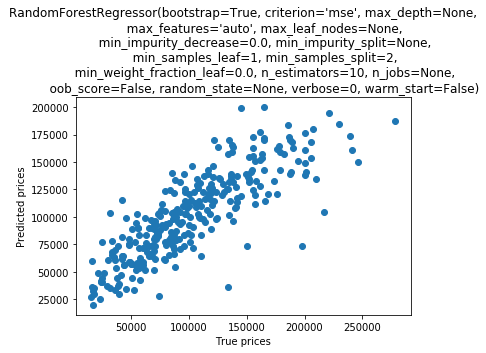
'min\_samples\_split': [8, 10, 12],

'n\_estimators': [100, 200, 300, 1000]

}

# Create a based model

rf = RandomForestRegressor()



RMS: 32458.27 r2\_score: 0.6860860976089398

# Create a based model

GBoost = GradientBoostingRegressor()

param\_grid = {

'learning\_rate': [0.05],

'max\_depth': [10, 20, 50, 100],

'max\_features': ['sqrt'],

'min\_samples\_leaf': [3, 5, 10],

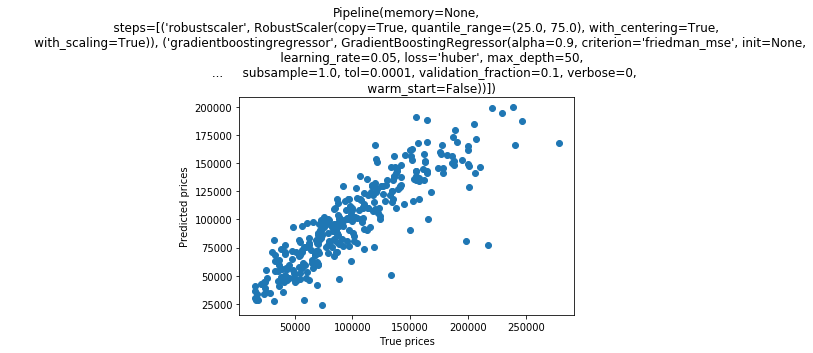
'min\_samples\_split': [5, 10, 15],

'n\_estimators': [100, 200, 300, 1000,3000],

'loss': ['huber'],

'random\_state': [121]

}



RMS: 29012.30 r2\_score: 0.7558133923042479