| Model | Optimize | Range of values |
|---------------------|--|---|
| Linear Regression | - fit_intercept - normalize | - True/False - True/False |
| Ridge | - alpha - fit_intercept - normalize | - 0.01, 0.1, 1.0, 10, 100 - True/False - True/False |
| k-neighbors | - n_neighbors - p | - 2, 4, 8, 16 - 2,3 |
| SVM | - C - gamma - class_weight | - 0.001,0.01101001000 - 'auto', RS* - 'balanced', None |
| Logistic Regression | - Penalty - C | - 11 or 12 - 0.001, 0.0110100 |
| Lasso | - Alpha - Normalize | - 0.1, 1.0, 10 - True/False |
| Random Forest | n_estimators max_depth min_samples_split min_samples_leaf max features | - 120, 300, 500, 800, 1200 - 5, 8, 15, 25, 30, None - 1,2,5,10,15,100 - 1,2,5,10 - log2, sqrt, None |
| XGBoost | - eta - gamma - max_depth - min_child_weight - subsample - colsample_bytree - lambda - alpha | - 0.01,0.015, 0.025, 0.05, 0.1 - 0.05,0.1,0.3,0.5,0.7,0.9,1.0 - 3,5,7,9,12,15,17,25 - 1,3,5,7 - 0.6, 0.7, 0.8, 0.9, 1.0 - 0.6, 0.7, 0.8, 0.9, 1.0 - 0.01-0.1, 1.0, RS* - 0, 0.1, 0.5, 1.0, RS* |