Machine Learning Algorithm

Support Vector Machine

class **sklearn.svm.SVR(*, *kernel*='rbf', *degree*=3, *gamma*='scale', *coef0*=0.0, *tol*=0.001, *C*=1.0, *epsilon*=0.1, *shrinking*=True, *cache_size*=200, *verbose*=False, *max_iter*=-1)**

Kernel	C	Coef0	R_Score
Linear	1.0	0.0	0.89
Rbf(default)	10000	0.0	0.37
poly	100	100	0.90
Sigmoid	10000	1000,epsilon=1	-0.57

Decision Tree

class **sklearn.tree.DecisionTreeRegressor(*, *criterion*='squared_error', *splitter*='best', *max_depth*=None, *min_samples_split*=2, *min_samples_leaf*=1, *min_weight_fraction_leaf*=0.0, *max_features*=None, *random_state*=None, *max_leaf_nodes*=None, *min_impurity_decrease*=0.0, *ccp_alpha*=0.0, *monotonic_cst*=None)**

Criterion	Splitter	max_depth	Random State	R_Score
Squared error(default)	Best	None	None	0.92
friedman_mse	Best	None	None	0.91
absolute_error	Best	None	None	0.95
poisson	Best	None	None	0.91
Squared error	random	None	None	0.65
friedman_mse	random	None	None	0.65
absolute_error	Random	None	None	0.72
poisson	random	None	None	0.65
Squared error	Best	1	1	0.27
friedman_mse	Best	1	1	0.27
absolute_error	Best	1	1	0.26
poisson	Best	1	1	0.06

Squared error	random	1	1	-0.03
friedman_mse	Random	1	1	-0.03
absolute_error	Random	1	1	-0.02
poisson	random	1	1	-0.03
friedman_mse	Best	2	1	0.78
absolute_error	Best	2	1	0.69
Squared error	Best	2	None	0.78
poisson	random	2	None	0.70