Supplementary File

This file gives an overview of all the machine learning methods used in the paper. It shows all hyperparameters of the corresponding best model that was found.

All methods were implemented with Pythons library "sklearn".

Gaussian Process Regression:

Method explanation: [1.7. Gaussian Processes — scikit-learn 0.24.2 documentation](#)

best model hyperparameters:

alpha=1e-05,

copy_X_train=True,

kernel=None,

n_restarts_optimizer=9,

normalize_y=False,

optimizer='fmin_l_bfgs_b',

random_state=None

Support Vector Regression:

Method explanation: [sklearn.svm.SVR — scikit-learn 0.24.2 documentation](#)

best model hyperparameters:

C=700,

cache_size=200,

coef0=0.0,

degree=3,

epsilon=0.1,

gamma='scale',

kernel='rbf',

max_iter=-1,

shrinking=True,

tol=0.001,

verbose=False

Polynomial Regression:

Method explanation: [sklearn.preprocessing.PolynomialFeatures — scikit-learn 0.24.2 documentation](#)

best model hyperparameters:

Pipeline(memory=None,

steps=[('polynomial_features',

PolynomialFeatures(degree=6, include_bias=False,

interaction_only=False, order='C')),

('linear_regression',

LinearRegression(copy_X=True, fit_intercept=True, n_jobs=None,

normalize=False))],

verbose=False)

Random Forest:

Method explanation: [sklearn.ensemble.RandomForestRegressor — scikit-learn 0.24.2 documentation](#)

best model hyperparameters:

bootstrap=True,

ccp_alpha=0.0,

criterion='mse',

 max_depth=None,

max_features='auto',

max_leaf_nodes=None,

max_samples=None,

min_impurity_decrease=0.0,

min_impurity_split=None,

min_samples_leaf=1,

min_samples_split=2,

min_weight_fraction_leaf=0.0,

n_estimators=125,

n_jobs=None,

oob_score=False,

 random_state=12,

verbose=0,

warm_start=False)

Gradient Boosting:

Method explanation: [sklearn.ensemble.GradientBoostingRegressor — scikit-learn 0.24.2 documentation](#)

best model hyperparameters:

alpha=0.9,

ccp_alpha=0.0,

criterion='friedman_mse',

init=None,

learning_rate=0.1,

loss='ls',

max_depth=3,

max_features=None,

max_leaf_nodes=None,

min_impurity_decrease=0.0,

min_impurity_split=None,

min_samples_leaf=1,

min_samples_split=2,

min_weight_fraction_leaf=0.0,

n_estimators=75,

n_iter_no_change=None,

presort='deprecated',

random_state=None,

subsample=1.0,

tol=0.0001,

validation_fraction=0.1,

verbose=0, warm_start=False)