

Supplementary File

Table 1: Hyperparameters of Machine Learning Algorithms

Algorithm	Parameters
XGBoost	n_estimators: 100, learning_rate: 0.3, max_depth: 6, min_child_weight: 1, colsample_bytree: 1, subsample: 1, verbosity: 1
CatBoost	depth: 6, iterations: 1000, loss_function: RMSE, logging_level: Silent
Random Forest	n_estimators: 500, max_depth: 14, min_samples_split: 2, max_features: auto, min_samples_leaf: 1
Extra Trees	n_estimators: 100, max_depth: None, min_samples_split: 2, max_features: 1.0, min_samples_leaf: 1
Decision Tree	max_depth: None, criterion: squared_error, min_samples_split: 2
Gradient Boosting	n_estimators: 100, max_depth: 3, learning_rate: 0.1, max_features: None, criterion: friedman_mse
SVR	C: 1.0, epsilon: 0.1, gamma: scale, kernel: rbf

Table 2: GPU Hardware Feature Details

Hardware Features	Tesla K80	Tesla V100	RTX A4000	RTX 4060
Architecture	Kepler	Volta	Ampere	Ada Lovelace
Compute Capability	3.5	7.0	8.6	8.9
Number of Cores	2496	5120	6144	3072
GPU Clock (MHz)	784	1230	1560	1830
L2 Cache (KB)	1536	6144	4000	24
No. of data points	4028	3988	3671	3367