

AMT
-conf: ConfigParser
+analytical_df: DataFrame
+compute_analytical_csv(config_path, input_path, output_type)
+calculate_error(output_type)

ML
-parameters: List
-algorithms: List
-all_hyper_parameters: Dict
-seed: int
-data_preparation: DataPreparation
-train_features: DataFrame
-test_features: DataFrame
-cv_features: DataFrame
-train_labels: DataFrame
-test_labels: DataFrame
-cv_labels: DataFrame
-logger: Logger
-read_config_file(path)
-select_regressor(algorithm): regressor
+get_grid()
-set_sample_weight(algorithm)
-try_hyperparameter(algorithm, regressor, grid, scores, hyperparameters)
+train_model_with_HP()

NeuralNetwork
-inputs: Variable
-labels: Variable
-output: Torch.nn
-activation_functions: List
-optimizer: Torch.nn
-criterion: Torch.nn
-epochs: int
-num_minibatch: int
-num_layers: int
+prepare(params)
+set_params(**params)
+fit(train_features, train_labels)
+predict(features): Numpy Array
-forward()

DataPreparation
-scaler_features: StandarScaler
-scaler_labels: StandarScaler
-logger: Logger
-conf: ConfigParser
+read_inputs(config_path, input_path, output_path): DataFrame
-split_data(seed): DataFrame
-scale_data(train_features, train_labels, test_features, test_labels): DataFrame
+mean_absolute_percentage_error(true_labels, predicted_labels): mape
+get_nn_weights()

CoreDataPreparation
+read_inputs(config_path, input_path, output_path): DataFrame
-check_cores(set_type): row numbers according to the number of cores
-get_original_sets(): original train, cv and test sets()
+plot()
+plot_cores_runtime(train_predicted, cv_predicted, test_predicted)
+plot_predicted_true(train_predicted, cv_predicted, test_predicted)
+plot_predicted_residual(train_predicted, cv_predicted, test_predicted)
+plot_original_data()
+plot_analytical_data()

-uses

-has

-is