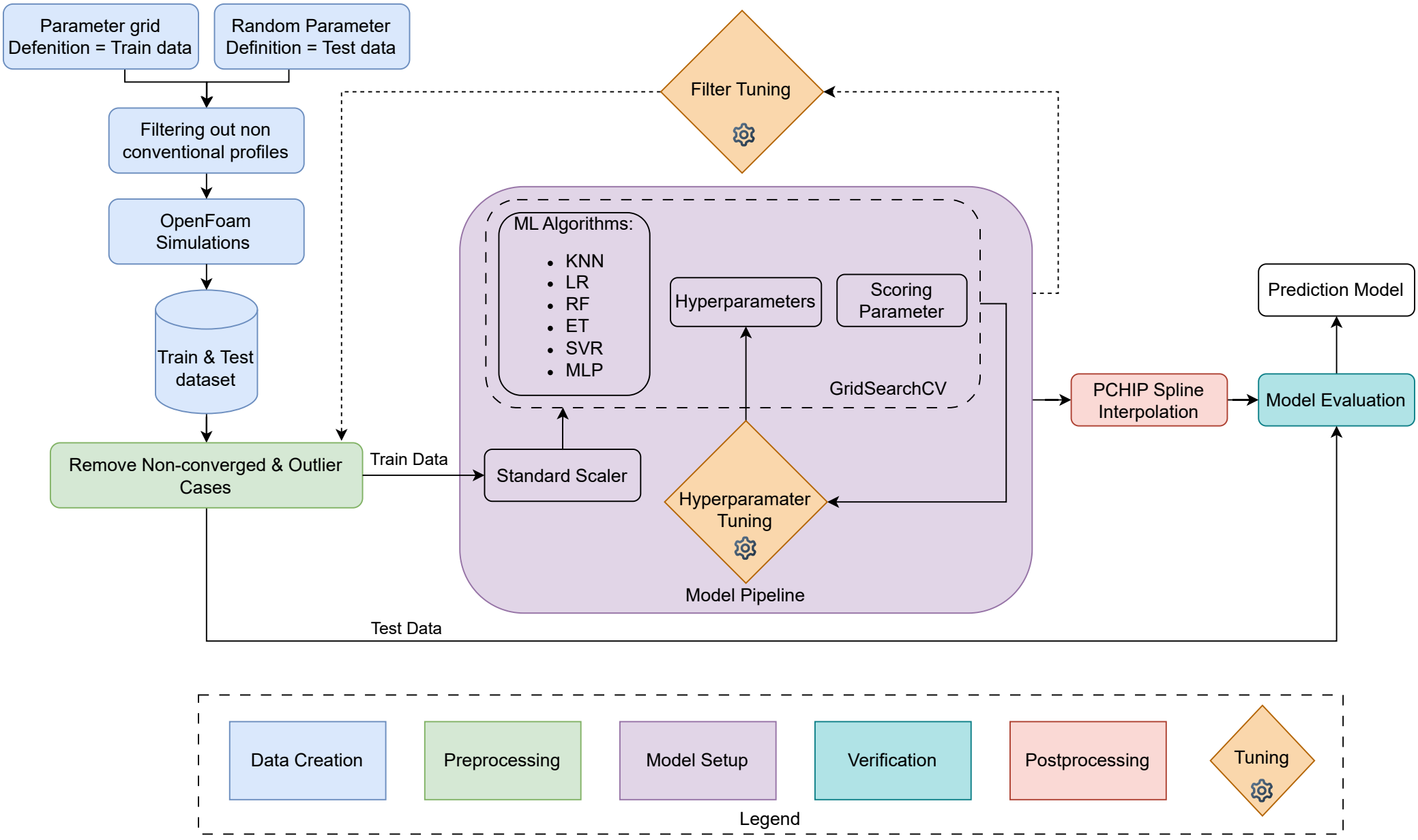

Parameter grid Defenition = Train data
Random Parameter Definition = Test data
Filtering out non conventional profiles
OpenFoam Simulations
Train & Test dataset
Remove Non-converged & Outlier Cases
Filter Tuning
ML Algorithms:
KNN
LR
RF
ET
SVR
MLP
Hyperparameters
Scoring Parameter
GridSearchCV
Train Data
Standard Scaler
Hyperparamater Tuning
Model Pipeline
Test Data
PCHIP Spline Interpolation
Model Evaluation
Prediction Model
Data Creation
Preprocessing
Model Setup
Verification
Postprocessing
Tuning
Legend