

REPLICATION INSTRUCTIONS

OBJECTIVE

This document provides detailed instructions to replicate the experimental results given.

Steps to Replicate Results

1. Set Up Environment
 - Install Python (≥ 3.8) and required dependencies.
 - Run: `pip install pandas numpy scikit-learn xgboost matplotlib scipy`.
2. Prepare Dataset
 - Ensure datasets are stored in right folder. For example:
C:\Users\chiam\OneDrive\Desktop\ISE\lab2\datasets.
 - Each dataset should be in CSV format.
3. Run Experiments
 - Execute the first script to analyse datasets and train models: `python CPL_models.py` to test all the other models and save to `model_performance_results1.csv`.
 - Execute the script to analyse datasets and train the models, Linear regression and XGBoost: `python Configuration_Performance_Learning.py`.
4. Validate Results
 - The output file `model_performance_results.csv` will contain the performance metrics for each dataset and model iteration.
 - Compare with previously saved results to verify replication.

By following these steps, you should be able to reproduce the reported results effectively.