

Replication Instructions

Objective

This document provides detailed instructions to replicate the experimental results from the provided

scripts.

Step 1: Environment Setup

Install Python 3.8+ and the required packages using pip.

Step 2: Dataset Preparation

Organize datasets in the 'datasets/' folder under subdirectories named after each system.

Example:

datasets/x264/data1.csv

Step 3: Run experiments.py

Run the script to evaluate all models and extract best performers:

```
python experiments.py
```

Output: experiment_results.xlsx

Step 4: Run RF.py

Run the second script for final evaluation using Random Forest:

```
python RF.py
```

Output: randomforest_results.xlsx

Reproducibility

Each run uses a fixed random seed and multiple repetitions (n=3) to ensure consistency of results.

Notes

- Results are saved to Excel files