

# FL Simulation Results

File: test1.1\_

## Federated Learning Configuration

Total Clients (N): 10

Malicious Clients (M): 1

Neural Network: Test1.1\_

Training Rounds: 5

Poisoned Rounds (R): 5

Distribution Strategy: first

## Data Poisoning Attack Parameters

Poisoning Operation: Label Flip

Attack Intensity: 15.0% (0.15)

Poisoned Data Percentage: 30.0% (0.30)

*Attack Summary: Using label\_flip with 15.0% (0.15) intensity on 30.0% (0.30) of data for 5 rounds with 1 malicious clients.*

## Simulation Results

Init Accuracy: 0.9445

Clean Accuracy: 0.9262

Poisoned Accuracy: 0.6767

Poisoned + DP Protection Accuracy: 0.6119

Drop (Clean - Poisoned): 0.2495

Drop (Clean - Init): -0.0183

Drop (Poisoned - Init): -0.2678

Drop (Poisoned DP - Init): -0.3326

DP Protection Method: median

GPU Used: GPU 1

### **Confusion Matrix Metrics (Weighted Avg):**

Clean Precision: 0.9280

Clean Recall: 0.9262

Clean F1 Score: 0.9260

Poisoned Precision: 0.7565

Poisoned Recall: 0.6882

Poisoned F1 Score: 0.6820

DP Protection Precision: 0.7597

DP Protection Recall: 0.6162

DP Protection F1 Score: 0.6231

## **Summary**

FL Simulation Complete

Task: 73c667df-682b-4ab3-8dd6-c4b1ec26a8e9

GPU: GPU 1

Init Accuracy: 0.9445

Clean Accuracy: 0.9262

Poisoned Accuracy: 0.6767

Data Poison Protection Accuracy: 0.6119

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