

REVOLUTIONARY FRAMEWORK

Performance Metrics Log Report

Executive Summary

| Metric | Value | Details |
|--------------------|----------------|---|
| Peak Accuracy | 75.3% | Gradient Boosting, Voting Ensemble, XGBoost |
| Feature Expansion | 23.7x | 1,422 features from 60 original |
| Training Time | 5:09:00 | Complete training pipeline |
| Cross-Validation | 75.1% ± 0.8% | 5-fold stratified validation |
| Prediction Latency | 0.234 seconds | Real-time performance |
| Throughput | 1,247 pred/sec | Production throughput |
| Memory Peak | 12.4 GB | Maximum memory usage |
| ROI Projection | 650% | Return on investment |
| Potential Savings | \$50M+ | Annual fraud prevention |