## Credit Card Fraud Detection Dataset

Train model: Logistic Regression (Log Reg)

• Features: 37

• Training size: 227846

• Test size: 56961

• Number of epoch: 1000

• Run time: 8 second

Dataset characteristic: 227846 = 394 (Fraud) + 227452 (Normal)

Credit Fraud	Accuracy	Recall	Precision	AUC
Plaintext	0.999	0.754	0.871	0.877
XOR	0.999	0.754	0.871	0.877
DP ( $\epsilon$ = 1)	0.889	0.467	0.008	0.679