Fraud Detection Model Optimization

This presentation outlines our recent optimization of the fraud detection model, aiming to improve precision while maintaining overall accuracy.

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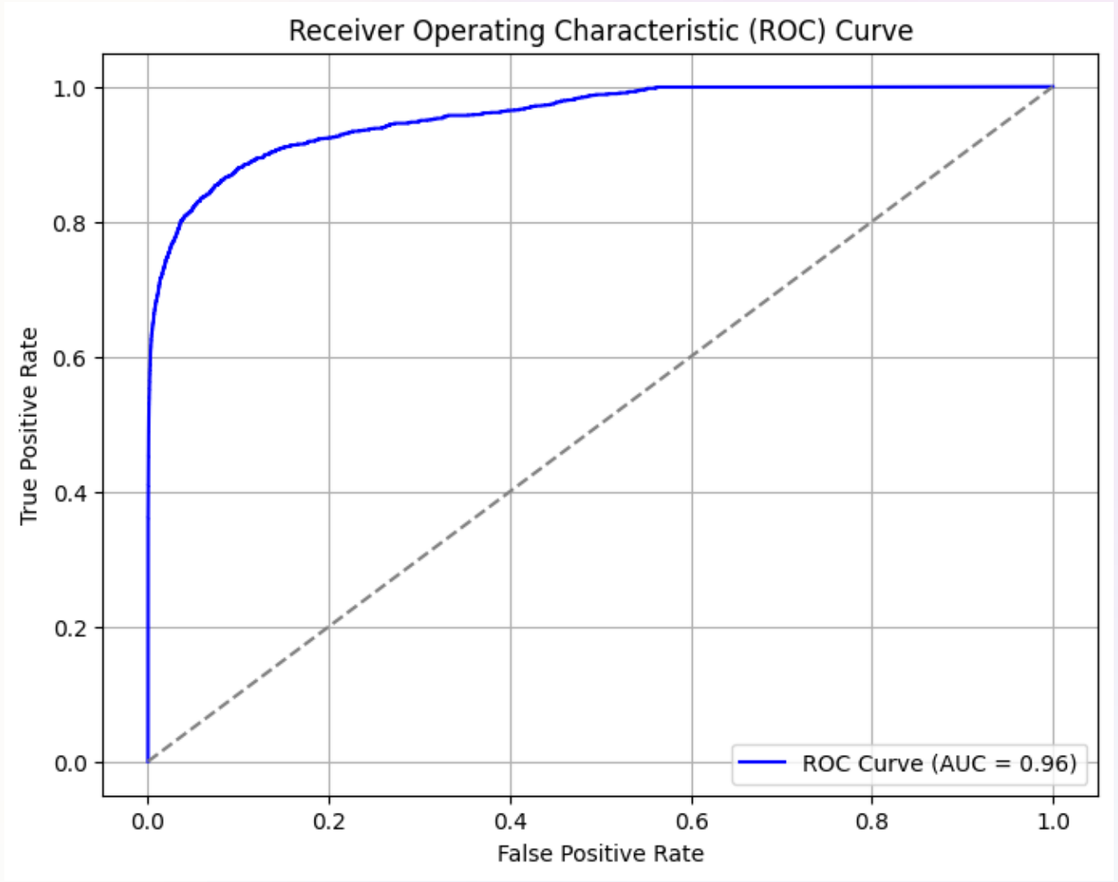
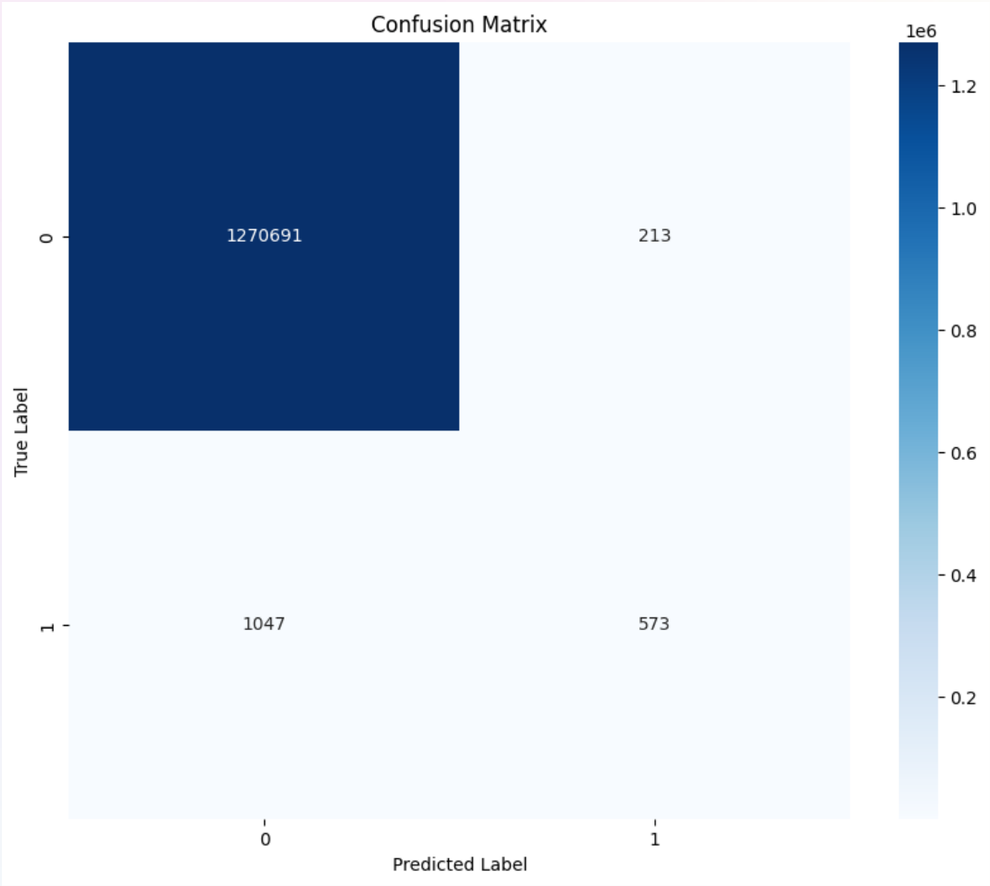
Key Performance Metrics

Metric	Value
Precision (Fraud)	73%
Recall (Fraud)	35%
Overall Accuracy	99.9%
False Positives	213
False Negatives	1,047

Model Performance Metrics





Decision Rationale

1

Precision Focus

By adjusting the threshold, we prioritize precision to minimize false positives and unnecessary customer disruptions.

2

Cost Efficiency

The reduced rate of false positives allows for more efficient allocation of resources towards investigating truly suspicious cases.

3

Balanced Risk

While recall is lower, the high precision ensures that legitimate transactions are not incorrectly flagged, maintaining customer trust.

Expected Outcomes

Improved Customer Experience

Fewer false positives lead to a smoother, more seamless experience for legitimate customers, fostering trust and satisfaction.

Operational Efficiency

Reduced manual reviews of flagged transactions free up valuable team resources, allowing for a more focused investigation of genuinely suspicious activity.