**ABSTARCT**

Financial Fraud Detector is a machine learning project for detecting financial transaction fraud. Utilizing XG Boost, precision-recall, and ROC curves, it provides accurate fraud detection. Explore feature importance, evaluate model performance, and enhance financial security with this comprehensive fraud detection solution.

Utilizing data analytics and machine learning algorithms forms the backbone of effective fraud detection. These technologies analyse vast datasets to identify patterns, anomalies, and deviations from normal behaviour. The continuous learning capability enables systems to adapt to evolving fraud tactics.

Implementing blockchain technology provides a transparent and immutable ledger, reducing the risk of tampering or manipulation of financial records. Smart contracts and distributed ledger technologies enhance transaction security and traceability.

The primary objective of financial fraud detection is to identify and prevent unauthorized or deceptive activities within financial transactions. By leveraging innovative technologies and analytical methodologies, the aim is to create a proactive defence system capable of detecting anomalous patterns and potential fraud indicators in real-time.