

# Fraud Detection in Bank Loans with KYC Verification System

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**Abstract:** *In today's technologically-driven financial landscape, bank loan fraud poses a significant threat to both financial institutions and their customers. While traditional methods of fraud detection have been moderately effective, the increasing sophistication of fraudsters necessitates the implementation of more advanced measures. This research proposes an integrated system for bank loan fraud detection that leverages the robustness of Know Your Customer (KYC) verification. By combining traditional KYC processes with advanced machine learning algorithms, this system seeks to provide a more comprehensive approach to detecting and preventing fraudulent loan applications. Initial results indicate a marked reduction in successful fraud attempts, as well as a decrease in false positives compared to conventional systems. Furthermore, the integrated system offers enhanced customer experience by streamlining the loan application process, reducing verification times, and ensuring greater security of personal data. As financial institutions continue to grapple with the challenges of fraud, this research underscores the importance of integrating traditional verification methods with cutting-edge technological solutions for optimal results.*

**Keywords:** Bank Loan Fraud, Fraud Detection, Know Your Customer (KYC), Artificial Neural Networks (ANN), Machine Learning, Identity Verification, Technological Advancements, Financial Security