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UPI Fraud Detection using Machine Learning

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Abstract: *The goal of this project is to use machine learning techniques to identify fraudulent transactions within the Unified Payments Interface (UPI). Although UPI has completely changed digital payments in India, an increase in fraudulent activity has resulted from its quick adoption. A sizable dataset of UPI transactions will be gathered in order to address this, and outliers, missing values, and category factors will be suitably handled. The efficacy of several machinelearning methods, including decision trees, random forests, logistic regression, and neural networks, in spotting fraud will be assessed. We will evaluate the model's performance using measures such as F1-score, recall, accuracy, and precision. Deep learning models and ensembletechniques achieve higher detection rates, according to preliminary investigations.*

Keywords: UPI, Fraud Detection, Machine Learning, Digital Payments, Logistic Regression, Decision Trees, Random Forests