Fraud Detection Analysis Report

Executive Summary

This report presents a comprehensive analysis of financial transaction data for fraud detection. The dataset contains 6,362,620 transactions with a fraud rate of 0.13%. Key findings include transaction type vulnerabilities, temporal patterns, and risk factors.

Dataset Overview

Metric	Value
Total Transactions	6,362,620
Fraud Cases	8,213
Normal Cases	6,354,407
Fraud Rate	0.13%
Transaction Types	5

Fraud Analysis by Transaction Type

Transaction Type	Total	Fraud Cases	Fraud Rate
CASH_IN	1399284	0	0.00%
CASH_OUT	2237500	4116	0.18%
DEBIT	41432	0	0.00%
PAYMENT	2151495	0	0.00%
TRANSFER	532909	4097	0.77%

AI-Generated Insights

Error in AI analysis: The model `text-davinci-003` has been deprecated, learn more here: https://platform.openai.com/docs/deprecations