IJARSCT
ISSN (Online) 2581-9429
International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
Impact Factor: 7.301
Volume 3, Issue 1, November 2023

Real-Time Fraud Detection in Serverless Financial Systems Using AI

Pranitha Gadam
Quality Engineer, Acquia, India
pranithagadam@gmail.com

Abstract: *This paper evaluates the implementation of AI technology within serverless financial platforms while explaining how AI tools perform financial crime prediction and detection tasks and examines the serverless advantages for reducing traditional operational challenges. The study examines the system architecture by examining how AI models get deployed, how real-time data processing works, and the ethical implications of AI-based financial decisions. Serverless methodologies create the perfect environment for executing fraud detection applications powered by AI methods because they eliminate the management burden of infrastructure complexities. Fraud detection systems under these architectures grow their resources automatically to maintain consistent performance when transaction numbers increase or decrease during peak periods. Multinational financial organizations use high-powered AI algorithms to explore large transaction datasets to identify abnormal behavior that signals possible fraudulent activities. Fraud detection models become more effective in spotting developing and emerging fraud patterns through the constant implementation of machine learning algorithms. The field of AI continues to attract financial institutions because they identify numerous operational areas where AI technology shows promise to make improvements. The combination of faster regulatory compliance and better trading and investment decisions forms part of the benefits achieved through this system.*

Keywords: Fraud Detection, Artificial Intelligence, Serverless Architecture, Real-Time Analysis, Machine Learning, Risk Assessment, Digital Transformation, Financial Crime, Fraud Detection