

# **AI Framework for Real-Time Spam Detection in Twitter**

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**Abstract:** *Social media platforms like Twitter face a persistent threat from spam accounts and malicious users who degrade the user experience and compromise platform integrity. This paper presents a real-time spam detection framework using artificial intelligence techniques tailored for the Twitter ecosystem. The proposed framework utilizes layered system architecture comprising a presentation interface, backend logic, data storage, AI processing, and third-party integrations. It incorporates machine learning algorithms for classifying tweets as spam or legitimate in real-time using a combination of textual features, user behavior, and network patterns. The framework demonstrates improved accuracy and performance in identifying and mitigating spam compared to traditional methods.*

**Keywords:** Spam Detection, Artificial Intelligence, Twitter, Real-Time Processing, Machine Learning, System Architecture

