

Leveraging Artificial Intelligence and Machine Learning for Detecting Fake Accounts on Social Media

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Abstract: *Detecting fake accounts is a significant challenge for social media platforms, e-commerce sites, and online services. Malicious users create fake profiles to spread misinformation, commit fraud, or manipulate system behavior. Traditional rule based methods often fail to catch sophisticated fake accounts that resemble genuine user activities. This paper examines the application of Artificial Intelligence (AI) and Machine Learning (ML) techniques to improve the detection of these deceptive accounts. Using KNN model and Gradient Boosting algorithm offer a more robust solution to identifying and combating fake accounts in Social Media Platform.*

Keywords: Fake account, social Media, AI and ML algorithms, KNN model , Gradient Boosting Algorithm