

# Spam Detection in Social Networks Using Machine Learning Algorithms

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**Abstract:** *Social networking websites have become more and more popular recently. Users use them to meet new people and communicate their most recent thoughts and actions to their existing acquaintances. The website among these that is growing the quickest is social media. Due to its popularity, many spammers attempt to flood actual users' accounts with spam messages. This paper considers three social networks, Twitter, Facebook, and Instagram, for experimentation. The classification of the data into spam and non-spam using four machine learning techniques, including SVM, KNN, decision trees, and Random Forest. The results obtained from the experiments show that the proposed approach can accurately detect spam in social networks. Implementing such algorithms could help social network platforms improve user experience by reducing the prevalence of spam and fraudulent activity.*

**Keywords:** Spam detection, social media, Machine learning, SVM, KNN, DT, RF

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