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Smart Spam Comment Detection Using Machine Learning

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Abstract: The profitability promoted by Google in its well-known video distribution platform YouTube has attracted an increasing number of users. However, such success has also attracted large number of malicious users, which aim to self-promote their videos or circulate viruses and malware. As we know that YouTube offers limited tools for comment moderation, so spam increases very rapidly and that's why comment section of the owners is disabled. It is very difficult to established classification methods for automatic spam filtering since the messages are very short and often widespread with slangs, symbols, and abbreviations. In this paper, we have evaluated several top-performance classification techniques for detecting and analysing spam comments. The statistical analysis of results indicates that, with 99.9% of confidence level, decision trees, logistic regression, Bernoulli Naive Bayes, random forests, linear and Gaussian SVMs are statistically equivalent in maximum rate . Therefore, it is very important to find a way to detect these comments on videos and report them before they are viewed by innocent users.

Keywords: Spam Comment Detection, Machine Learning, Naïve Bayes, Linear Regression, SVM

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