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Patent Search

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Abstract:

Detecting the SMS spam with Machine Learning, Deep Learning with Artificial Intelligence for Secure Mobile Message Communication Abstract: Mobile messaging core is unreliable because it is difficult to differentiate between spam and legitimate messages. To address this issue, we need a reliable and accurate method for identifying mobile message exchanges. As a method of effective detection, we proposed a spam detection application based on machine learning. This method distinguishes between spam and legitimate messages in mobile device communication using machine learning classifiers such as logistic regression (LR), k-nearest neighbor (K-NN), and decision tree (DT). A SMS spam collection data set is used to validate the approach. The dataset has been divided in half for preliminary analysis and final testing purposes. Comparing the classification performance of LR to that of K-NN and DT revealed favorable results, with LR obtaining a remarkable 99% accuracy. According to the results of the study, the proposed methodology performs exceptionally well in terms of outstanding classification performance. In addition, when compared to the performance of cutting-edge methods, the proposed methodology performs exceptionally well.

Complete Specification

Description:DESCRIPTIONS:

Billions of people around the world use mobile devices and exchange thousands of messages daily using mobile messages. Without proper message filtering procedure, this mode of communication is however susceptible to interception. Spam is one factor that contributes to the insecurity of mobile SMS transmission. Spam is widely recognized as a significant problem for modern electronic mail and instant messaging systems. The term "spam" alludes to unsolicited email. The term "spam" refers to unsolicited electronic message sent to an individual or organization. It can take many forms, such as the promotion of products and services, the dissemination of content, etc. The recent increase in spam is likely due to the proliferation of mobile devices capable of sending and receiving email and text messages. Currently, 85% of all communications sent to mobile devices are considered spam. While it is relatively inexpensive to transmit mail and messages, receiving them can be quite costly. Costs to service providers and spam can be measured in terms of the amount of human effort expended and the number of essential messages or emails that go unused. The deluge of spam is hindering the transmission of legitimate emails and texts. This is due to the fact that consumers' Internet access, attention spans, and storage are all limited. Researchers have proposed a number of solutions to address the problems that have arisen as a direct result of spam, including the detection of spam and the enhancement of online communication security. This page describes a few of the available methods in detail. Tools that use machine learning to distinguish legitimate messages from spam. In the proposed procedures, four distinct classifiers were utilized: the iterative dichotomizer, the decision tree, the simple cart, and active directory tree. Weka was utilized to conduct simulated investigations. Using the proposed procedure, the precision requirements were successfully met. As a method to detect spam, the email classification strategy was introduced. For training and evaluating the models, the system employed four distinct predictive machine learning classifiers, each of which relied on a distinct data partition. In addition, the hyper parameter values utilized by the models were diverse. Utilizing this method yielded

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