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(57) Abstract :

Given that spam text is one of the primary causes in the diffusion of phishing attempts to steal sensitive data like credit cards and passwords, the rise in the usage of mobile messaging services has contributed to the proliferation of social engineering attacks like phishing. Additionally, false medical information and rumors about the COVID-19 pandemic are frequently disseminated on social media, instilling uncertainty and anxiety among the public. Filtering spam content is therefore essential to lowering risks and hazards. Prior research focused on machine learning and deep learning techniques to classify spam, but these techniques have two drawbacks. Deep neural networks demand a high computational cost, whereas machine learning models require manual feature engineering. This work presents a dynamic deep ensemble model for spam detection that automatically extracts features and modifies its complexity. Convolutional and pooling layers are used in the proposed model to extract features, while basic classifiers such random forests and much randomized trees are used to categorize messages into spam and valid texts. The model also uses ensemble learning techniques like bagging and boosting. A high f1-score, recall, and accuracy of 98.38% were obtained by the model as a consequence.

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