

(54) Title of the invention : IOT WITH INTEGRATING MACHINE LEARNING AND DEEP LEARNING MODELS TO MAKE AN IMPROVED MODEL FOR DETECTING PERSIAN SMS SPAM

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(57) Abstract :
 Spam is an example of undesirable content provided by unknown users and generating problems for mobile phone customers. Disadvantages of spam include the inconvenience to the user, the loss of network traffic, the imposition of a calculating cost, the occupation of the physical space of the mobile phone, the abuse and fraud of the recipient. For this reason, the automatic detection of unpleasant text messages can be crucial. Also, detecting intelligently created text messages is a challenge. Nevertheless, the present methodologies in this subject encounter challenges, such as the absence of sufficient Persian datasets. Experiences have shown that systems based on deep and mixed learning have superior success in uncovering the unpleasant text messages. Accordingly, this study has aimed to develop an efficient technique for identifying SMS spam by integrating machine learning classification algorithms with deep learning models. In the proposed technique, after conducting preprocessing on our gathered dataset, two convolutional neural network layers and one LSTM layer and a fully connected layer are applied to extract the features are applied on the data which forms the deep learning element of the proposed method. The Support vector machine subsequently leverages the extracted information and features to produce the final classification, which is a part of the Machine Learning methodologies. The results reveal that the proposed model implements better than previous techniques and 97.7 percent accuracy was attained.

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