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| Title | Deep-BERT: Transfer Learning for Classifying Multilingual Offensive Texts on Social Media. | | | |
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| Abstract |  |
| Offensive messages on social media, have recently been frequently  used to harass and criticize people. In recent studies, many promising algorithms  have been developed to identify offensive texts. Most algorithms analyze text in a unidirectional manner, where a bidirectional method can maximize performance results and capture semantic and contextual information in sentences. In addition, there are many separate models for identifying offensive texts based on monolingual and multilingual, but there are a few models that can detect both monolingual and multilingual-based offensive texts. In this study, a detection system has been developed for both monolingual and multilingual offensive texts by combining deep convolutional neural network and bidirectional encoder representations from transformers (Deep-BERT) to identify offensive posts on social media that are used to harass others. This paper explores a variety of ways to deal with multilingualism, including collaborative multilingual and translation-based approaches. Then, the Deep-BERT is tested on the Bengali and English datasets, including the different bidirectional encoder representations from transformers (BERT) pre-trained word-embedding techniques, and found that the proposed DeepBERT’s efficacy outperformed all existing offensive text classification algorithms reaching an accuracy of 91.83%. The proposed model is a state-of-the-art model that can classify both monolingual-based and multilingual-based offensive texts. | |