
Abstract

Due to the detrimental consequences caused by cyberbullying, ~~a lot a great deal~~ of research has been undertaken to advance ~~new novel~~ techniques to resolve this ~~reoccurring~~ problem. In this research, a machine learning approach was used to automatically detect cyber-bullying ~~scenarios~~. The ~~main primary~~ challenge ~~which that~~ stands against ~~the~~ construction of a powerful detection model is ~~finding the availability of~~ rich and cleaned datasets. ~~An A novel~~ approach was ~~per formed proposed and applied~~ to improve ~~the~~ current datasets in terms of ~~its~~ sampling and cleaning. Two different datasets were used to construct deep learning (DL) models sourced from ~~wikipedia Wikipedia~~ and Twitter. ~~Consequently, c~~ cyberbullying-related features ~~have been were~~ extracted, ~~including such as~~ negative emotions and sentiment ~~polarity~~, as well as the context of the text. However, this work ~~gives prioritizes~~ emotions ~~high attention~~ due to the strong relationship between ~~the~~ negative emotions and ~~the impacts~~ of cyberbullying's impacts. The emotions ~~have been were~~ drawn out from ~~the~~ text through the use of supervised and un-supervised approaches. ~~An e~~ Emotion Detection Model (EDM) was trained and ~~used employed to study~~ investigate the various types of emotions associated with cyberbullying. The results ~~showed demonstrate~~ that anger, fear and guilt were the major emotions associated with cyberbullying. As a result, ~~The the~~ extracted emotions were included to train DL ~~Models models for~~.