A Noval Method to Detect Cyber-Attacks in IOT Devices Dataset using DL

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Abstract: *In the modern era, the usage of internet has increased tremendously which in turn has led to the evolution of large amount of data. Cyber world has its own pros and cons. One of the alarming situations in web 4.0 is cyber bullying a type of cyber-crime. When the bullying occurs on line with the aid of technology it is known as cyber bullying. This research paper have surveyed the work done by 30 different researchers on cyber bullying, and elaborated on different methodologies adopted by them for the detection of bullying. Cybercrimes involve all the crimes where internet is used as an access medium and committed through some electronic device such as computers and mobile phones. Unavailability of datasets, hidden identity of predators and the privacy of the victims are the main factors for limiting the past research in cyberbullying detection. Considering these factors, an effective text mining approach using machine learning algorithms is proposed to proactively detect bullying text. The dataset collected from myspace.com and Preverted-Justice.com has been used to evaluate the system's performance. Three types of feature namely textual, behavioral and demographic features are extracted from the dataset as compared to earlier study over the same dataset where only textual features were considered. Textual features include certain bullying words that if exists within the text may lead to a true outcome for cyberbullying. Personality trait features are extracted for the user if it is involving once in bullying may bully in future too. While demographic features extracted from dataset include age, gender and location. The system is evaluated through different performance measures for both classifiers used and the performance of Support Vector Machine classifier is found better than the Bernoulli NB with an overall 87.14accuracy.*

Keywords: Bullying, Cyber, detection, feature extraction, logistic regression classifier, IOT, and attacks