

CYBERBULLYING DETECTION IN TWITTER USING LANGUAGE EXTRACTION

BASED SIMPLIFIED SUPPORT VECTOR MACHINE (SSVM) CLASSIFIER

SHERLY T.T¹ & B. ROSILINE JEETHA²

 ¹Research Scholar, PG and Research Department of Computer Science, Dr. N.G.P. Arts and Science College, Coimbatore, Tamil Nadu, India
²Research Guide, PG and Research Department of Computer Science, Dr. N.G.P. Arts and Science College, Coimbatore, Tamil Nadu, India

ABSTRACT

Text mining is the thrust research area in the field of data mining and knowledge engineering. The communication data commencing online social networks is capable enough to offer new insights for building societies that was earlier thought as impossible in terms of scale and extent. Cyberbullying is a common thing in social networks like twitter which is described as the use of information and communication technology by an individual or a group of users to annoy other users. This research work presents cyberbullying detection in twitter using language extraction and simplified support vector machine classifier. Around 4556 tweets are taken from the Twitter. The proposed SSVM classifier allowed to train with 3000 tweets. The SSVM is compared with existing SVM classifier. Simulations are carried out using MATLAB 2012. The result shows that the proposed language extraction based SSVM outperforms than that of the existing classifier.

KEYWORDS: Cyber Bullying, Language Extraction, Support Vector Machine, Stop Word Removal Text Mining