

Cyberbullying Detection Using Machine Learning

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Abstract: *In the current digital era, The issue of cyberbullying is spreading and has the potential to seriously harm people's mental health, interpersonal relationships, and academic achievement. To recognise and stop such activity, there is a growing demand for automated cyberbullying detection systems. This paper proposes a machine learning-based approach for detecting cyberbullying in all forms. cyberbullying is a developing problem that can take many different forms, including text, photos, and PDF documents. Cyberbullying detection is being developed to evaluate various forms of content and spot instances of the behaviour using machine learning techniques like SVM[15], k closest neighbour, Decision Tree[17], and Random Forest[18]. To identify cyberbullying in photographs and text, we used image recognition algorithms, OCR[19], and natural language processing approaches. We trained the aforementioned machine learning algorithms on a sizeable dataset of labeled cyberbullying content. The prevalence of cyberbullying might be considerably reduced by the suggested method, and the online space could become safer and more welcoming as a result.*

Keywords: Machine learning, Natural language processing, Cyberbullying, Text, Image, Documents.

