

Abstract

Cyberbullying can be perpetrated by anyone, whether children or adults, with the primary aim of belittling or attacking specific individuals. Social media platforms like X (formerly Twitter) often serve as the primary medium for cyberbullying, where interactions frequently escalate into retaliatory attacks, intimidation, and insults. In detecting these actions, short tweets are often difficult to understand without context, making specialized approaches like word embedding important. This research uses GloVe feature expansion, utilizing a corpus generated from the IndoNews dataset containing 127,580 to enhance vocabulary understanding in tweets that include the use of Indonesian language in both formal and informal forms. This data was then classified using the Hybrid Deep Learning method, which combines Convolutional Neural Network (CNN) and Bidirectional Long Short-Term Memory (BiLSTM) with used 30,084 tweets taken from platform X as the dataset. The analysis results show that the application of expansion features using GloVe can improve the performance of the BiLSTM-CNN hybrid model, with the highest accuracy reaching 83.88%, an increase of +4.35% compared to the baseline. This research successfully detected cyberbullying on platform X, making a significant contribution to efforts to create a safer and more positive social media environment for users.

Keywords: cyberbullying, GloVe, hybrid, CNN, BiLSTM