

Analisis Sentimen di Media Sosial Menggunakan Kombinasi Metode Convolutional Neural Network (CNN) dan Robustly Optimized BERT Pretraining Approach (RoBERTa)

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Abstract

Social media such as Twitter, Facebook, and Instagram are favored by people in Indonesia and globally. Social media, whose main features are communicating and conveying information, can express his opinion on a problem. Opinions contained on Twitter can be analyzed using sentiment analysis. Sentiment analysis is carried out to see the tendency of an opinion, whether the opinion tends to be positive, negative, or neutral so that researchers or institutions can find out how the response and emotions of an issue are happening and make good decisions. With so many Twitter social media users in Indonesia, sentiment analysis will be carried out using a combination of the Convolutional Neural Network (CNN) and Robustly Optimized BERT Pretraining Approach (RoBERTa) methods. The CNN method is a deep learning algorithm that has a function for one-dimensional text processing data. Meanwhile, RoBERTa is a word embedding used for feature extraction of text in Indonesian. In this research, the dataset used is trending topics with keyword related to government policies on Twitter social media and obtained through crawling and supported by feature extraction from TF-IDF with N-gram and feature expansion from Glove. By using 30.811 data, will show that the CNN and RoBERTa methods have an accuracy rate of 95.56%.

Keywords : Sentiment Analysis, CNN, Twitter, RoBERTa, Glove
