

ABSTRACT

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BIDIRECTIONAL ENCODER REPRESENTATIONS OF TRANSFORMERS (BERT) METHOD IMPLEMENTATION FOR SENTIMENT ANALYSIS OF INDONESIAN LINKEDIN APPLICATION REVIEWS

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(xiii + 65 + Appendix)

This study aims to analyze Indonesian sentiment on user reviews of LinkedIn application on the Google Play Store. Application reviews that vary from positive, negative, or neutral reviews can be used for social studies as a tool in decision-making. However, because in application reviews sometimes reviews are not appropriate or relevant to the given rating, automation is needed in classifying reviews based on the polarity of their sentiments. Sentiment analysis using traditional machine learning algorithms such as Naïve Bayes, SVM, and others cannot understand the context of comments in-depth about the semantics of existing words because they only study given patterns such as frequency of occurrence of words. For that, we need a deep learning approach such as BERT (Bidirectional Encoder Representations of Transformers) which produces a bidirectional language model. The dataset used goes through a pre-processing stage consisting of case folding, data cleaning, tokenization, and normalization with the NLTK library before sentiment analysis is carried out. In this study, the hyperparameters used were 5 epochs, learning rate 3e-6, and batch size 32. Sentiment analysis was tested the IndoBERT pre-trained model with 67% accuracy.

References (2017-2021).