**COMPARISON OF SIMPLE-RNN, LSTM, and BI-LSTM MODELS FOR SENTIMENT ANALYSIS WITH PRESIDENT JOKOWI'S TRAINING DATA ON PRESIDENT JOKOWI'S NEWS AT DETIK.COM**

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**ABSTRACT**

The emergence of online media greatly affects the speed and quantity of news. With a lot of news, the sentiment analysis of news must also keep pace with its speed. In this case, both machine learning and deep learning have been able to answer these challenges with the emergence of artificial neural networks. There are a lot of models in deep learning that makes us have to carefully choose the right model to perform sentiment analysis. This paper reports the results of deep learning experiments that are closest to perfect accuracy. The models compared are the SimpleRNN, LSTM, and Bi-LSTM models. The dataset used for training is a collection of news headlines with the keyword Jokowi.
Keywords: Sentiment Analysis, SimpleRNN, LSTM, Bi-LSTM, and Jokowi.
Abstraksi
Munculnya media online sangat berdampak pada kecepatan dan kuantitas berita. Dengan banyaknya berita yang muncul, maka analisis sentimen pemberitaan juga harus mengimbangi kecepatannya. Dalam hal ini, machine learning maupun deep learning telah mampu menjawab tantangan tersebut dengan kemunculan jaringan saraf buatan. Banyaknya pilihan model dalam deep learning membuat kita harus hati-hati memilih model
yang tepat untuk melakukan analisis sentimen. Tulisan ini melaporkan hasil eksperimen deep learning yang paling mendekati akurasi sempurna. Model yang dibandingkan adalah model SimpleRNN, LSTM, dan Bi-LSTM. Dataset yang digunakan untuk training adalah kumpulan judul pemberitaan dengan kata kunci Jokowi.
Kata Kunci: Analisis Sentimen, SimpleRNN, LSTM, Bi-LSTM, dan Jokowi.

*Keywords: Sentiment Analysis; Simplernn; Lstm; Bi-lstm; And Jokowi*