

Implementation Bidirectional Long Short-Term Memory (BiLSTM) and BERT Embedding in News Classification Hoax in Indonesia Ahead of The 2024 Election

Aissa Putri Pertiwi*¹, Yuyun Hidayat² and Restu Arisanti³

^{1, 2, 3} Department of Statistics, Faculty of Mathematics and Natural Sciences, Padjadjaran University, Indonesia.

(E-mail: aissa20001@mail.unpad.ac.id, yuyun.hidayat@unpad.ac.id,
r.arisanti@mail.unpad.ac.id)

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ABSTRACT

Advances in technology have made it easier for internet users to disseminate and consume information on online media. However, the impact is not always good because a lot of information that is widely disseminated turns out to be inaccurate and unreliable, such as hoax news. Hoax is defined as false information [1], news that is not in accordance with reality or truth (non-factual) for certain purposes [2]. Especially before the election, the spread of hoax news in the political field is very common. Therefore, this research will discuss the use of BERT Embedding and BiLSTM in automatically detecting news to categorize it as a hoax or not.

This research will process text data in the form of Indonesian language news with keywords related to the 2024 Election. The data is obtained from several online news media sources, including Cek Fakta, Kompas, CNN, and Detik. By evaluating the performance of the BERT Embedding and BiLSTM methods, this approach can identify patterns and characteristics that are typical of hoax news, so that it can effectively mitigate the spread of misinformation and assist the public in choosing reliable sources of information.

The analysis procedure is divided into various parts, beginning with preprocessing, transformation, modeling, and evaluation. And the results showed that the BERT Embedding and BiLSTM methods had an accuracy rate of more than 90% in determining whether or not news was fake. It is desired that the model may be advanced to the development stage so that it can be easily accessed by the public and work correctly to assess the truth of news before it is ingested and processed further.

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