SENTIMENT ANALYSIS OF YOUTUBE COMMENTS ON THE 2023 GLOBAL RECESSION USING LONG SHORT-TERM MEMORY

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ABSTRACT

Sentiment is a description of someone's expression towards something, for example a YouTube video. There are many reactions that are divided into 2 classes, namely positive and negative, where these sentiments can be analyzed using a learning algorithm. There is a hot topic at the end of 2023 because many predict that 2023 will see a global recession. One of those discussing the topic of recession is a YouTube content creator who works in the economic sector. The large number of sentiments expressed through the comments column makes it difficult for content creators to understand the sentiments of their viewers. Therefore, a system was built to help make it easier for content creators to analyze sentiment. The system was built using one of the Recurrent Neural Network architectures, namely Long Short-Term Memory (LSTM). LSTM can process quite a lot of data. This research uses a total of 500 data taken via the Youtube API. With a large amount of data, it can help the system optimize the results with the accuracy of the test data from this research amounting to 60% of the LSTM model configuration with 16 layers, 300 epochs, using sigmoid activation, rmsprop optimizer.

Keywords: Long Short-Term Memory (LSTM), Sentiment Analysis, Global Recession, Youtube Comments, Recurrent Neural Network.