ABSTRACT

AUTOMATIC STORY TEXT GENERATION USING RECURRENT NEURAL NETWORK ALGORITHMS

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Novels are one type of literary work in the form of long prose. In the process of writing a story requires time to bestow feelings and pour imagination into a novel or short story, so it is not uncommon for novel writers to run out of ideas with the story to be written which makes the writing process inhibition. In previous research algorithms such as, Natural Language Generation, Generative Adversarial Network, Generate and Rank Methodology and Recurrent Neural Network can generate a sentence from the word entered. The dataset used and the output produced are still limited to using English. In this study, authors will experiment using the Recurrent Neural Network algorithm with GRU and LSTM architectures. This study used a dataset of novel text with a length of 1.943.055 words in txt files. In the initial stage, preprocessing datasets such as cleaning, tokenizing, and vectorizing are carried out. After that, training data with 50 epochs was carried out. The results of the GRU architectural model 1 layer with embedding 64 and unit 256 have the best model precision with a minimum loss of 2,7009. Based on the calculation of the average relevant word and standard deviation from output text generated LSTM architecture model 1 layer with embedding 16 and unit 16 obtained an average value of 3,9 words with a standard deviation of 1,7288 words. The models successfully creates automatic story text to help provide author recommendations in determining the next idea during the process of writing a novel or story.

Kata kunci: *Gated Recurrent Unit, Long Short-Term Memory, Recurrent Neural Network, Text Generator.*