

Emotion Classification on Text using Recurrent Neural Network

Klasifikasi Emosi pada Teks menggunakan Metode Recurrent Neural Network

Hisyam Muhammad¹, Nur Heri Cahyana², Dessyanto Boedi P.³

^{1,2,3} Informatika, Universitas Pembangunan Nasional Veteran Yogyakarta, Indonesia

¹hismuhammad@outlook.com, ^{2*}ohmyon_rn@yahoo.co.id, ³dess95@gmail.com

*: Penulis korespondensi (corresponding author)

Informasi Artikel

Received: March 2021

Revised: March 2021

Accepted: April 2021

Published: April 2021

Abstract

Misconceptions in reading online chat text messages often occur in the era of technology 4.0. From this misunderstanding, it often becomes an argument. Research on the classification of emotions in text is a solution to overcome misunderstandings in replying to messages on online chatting media. In examining emotions in text, especially in online text chatting. There are several differences from text in general, such as abnormal vocabulary, incompatible syntax structure. The solution to this problem is to carry out the text processing stage during the text classification process. Like preprocessing word normalization, extracting full sentence features. This study uses artificial intelligence with the Recurrent Neural Network method with Long Short Term Memory architecture. The dataset used in this study is the ISEAR dataset and data taken from the questionnaire. The results of the accuracy of the bot's accuracy in classifying emotions amounted to 91% of the 7521 data. These results were obtained from bot training with training data of 70% and test data of 30% of the entire dataset. Meanwhile, the accuracy of the test results with 10 respondents resulted in an accuracy of 65%.

Abstrak

Kesalahpahaman dalam membaca pesan teks *online chatting* seringkali terjadi di era teknologi 4.0. Dari kesalahpahaman tersebut tidak jarang menjadi sebuah pertengkarannya. Penelitian mengenai klasifikasi emosi pada teks merupakan solusi untuk mengatasi kesalahpahaman dalam berbalas pesan pada media *online chatting*. Dalam meneliti emosi dalam teks, terutama pada teks *online chatting*. Terdapat

Keywords: Emotion Classification; Machine Learning; Recurrent Neural Network; Long Short Term Memory; Text Classification.

Kata kunci: Klasifikasi Emosi; Pembelajaran Mesin; Recurrent Neural Network; Long Short Term Memory; Klasifikasi text