

Klasifikasi Teks *Multi-Label* pada Hadis menggunakan *Recurrent Neural Network*

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Abstract

Hadith is the second source of Islamic guideline or reference for Muslims after the Qur'an. Of the many Hadith, an authentic Hadith source that Muslims often refer to is Hadith Al-Bukhari. Besides that, in the Hadith, each sentence quoted in each chapter has a particular meaning. This is a challenge for people who study the Hadith or are only just studying the Hadith for the first time. Therefore, this research aims to develop a system that can classify each sentence quoted in the Hadith according to its meaning. The developed classification technique is based on the Recurrent Neural Network (RNN) algorithm. The RNN was selected because it can remember previous information during the learning process, owing to its short-term memory. The results obtained show that 94.03% of the multi-label Hadith data were correctly classified (Hamming loss = 0.0597).

Keywords: recurrent neural network, classification, hadith, multi-label