

Abstract

Hadith is everything that is based on Prophet Muhammad SAW involve words, deeds, taqir (silence agree) and others. Hadith is a separate source of law for Muslims which is not explained in the Qur'an. There are many traditions which have been narrated by the experts of hadith, one of which is the hadith of sahih Bukhari. This research makes a system that can classify the Bukhari Muslim Translation of hadith in Indonesian. The classification method of Backpropagation Neural Network is used because it can classify data with a large number of diverse features, supported by Mutual Information as a feature selection method in selecting features that affect each multi-label class label. In this study several test scenarios were carried out by modifying the preprocessing stages, feature selection, and Backpropagation Neural Network parameters. The test shows that the best hamming loss value is 0.0892 and a computation time of 5284.8 s by involving three test points, namely: stemming, Mutual Information and the best learning rate value.

Keywords: text classification, hadith, backpropagation neural network, mutual information, multi-label