

## **Abstract**

**Research about hadith authenticity is a crucial part in hadith study. The vast amount of data, and the difference of opinion about its authenticity makes the research into hadith authenticity continues. An automated system can be helpful for today researcher to ease the process to research the vast amount of hadith data, and to study and consider the authenticity of hadiths that was disputed by previous researchers. In this paper, a representation of isnad names into n-gram form is expected to help represent the chain of the isnad in a simple form and helps the performance of machine learning based automated system. An experiment was performed, that involves hadith authenticity classification system that classify hadith data into shahih, hasan and dhaif class, which is based on three machine learning methods, which are Naïve Bayes, SVM and Decision Tree, and make use of n-gram representation of data features to support the data processing. From this experiment, it was found that n-gram features have varied effects on each machine learning method, with the program with SVM method and monogram features have the highest average accuracy of 0,62 and highest accuracy of 0,64.**

**Keywords: hadith, isnad, classification, n-gram, machine learning**