

## ABSTRACT

Hadith is the basis of Islam that must be studied and practiced by Muslims. In the hadith, there are several types of teachings that humans can take. Some hadith are an advice for Muslims. There are also hadith which contain prohibitions on behaving as Muslims. However, there are some hadith which are not belong to these two things, which can only be said as information to Muslims. This study focuses on increasing the performance of chi-square features selection to get the relevant attributes for multi-label classification cases using the Bukhari hadith book dataset in Indonesian translation. In this study, we use Bernoulli models to improve chi-square feature selection, because the Bernoulli model is suitable for short text data such as hadith. As a result, the proposed method can choose attributes that are relevant to its class, so that it can improve the performance of the classification with an error value of 9.38% compared to the basic chi-square feature selection which is equal to 9.91%.

**Keywords:** Hadith Classification, Feature Selection, Chi-Square