

## **Abstract**

Songs are lyrics combined with music to express emotion and different experience, like love, friendship, religion, etc. there are many songs created by talented musician, many features have been used so we can search songs by title, singer, album, music genre, etc. However, songs searching by song topic feature using lyrics and genre of song yet exist. In this research text classification was used to decide song topic using lyrics and genre of song. This research has been conducted in 4 stages. first stage is preprocessing data. preprocessing consists of case folding, word tokenization, stopword removal, and stemming. Second stage is sampling, then splitting data into training data and testing. Third step is making bag of words. Bag of words is a set of words which is used calculating Chi Square. Third stage is building classifier based on features on training data. Methods used to build classifier is Bayesian Networks. This Classifier has been built using parameter calculation for learning it's MAP (Maximum A Posteriori) and Multinomial Distribution Probability. Bayesian Networks graph score was calculated with BDeu (Bayesian Dirichlet equivalence uniform). After classification, obtained precision 89.66%, recall 88.89%, accuracy 96.03%, and F1-Measure 89.27%.

Key words: Text Classification, Chi Square, Bayesian Networks, MAP, Multinomial Distribution Probability, BDeu, F1-Measure