

## ***Abstract***

*Language is used not only to articulate the facts, but also the emotions. Emotion can also be seen from the behavior to social media statuses written by him. Analysis of emotions in the text itself can be done in a variety of media, one of them is Twitter. Emotion detection could have a wide range of application, such as a material for consideration in the political decisions of a government. In this final task, the authors will examine the classification of emotions on twitter using Bayesian Network. The method is used because of its ability to model the uncertainty and relationships between features. The result of study shows method used to train Bayesian Network is not very effective to create the best model, with 53.71% as the highest F1-Score. We also study an alternative model based on Bayesian Network, the study shows that the model can give better result compared to Naive Bayes with similar complexity on inference. F1-Score for Multinomial Naive Bayes model is 51.49%, while for alternate model based on Bayesian Network is 52.14%.*

***Keywords:*** *Sentiment Analysis, Emotion Analysis, Twitter, Bayesian Network.*