

UNIVERSITI TEKNOLOGI MARA

**TEXTUAL INFORMATION ANALYSIS ON
USER'S EMOTION IN SOCIAL MEDIA USING
MACHINE LEARNING TECHNIQUE**

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SUPERVISOR'S APPROVAL

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This thesis was prepared under the supervision of the project supervisor, Muhammad Nabil Fikri bin Jamaluddin. It was submitted to the Faculty of Computer and Mathematical Sciences and was accepted in partial fulfilment of the requirements for the degree of Bachelor of Information Technology (Hons).

STUDENT DECLARATION

I certify that this research proposal and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

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ABSTRACT

The world has been shocked by Covid-19 and it has caused various human emotions posted on social media due to many aspects such as vaccination, number of daily Covid-19 cases and many more. This project is about analysis on user's emotion based on textual information in social media using machine learning techniques. The objectives of this project is to develop classification model of analyzing user's emotion based on textual information, to compare the accuracy of each machine learning technique and to test the classification performance of developed model using evaluation metrics. This machine learning techniques applied includes Artificial Neural Network (ANN) and Naïve Bayes. The project also contains comparison of machine learning technique and three type of data split for testing and evaluation metrics is used to check the precision, recall and F1 – Score. Testing result shows that, the NB model outperform ANN with 59% accuracy.

Keywords: Text Analysis, Text Mining, Machine Learning, Evaluation Metrics, NLP, NLTK

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