

**UNIVERSITI TEKNOLOGI MARA**

**FORECAST THE PRICE OF FRESH FRUIT BUNCH  
USING ARTIFICIAL NEURAL NETWORK IN EAST  
COAST OF MALAYSIA**

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## **STUDENT'S DECLARATION**

I certify that this report and the research to which it refers are the product of my own work and that any ideas 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**

Price of fresh fruit Bunch (FFB) of palm can be used as benchmark to measure the economy performance of a country especially Malaysia. Palm oil industry in one of the biggest industry in Malaysia and gave a lot of opportunity in income generation. Palm fruit can be divided into three grade which are grade A, B and C and the price of FFB depends on its grade. Price of FFB changed everyday because the price are affected by the economy performance. Forecasting price of FFB can be challenging task because the accuracy of the method need to be considered as the main aspect. This study aim to generate 5 step ahead value of price of FFB for grade A,B and C in East Cost of Malaysia using Artificial Neural Network (ANN) by using Alyuda NeuroIntelligence as a software. The data was collected from Malaysia Palm Oil Board (MPOB) website from January 2015 to August 2018. While run this research, this study split the dataset in three type which are training, testing and validation dataset. In architecture design this study use Kolmogorov's Superposition Theorem in order to find the best architecture design for ANN for each data set. The data set also going through all training algorithm to find the best suitable algorithm determined by smallest error.

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