## Universiti Teknologi MARA

# **Banana Recognition System Using Convolutional Neural Network**

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#### STUDENT 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 the other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of this discipline.

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#### **ABSTRACT**

The programming is a subject that are used by developer to provide the system. Most of the human work has been replaced by computers in recent years. With the rise of mobile technology and internet access, recent development in machine learning have designed many algorithms to solve diverse human problems. Many developers especially beginner student usually facing problem to find difficult. The value of deep learning has led to the inclusion of project development activities in computer science course. The project aimed to implement web-based banana species recognition system. The method of the project is convolutional neural network. Convolutional neural network is machine learning area that provide the system to training and testing datasets. There are many machines learning types and classification techniques have widely used nowadays such as Support Vector Machine, K-Nearest Neighbors, Neural Network and Naïve-Bayes Classifier are defined and studied. The design and implementation of web-based application will also be stated to state the working progress for the final year project. This include limitations and future improvements that could be added in the near futures.

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