

## **ABSTRACT**

### ***Development of a MobileNetV2-Based Application for Classifying Potato Quality***

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*Potatoes are one of the main commodities in the agricultural and food industry in many countries, including Indonesia. Potatoes are a primary source of carbohydrates in the daily diet and are rich in nutrients. In recent years, potato production in Indonesia has increased. Sorting potatoes is an important stage in the potato production and distribution process. However, manual sorting requires a lot of time and labor. This final project addresses the issue of developing a MobileNetV2-based application to assess potato quality. The objective of this research is to complete the development of an application for potato quality classification using the MobileNetV2 model, integrated into a web-based application built with Flask. The methods used include collecting a dataset of 50 potato images per class, image preprocessing, feature extraction, and classification using the MobileNetV2 model based on Convolutional Neural Network (CNN) algorithms. Through this final project, it is expected that the computer vision-based application for classifying potato quality can be completed and function properly according to the design.*

**Keywords** : Image Classification, Convolutional Neural Network, Application, MobileNetV2, Flask.

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