CLASSIFICATION OF BANANA MATURITY LEVEL USING THE CONVOLUTIONAL NEURAL NETWORK METHOD

AFIFAH INAS HANIFAH

Informatics Study Program, Faculty of Science & Technology
University of Technology Yogyakarta
Jl. Ringroad Utara Jombor Sleman Yogyakarta
E-mail : inashanifah54@gmail.com

ABSTRACT

Banana production in Indonesia is quite large, in fact Indonesia is one of the largest banana producers in the world. Sorting the level of ripeness of bananas is usually seen from color changes because it is easy to do. However, because banana production in Indonesia is quite large, a lot of labor is needed. The sorting of bananas is also inconsistent because each person's assessment of the color composition is different. Therefore, in this research a classification system for banana ripeness levels will be created based on color changes. The aim of this research is to create a classification web and convolutional neural network model with good accuracy so that it is hoped that it can help overcome these problems. The results of this research have obtained a model with the best accuracy of 88% using a learning rate of 0.001 and max epoch 15.

Keywords: Classification, Convolutional Neural Network, Banana Maturity Level