RANGE FRUIT SELECTION SYSTEM USING COLOR SENSOR AND WEIGHT SENSOR WITH NAIVE BAYES METHOD

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ABSTRACT

Lime is one type of fruit that is quite popular in Indonesia. The nutritional content contained in lime fruit is very abundant, including macro nutrients, minerals, vitamins, and antioxidants. To get freshness, nutrition and maximum benefits from lime juice, it is necessary to choose fruit that is of superior quality, ripe, and suitable for consumption. To get citrus fruits that meet these three criteria, more accuracy is needed during the sorting process. The process of sorting citrus fruits is generally carried out by farmers and traders using the manual method, this is of course less efficient because it requires more energy and accuracy when doing the sorting process manually, besides that the percentage of errors when sorting manually is also greater. Therefore the authors designed a Citrus Fruit Selection System Using Color Sensors and Weight Sensors With the Naive Bayes Method. Based on the tool testing that has been carried out, testing the success of the tool in determining the type of lime fruit gets a value of 92% and an error of 8%. And in the confusion matrix from tool testing, it gets an accuracy score of 0.92, precision 0.92244, and recall 0.9188. This result is quite good, because the error obtained is not more than 10%.

Keywords: Lime, Sorting, Naive Bayes¸ Confussioin Matrix