IMPLEMENTATION OF THE NAÏVE BAYES CLASSIFIER ALGORITHM FOR CLASSIFICATION OF FRESHNESS OF CHICKEN MEAT BASED ON COLOR INDICATION

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ABSTRACT

Chicken is one of the basic necessities that is popular with all groups. To get the benefits of chicken meat, the level of freshness is one of the main keys. In general, the level of freshness of chicken meat is divided into fresh and non-fresh which can be differentiated through color comparison. The widespread sale of tiren (dead yesterday) chicken meat that has been treated with chemicals has created doubts in distinguishing and choosing fresh and non-fresh chicken, especially for color blind sufferers. The main aim of this research is to make it easier to differentiate between fresh and non-fresh types of chicken meat based on color using the Naïve Bayes Classifier algorithm. The Naïve Bayes Classifier algorithm performs classification by calculating the probability value for each class. After carrying out several experiments with different parameters, the highest accuracy was obtained at 79% using a test size of 0.2 and a random state of 0 with the number of correctly predicted data being 19 data out of a total of 24 test data. The results of this research are quite good in classifying the freshness of chicken meat based on color indication.

Keywords: Image classification, freshness, naïve Bayes classifier, feature extraction