ABSTRAKSI

Mentari Nur Hakiki, 54416379

VEGETABLE DETECTION APPLICATION USING OPENCV BY APPLYING HSV COLOR MODELS

Education in general should begin to be applied to early childhood because that's when children are quicker to capture new memories so that parents and teachers can apply their basic abilities from an early age. To achieve this goal, parents and teachers must find various ways so that the child can easily understand the knowledge conveyed to him. The author makes a vegetable detection application that aims to assist parents and teachers in conveying information in the form of learning the names of vegetables based on their color, namely peppers, carrots, and pumpkins to children through computer media. When making the application, the author uses the HSV (Hue, Saturation, Value) color model and besides that, uses the OpenCV feature, namely Open Morphology. Vegetable detection will be done in real time, where the user will place the vegetables in front of the webcam and the application will detect vegetables based on their color. From the test results, it can be concluded that the application is very dependent on light intensity during detection and can detect vegetables optimally when using sunlight using Open Morphology and the optimal detection distance is 10 to 60cm for peppers, carrots, and pumpkin.

Daftar Pustaka (2006 - 2019)