UNIVERSITI TEKNOLOGI MARA

HERB RECOGNITION FOR MOBILE APPS

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ABSTRACT

Tremendous growth of the advanced technology in the new era makes the world's development more comprehensive adaptation and quite complex as to fulfil people's needs and desires. In recent years, vision-based tools for example barcode scanners and landmark recognition systems have made a positive impact on extending usability. Among them is herbs plant application. Herb is any plant that is used to alleviate unwanted symptoms or boost overall health. Herb recognition for mobile application identifies the name of the herb by recognizing the top part of the leaf. An image of the leaf is captured and texture feature is extracted. Texture feature is preferable because color and shape features can be influenced by lighting. Two texture features have been experimented that are Local Binary Pattern (LBP) and Histogram of Oriented Gradient (HOG). Template matching is applied for herb recognition for about 35 samples of training data and 13 samples of testing data. The output of this project will show the name of the herb and its information. This project involves designing and developing on Herbs Recognition for Mobile Application. The mobile application is able to recognize the herbs type using the most suitable algorithm. In addition, this mobile application will also provide the information about the herbs for user's knowledge.

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