

# A METHOD FOR FRUITS RECOGNITION USING IMAGE PROCESSING TECHNIQUES

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## Abstract:

Pattern recognition has been, and continues to be, the subject for extensive research and development due to its wide range of applications in the real life. In this paper, we introduce a fruits recognition system that can recognize some types of fruits, which are common food in our life, and make corresponding sounds. By analyzing image processing algorithms and taking into account the features, which are extracted from the images for classification purpose, we establish a vision system using a few feature set. The output of our system is a “saying”, which matches the result of the classifier – a correct kind of the fruits. In order to validate the effectiveness, we have tested the designed system with some plant fruits such as apple, kiwi, lemon, orange, strawberry, and tomato in the supermarket with a success rate of around 91%, and have compared this system with other works in recent years.

*Key words: Recognition system; Image processing algorithms; Minimum distance classifier; Extracted features; Sounds.*