Abstract

Feature based Fruit recognition technique that has been proposed several times in past revealed in maximum research works either the color and shape or shape and texture or texture and color features. Different fruit images may have same color or identical shape or similar type texture but all three features are rarely identical at the same time for two different types of fruit. So the classification of fruit considering the three features at the same time increases the efficiency and accuracy of the algorithm. The proposed method represents fruit recognition expanding multiple feature based analysis that includes texture, color and shape. To recognize the texture of a fruit the Log Gabor filter has been used, mean hue has been calculated for color and shape has been analyzed by counting perimeter and area pixel. In the study of fruit recognition texture analysis using Log Gabor has been rarely used. The Projected fruit recognition technique is used to extract the above mention three features and Artificial Neural Network is used for classification. The system has achieved more than 90 % accuracy using successful implementation of the proposed algorithm.

References
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Index Terms

Computer Science
Artificial Intelligence
Keywords
Fruit recognition  Log Gabor  Artificial Neural Network.