## Face Detection System Using Skin Color And Edge Detection

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Computer vision is one of the fields of active scientific in computer science which The researcher's opinion getting attention the early days of the computer history. The face is exclusive features of every human. Hence the face can be used one of the most important criteria and appropriately identification to identify individuals. Nowadays, the topic of face recognition have applications in various fields including public security, identify, identification of the most important and sensitive locations, access control, video monitoring and more. In between face recognition featurebased methods, those using skin color for face recognition has benefited good performance. Two major issues that are important applications of facial recognition speed and accuracy in diagnosis. During the past decade, an effort to improve performance quickly and accurately identified. Of the cases that are causing the error in the process of diagnosis can be illuminance, the angle of the head, the head of State, the latency for (by the mustache, beard, glasses, etc.), Rotate the head andso on. The goal of this study investigated methods of detection and recognition the faces in the pictures. In this project, we try to study past records, the fast and efficient method proposed for face detection and recognition. In the first part, according to different studies have been used the HSV and YCbCr color spaces and Canny edge detection to detect skin. In the second part, in the second part, After face recognition algorithms in various reviews, is used the combination algorithms HOG-LBP for feature extraction and SVM classification training and testing for data classification. The results of the research have obtained the value of 11.99% and 95% for face detection and recognition respectively. Results achieved the relative capabilities of the proposed system. Keywords: Face Detection, skin color, Color space HSV and RGB, Edge Detection, Canny, LBP, SVM, HOG.

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