Abstract

The human face and facial feature extraction play a key role in person identification in the areas of video surveillance and access control on security reason. In this research work news video is taken for anchor person detection. Detecting anchor person from news videos give the time distribution to news readers and provide editorial support to journalist to find videos related to the particular person. First the video is converted into frames and the shot change detection algorithm is used to find scene changes and store the image in the database. Two different algorithms are used to find scene change detection such as color based shot detection and edge based shot detection. From these result, edge based shot detection performs well in finding shot changes more accurately. Second, segment the still image into skin region and non-skin region by using skin-color model based on its size and shape face region is identified. Third step, facial features like location of eye, nose and mouth are extracted to recognize face variations through haar-like features. It provides a possible ways to locate the positions of eyeballs, mouth centers, midpoints of nostrils and near and far corners of mouth from face image. This approach helps to extract features on human face automatically and improve the
accuracy of face detection. Finally, anchor person is detected from news video by extracting
SURF features of the given image. Experimental results show methods used in this research
could locate facial features from face exactly and quickly.

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**Index Terms**

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**Keywords**

Anchor person, SURF, haar-like feature, edge-based, color histogram.