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## Abstract

Huge amount of video data is being generated every day, with enormous growth of security and surveillance system. It is immensely challengeable for researcher to search and retrieve accurate human face of interest from video with utmost speed. The proposed work is stimulated from the same concern. It would be the future demand for searching, browsing, and retrieving human face of interest from video database for several applications. This paper proposes the novel algorithm for human face retrieval from video database based on holistic approach. The Viola and Jones frontal face detector detect the face region. The next stage is face extraction which have input for grouping individual faces. The individual group of faces has converted into single normalized mean face using PCA. The final face group contains single face for each person occurred in video. After the pre-processing of normalized faces, recognition is performed on the basis of query face image.

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