

# [Abstract: is performed by isolating the face](https://assignbuster.com/abstract-is-performed-by-isolating-the-face/)

Abstract: Intoday’s world there are lot of threat arises due to terrorists, criminals, thieves and also illegal access of the data from the unwanted person etc . Thisleads to lot of challenges in our daily life. Withincrease in threat globally the need to deploy reliable surveillance is onincrease. Video surveillance is considered to be the major breakthrough in monitoring andsecurity.

In video surveillance, the facial recognition furthermore enhancesthe security and defense in real time. By face recognitionthe probe person can be recognized more accurately, efficiently and with shorttime. Various methods, approaches, algorithms were available for face recognition from surveillance video. Themain objective of the paper is to discuss and analyze about the various facialrecognition technique.

Introduction:            The concept of face recognition isto detect the particular character from the video or from the database and isused for security purposes. Face gives a rich source of information about aperson and it is a most acceptable biometric. Face recognition, voicerecognition, retinal scanning, fingerprint are some of the emerging biometrics. In these, the method of spotting an individual by face recognition is far moreaccurate and faster than any others.

Major advances has taken place in the lastfew decades in face recognition. There is a significance attention and activeresearch in this field. The human face tend to change significantly and quicklyin time, so it is considered as a complicated and dynamic structure. Facerecognition is regarded to be challenging when there is a variability ininformation due to pose variation, lightning conditions and other variousfactors. Face recognition should address these major challenges. Pose variationis considered to be a difficult problem because all faces seem to be similarwith two eyes, mouth, nose and other features present in the same location.

The main aim of face recognition isto detect and verify a person from videos by one-to-many matching that compares the query face with the storeddatabase faces4 . Face recognition scheme may fail when there is a largedifference in the query face and the stored database faces e. g., makeup changes1. Face detection, feature extraction and face recognition are said to be thethree stages of a face recognition system2.

Face detection is the process ofdetermining the existence of a face in a video frame. Once aface is detected, face recognition is performed by isolating the face region and featureextraction is do carried out. Face verification and face identification are thetwo important stages of face recognition problem35. TheImage Preprocessing, Feature extraction from face and the face matching areconsidered to be the main stages of the Face Recognition technique.

In fig. 1these three main stages of face recognition algorithm is shown. Imagenormalization and enhancement is done during the Image Preprocessing. Also thefeatures of the face are extracted during this stage             1. Zhenzhu Zheng and ChandraKambhamettu.

Multi-level Feature Learning for Face Recognition under MakeupChanges 12th International Conference on Automatic Face & GestureRecognition, pages 918-923. IEEE, 2017 2. MejdaChihaoui\*, AkramElkefi, WajdiBellil and Chokri Ben Amar. A Survey of 2D FaceRecognition Techniques. pages 1-28. Computers, 20163. KittikhunMeethongjan Mohamad.

A Summary of literature review : Face Recognitionpages1-12. Postgraduate Annual Research Seminar 2007 4. Shailaja A Patil and Dr. P. J. Deore.

Face Recognition: A Survey. pages 31-41. InformaticsEngineering, an International Journal (IEIJ), 2013 5. V. VijayakumariFace Recognition Techniques: A Survey pages  41-50. World Journal of ComputerApplication and Technology, 2013