



Face Recognition Technology

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ABSTRACT

The biometric is a study of human behavior and features. Face recognition is a technique of biometric. Various approaches are used for it. Face recognition is emerging branch of biometric for security as no faces can be defeated as a security approach. So, how we can recognize a face with the help of computers is given in this paper. The typical way that a FRS can be used for identification purposes. The effectiveness of the whole system is highly dependent on the quality and characteristics of the captured face image. The process begins with face detection and extraction from the larger image, which generally contains a background and often more complex patterns and even other faces. A survey for all these techniques is in this paper for analyzing various algorithms and methods.

I. INTRODUCTION

A face recognition technology is an software which is used to biometrically identify the face of the person on the basis of the points Which gets located when the unlocks happened and then it detects whether this is same with the saved pattern or not if it is same then it accepts or else it fails. It is typically used in the security systems and can be called as biometric such as fingerprint and retina sensors. But these days this technology is been widely used in the marketing tool. And along with the Electronics gadgets.

II Scope

The main objective of this document is to make people aware that what is the technique they are using and what are methods which are behind to the logic and what does make face recognition possible in the real life. These Consist of great technology along with the some algorithms which make it so very much

useful in the market and also very demanding these days.

III Literature Survey

The techniques consist of many things such as processing of the image, machine learning, vision by computer and neural networks. The main problem in the face recognition is the classification part. The major part included in the face recognition is to read the faces from the people whose faces are been stored along with the faces of the new people. In humans there is a problem of limited memory this can be sorted by using the computer techniques.

The major problems in this technique are:

1. Change in Facial expression
2. Ageing
3. Beard, Moustache and hair style
4. Change in the post.

This technique work as follows it involves the detection of the faces and extracting the facial features. If we are working on the facial feature. If we are working on the facial recognition these above problems need to be solved and a proper image is to be detected and recognized.

IV Existing system

The existing system uses the principal Component Analysis as a technique which is very much useful in face recognition technique. It is also known as the PCA.

The basic technique behind this algorithm is that it takes and parameter by the lower level and compares

it with the parameter which is already present and then it stores and evaluated on basis of that.

V Challenges in face Recognition

Technique

1-The character must be at certain distance so that it can clearly capture and also it requires that the character must not move for some time.

1-Also there are very few high recognition face databases available in the market so recognizing all is still a big task.

2-The major difference is that evaluating this is that there is a lot difference in the system along with the real life and that does not match enough.

VI Working

The face recognition technique consists of three basic steps they are:

1-Face detection- This technique consist of using the camera feature where the camera captures the real life images of the face and stores them in the data.

2-Face tracking- There are specific tools which are been used in this these tools consist of techniques where the data can be easily manipulated and also the data can be can be verified by the person or specialist

3-Face recognition-This is the best and the most important part in this technique because in this the faces which is been verified by the tracking process is been cleaned up along with that the image is been

compared with lot more images in the database so that to contain a similar kind of image.

VII Conclusion

From this we can conclude that face recognition is a technique which has very much limitation as well as problem than too this is the emerging technique in security and technology purpose. But as the time is been going out this technique is becoming more and more advance and much more accurate than ever. Hopefully we have great techniques regarding face recognition technology and we can expect a better technique in the nearby future.

VIII Reference

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