

Face Recognition for Authentication on Social Networking Site

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ABSTRACT

In this paper we implement access control system is integrated with a face authentication system. This system is used for the social networking sites for authentication purpose. The advantages of this system is to authorised person only can access this system another unauthorised person prevent this system. From the given image, face detection system locate size and scale of human faces. First step for Face localization, Face Tracking, Facial Expression Recognition, and Face Recognition is Face detection. Detection of faces within an image can be done accurately and rapidly. This technique accurately detects facial features.

Keywords: Face Recognition, OpenCV Library, Security, Social network.

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I. INTRODUCTION

Nowadays, Millions of users are attracted to the Social Networking Sites (SNSs) through continuous use of these sites in their daily activities. All the way through, hundreds of SNSs are running and available with variety types of technology. These sites have a large scale of features which providing maintenance ability for the pre-existing social network sites. Furthermore, the mentioned sites have consistent technological features with reference to the aspects of sharing the interest, providing some information about the current business status, religious and national views, culture and individual opinions and political views and many other aspects. Some sites also able to provide various users types, while other Social networking sites are restricted to specific group of people based on their common language in order to allow them to share their opinions and views. SNSs can be varied in the context of the information they provides, information representation method and the used communication tool such as images, figures, video files and it can be accessed by using the mobile technology as well. Moreover; the media play important role in covering the development of the SNSs, its positive effects and concerns about the way

that how the users can deal with it. Obtaining a lot of personal information from this social network is very easy. Using the search engine sites or existing social networking website, search for detailed-identity can be easily conducted through searching. However, it seems to be less effective. Therefore, our designed system can connect a person to a variety of services through his/her own identity. Person's face is the primary identity in our proposed system. Using our system, it is possible to know various social network and other internet activities followed by that person. System identification can be done by a person using face recognition system and utilizing the camera system on a computer or a laptop. This system uses the Haar cascade algorithm for face identification and face recognition. Because of the wide variations of shape and pigmentation within a human face, analysing the pixels for face detection is time consuming and difficult to accomplish.

This paper is divided in six sections. Section II contains the literature survey of SNS while Section III demonstrates the proposed system of SNSs. while last

Section IV contains conclusion and references of the paper.

II. LITERATURE SURVEY

Based on the above definition, in 1997 the first social network site was launched and it was called SixDegree.com. SixDegree.com allowed users to create their own profiles, list their friends, in 1998 SixDegree.com provides new feature to the users which is the ability to browse the friends lists.

Moreover; before the Six Degrees each of the mentioned features existed in some forms. Basically; in the most dating community and networking sites profiles. Where lists of friends were supported by ICQ and AIM buddy lists. In spite of those friends were not obvious to others. Classmates.com gave users the ability to integrate with their university, college and browse the network for other integrated users. The other users who were not integrated in the classmates.com, users were not be allowed to create profiles or list Friends until years later. SixDegrees was the first site that combined these features (Kaur and Singh, 2012; Fourli, 2010;Kumar et al., 2013; Marion and Omotayo, 2011; Kapoor, 2011).

A number of community tools arose in 1997 till 2001 such as MiGente, Black Planet and Asian Avenue, these community tools were created to support different mixture of profiles and publicly articulated friends. Moreover; these community tools allowed and help users to design personal, professional and dating profiles-users which can be recognize friends using their own personal profiles without searching for an approval for those connections (O. Wasow, personal communication, August 16, 2007).

However; in 1999 the Korean virtual worlds site Cyworld was launched and in 2001 added some SNS features. For further information about the history of Social Networking Sites, please refer to (Kaur and Singh, 2012; Bhagwat and Goutam, 2013).

As well, when the Swedish web community LunarStorm modernized itself as a Social NetworkingSite in 2000, it contained diary pages, guestbooks and Friends lists (Kumar et al., 2013). For further explanation about the history of the social network please refer to (Kaur and Singh, 2012; Fourli, 2010; Kumar et al., 2013; Marion and Omotayo, 2011; Kapoor, 2011; Cecconi, 2007b; Banbersta, 2010; Igoe, 2008).

Benefits SNSs: Social networking Sites benefits can be summarized as follows

- The ability to offer national range with a free cost or with a very slightly cost.
- The ability to provide new opportunities that can support the economy such providing online

customer service, online marketing and the uses of mobile phone industry.

III. PROPOSED SYSTEM

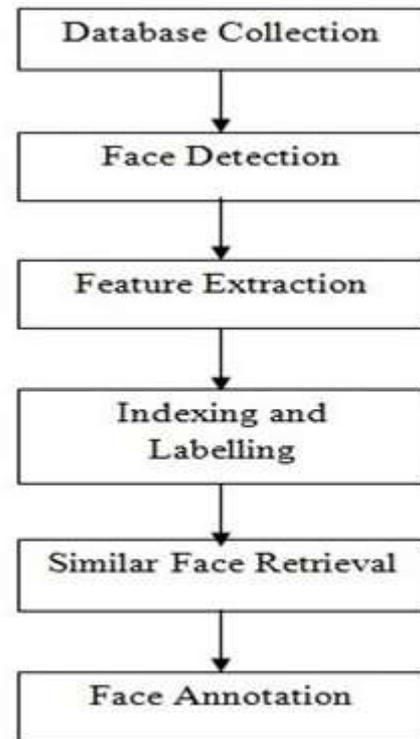


Fig 1. Proposed system

Face detection and recognition is the process of determining the identity of any particular person .Here only face will be detected and other objects will be ignored by the camera such as tree, hand, building etc. By detecting face of any person one can get access to the system which is secured by the password.

We are using facial recognition and detection instead of passwords where face of the user is captured and detected then matched with faces/photos in the database to verify user and to authenticate user for access of the system. During enrolment phase, image of the face of the user is captured and saved in the database.

When user wants to login into the system, the photo of user's face is captured and then compared with the one in the database and if it matches then user is authenticated and authorized to access system.

Objective:

- Fast & accurate face recognition
- Reliable matching
- Extraction of similar facial area

- Secure access control for sensitive areas.

IV. CONCLUSION

Social networking is becoming important part of life, there are a variety of services on the internet which are integrate their services with social network services. So to provide security for confidential areas, we have different authentication methods but among all of them biometric is very effective method.

To overcome this problem we can use face detection and recognition method. Face is the primary identity of the user and by identifying that we can provide access to the user. It requires high computation to identify any particular user. Once the site has the database of its user then it becomes easy to identify the authentic user. So providing security by using face authentication we can be surer about the privacy.

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