Biometric identification mode. (kumar and ryu

Business, Management

Biometricrecognition refers to recognition of human by various way such as fingerprint, face, iris and voice. In other words, it is the strong bond between a personand his identity. It cannot be easily lost, shared or duplicated. (Mudholkar, et al.

, Feburary 2012) In today's world, itis the world of technology so, ID cards or password are not trusted properly inpresent time, because it may be lost or shared or easily remembered. Butthrough biometric technology it doesn't require any password or ID cards, people are recognized when they are physically present at the point of thetime. It is done through iris, voice, face, fingerprints. In other word, no anypassword or ID cards are required in biometric recognition. (Michigan State University, 2009)Biometricis only the one that can provide negative identification functionality whichaims to assure that the individuals are involved in the system or not. Due allthis characteristic it has been widely hailed as natural, reliable of anidentity system. (Mudholkar, et al., Feburary 2012) 1.

2 CurrentScenario Afterthe discovery of the scientific paper on automated fingerprint matching manymajor law were enforcement department embraced the idea of first " booking" thefingerprint of criminal and store in a database(i. e. card). If any crime is doneby any criminal, the store database are used to identify the fingerprint whichis left over the crime scene. (Jain, et al., january 2004) Biometricis now widely being used by financial institution to prevent frauds, it is alsobeing used by citizen to secure their mobiles phone, and it is also used byvarious security company to increase or make better security. (Michigan State University, 2009)2.

BackgroundIn the today content nearly70% of the worldwide consumer are supporting or using the biometricstechnologies like: – finger prints, voice recognition, iris, etc. In biometricpeople are identify through their physiology or behavioral characteristics. Inbiometric technology it is operated by accepting the data from the variousindividual and compared the data which is taken from individual to the datathat are kept or store on the database. It has two operating system: – verificationmode or identification mode.

(Kumar & Ryu , march, 2009)VerificationMode: – Inthe verification mode, the system take the biometric data and compare withhis/her own biometric templates that is store in data base. In thisverification mode, person are verified via PIN (Personal IdentificationNumber), user name, smart cards, etc. After this a system conduct a comparison(i.

e. one to one comparison) between the data taken from the person and thedata that are store in data base whether the claim is true or not. IdentificationMode: – Inidentification mode, after the biometric data is taken from the individual, thesystem identify the individual by searching biometric templates that is storein data base. After this a system conduct a comparison (i. e. one to manycomparison) between the data taken from the person and the data that are storein data base to establish an person identity but does not claim the identity. (Jain, et al., january 2004)There are various types ofbiometric, some of them are as follows: -Retinalscanning (iris): – In this method the vascular patterns of theretina of the eyes are used for the personal identification.

This vascularpatterns of the retina does not changed over the life time (like: fingerprint)of the person so it is used as the personal identification. In this methodperson are required to look in the device and focus on specific spot in thevisual field so that the vascular patterns could be imaged. The vascularpatterns are scanned using a low intensity light

source. Fingerprints:- Fingerprints varies from the person to person. It means that the finger prints of theperson are not same, all person have different finger prints even a twins havethe different finger prints so it is used for personal identification and itsmatching is very high. (Jain, et al., january 2004) In thissystem a user are not required to type a password instead of this person arerequired to touch a finger print device with their finger. Fingerprints are thepatterns of the ridges and valleys on person fingertips.

(Kumar & Ryu, 2009) FacialRecognition: – Facial recognition is the most commonbiometric used by the humans to make a personal recognition. Usually, facerecognition are done through location and shape of facial attributes, such asthe eyes, eyebrows, nose, lips, and chin and their spatial relationships, orthe overall analysis of the face image that represents a face as a weightedcombination of a number of canonical faces. Beside this there also otherbiometric system.

They are: – voice recognitions, signature verification, DNA, Gait, hand and finger geometry, Facial, hand, and hand vein infrared thermogram, Keystroke, Odor, Palm print. (Jain, et al., january 2004)2. 1 current scenarioBiometric are being preparedto be install by International Police Organization (Interpol) in four place ofNepal. It is supposed to be used to

track the terrorists and criminals and tocatch the foreigner's with the duplicates travel documents. In Nepal, 3 biometric systemare being installing.

It will be install in police headquarters, CentralInvestigation Bureau of Nepal police and Tribhuvan International Airport. Thesesystem are based on fingerprint and face recognition. Chief of Interpoldivision Kiran Bajracharya has said that the device will identify passport, visa and administrative document of travelers and will track the people who areon Interpol's of travel document, it also check whether it is valid document ornot. Now the government also making the citizenship card into E-citizenship. The National Identity Card Management Center are making the biometric nationalcard under the Ministry Of Home Affairs (The Kathmandu Post, 14-10-2017)