

Ethnicity diagnosis based on image processing

tahereh manafi*,Mohammd Reza Yamaghani,

The need to identify with accuracy and high reliability systems is growing. An identification system based on the document and documents (such as identity cards, smart cards, magnetic cards, keys, birth certificate, passport) and human knowledge (user password, PIN) are identifiable. The artificiality of the system because they are subject to forgery, destruction, loss and other events is. These events put at risk the security of these systems and their confidence level has reduced [1, 2]. Recent developments in information technology and the increasing demand for high security and machine vision, has led to rapid advances in the field of biometric identification based on smart and achieved. In recent years, various types of biometric techniques, biometrics for physical characteristics of this technology is one of the most accurate and reliable method for the detection and identification is human demographics. With this specification for the sake of stability characteristics, such as age, gender and ethnicity of the face detected. Human face images containing demographic information such as ethnicity, age and gender. This visual information for sustainable because of high durability and strength, plays an important role in identifying faces. This thesis is a system for classifying race using face images and taking into account the characteristics of the local strongmen would suggest. In this thesis by extracting key figures sparse matrix by three groups of race (Gilani, Azeri and effort) is detected. Using these algorithms, computational complexity and reduces time. Using sparse matrix processing operations much faster and more cost-effective than when the matrix is called full matrix. The study authors have been collected by the images database, is done. In this experiment, each person on average 8 photo taken and averaged a successful system designed to identify people gained about 76 percent.

Keywords : detection of ethnicity and race, for feature extraction, face recognition, sparse matrix