

Fingerprint Recognition

By:

Ashwag Al-Abdul Jabbar

Haya Al-Twaimi by:

Norah AL-Gamdi

Nada Al-Khoshaim

Supervised by:

Dr. Salah M. Rahal

Abstract

Biometrics refers to the automatic recognition of individuals based on their physiological and/or behavioral characteristics.

Biometric Systems are used for personal authentication because they are more accurate and more convenient than current methods.

The aim of this project is to investigate the national interest in such systems and to simulate a Biometric System Prototype fulfilling the national need of Kingdom of Saudi Arabia – KSA.

The good acquired knowledge about the biometric technologies and the performed feasibility study allowed us to evaluate the trend in KSA either for the more required biometric type (identifier) or for the suitable specifications for such a system, select the more appropriate identifier, and to define the adequate specifications for the simulated biometric system prototype around this identifier.

The fingerprint authentication technology seems to be the best suited biometric one. A general prototype design (Hardware & Software) for Student Attendance System around fingerprint identifier is presented.

The User Interface is of great interest for the users of the Fingerprint Student Attendance System “FSAS”. A detailed simulation for this interface is performed.