Abstract

With the increasing awareness about the security systems, there has been a development of different types of biometric systems in this field. One of the most common and cost effective biometric systems is Fingerprint Biometrics. Enhanced Fingerprint Identification Technique describes mathematical algorithms to overcome the limitations faced while using the conventional fingerprint biometric systems. Enhanced Fingerprint Identification Technique provides improvised and efficient recognition process. Lumidigm sensor, captures images of skin at different wavelengths, has been used to get a multispectral image of fingerprint. GLCM algorithm is used for extracting features from the acquired fingerprint image. DTW Comparison is used for identification and verification process. Machine learning based amalgamated algorithms will overcome the hindrance faced in the recognition process while using the conventional fingerprint scanner.
A Machine Learning Approach for Enhanced Fingerprint Recognition Technique


Index Terms

Computer Science

Pattern Recognition
Keywords

Fingerprint; GLCM algorithm; Dynamic Time Warping algorithm; fingerprint spoofing; biometric system