Clustering Fingerprint Image Classification of Biometrics System Using Pyramid Decomposition

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Abstract
As we know that human being is capable to identify any given object of real world. To identify and recognize any object number of internal processing is to be carried out into the brain of human being. This is powerful technique and capability of human being but it is still yet not defined. So the automated system used for identification and recognition is called as biometrics system. The techniques used by a biometrics system to identify the individual, based on one or combination of speech recognition, face recognition, iris scanning, hand geometry, and fingerprint recognition. To identify the person who has claimed for identity using a biometrics technique normally number of samples from the database is matched with the sample of fingerprint provided by an individual. Such matching process is time cumbersome and tedious. To reduce the search space and minimize the computational efforts required for matching, we are classifying the fingerprint images based on the Henry's classification. This classification give the index number with the help of this number searching process can directly point out the location of appropriate fingerprint from a database. In this paper we present fingerprint image classification using pyramid decomposition.

Keyword: Biometric techniques, Fingerprint database, Fingerprint classification, Pyramid decomposition.

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