

ABSTRACT

Biometrics is technologies used for measuring and analyzing a person's unique characteristics. There are two types of biometrics: behavioral and physical. Behavioral biometrics is generally used for verification while physical biometrics can be used for either identification or verification. Identification is determining who a person is. It involves trying to find a match for a person's biometric data in a database containing records of people and that characteristic. This method requires time and a large amount of processing power, especially if the database is very large. Verification is determining if a person is who they say they are. It involves comparing a user's biometric data to the previously recorded data for that person to ensure that this is the same person. This method requires less processing power and time, and is used for access control (to buildings or data). In order for the biometrics to be ultra-secure and to provide more-than-average accuracy, more than one form of biometric identification is required. Hence the need arises for the use of multimodal biometrics. This uses a combination of different biometric recognition technologies. In certain situations, the user might find one form of biometric identification is not exact enough for identification. This can be the case with fingerprints, where at least 10% of the population have worn, cut or unrecognizable prints. Multimodal biometric technology uses more than one biometric identifier to compare the identity of the person. Here, we have increased the accuracy of biometrics using two modalities one is fingerprint and the other is iris. Fusion of these two modalities is experimented for authentication purpose. The features of fingerprint and iris have been extracted which are fused and saved as a database. If one of the technologies is unable to identify, the system can still use the other to accurately identify against.

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