

ABSTRACT

The recent advances in information technology and the increasing requirement for security have resulted in the rapid development of intelligent personal identification system based on biometrics. Iris recognition system overrates another biometric identification system in it high level of accuracy, long-term stability, easier to use, and the low factor of mistake.

At this research, proposed a feature extracting method using wavelet decomposition transformation so that can recognize important feature information from eye iris image. Then, will be applied Levenshtein Distance in decision making.

From the testing result is obtained by level of identification accuracy of 98,77 with 0,80% of False Acceptance Rate (FAR) and 1,67% of False Rejection Rate (FRR). This system also can overcome rotational inconsistance during image acquisition, and recognize image that added noise. Therefore, this iris pattern recognition system has potential a reliable and accurate biometric technology.

Key word : biometric, iris identification, wavelet decomposition transformation, Levenshtein Distance.