Abstract

A biometric system is basically a pattern recognition system. Biometrics based user authentication system serve as a reliable means for meeting the challenges in today's world of information and network security. It has gained enormous interest by scientists and researchers. Unimodal biometric systems that employ only a single biometric trait fails to achieve the desired security levels. Even the best unimodal biometric system suffers from various problems. To overcome these issues, we propose a multi-modal biometric system which employs iris and hand-geometry biometric traits. The iris patterns of human eye are very complex and random. It is almost impossible for an imposter to imitate them. Hand-geometry measurements are not so distinctive and hence are used only for verification purpose. By combining them with other biometric trait like iris, a more secure multi-biometric security system can be obtained for verification as well as identification purpose. In this paper we will present a brief introduction about unimodal biometric systems, need for biometrics integration, various integration levels, types of multi-biometric systems and some previous research work. In the last section (7th), we have presented our proposed multi-biometric system.
Towards an Integrated Biometric Technique

References

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Index Terms

Computer Science

Security
**Keywords**

Multi-biometric System Iris Hand-geometry Biometrics Integration Multi-sensor Multi-algorithm Multi-sample Multi-instance Multi-modal Hybrid Systems