Abstract

Palm print is a widely accepted biometric trait for authentication due to clarity in discriminating the features of palm such as large distance among non-class samples as well as minimum distance between intra-class samples. Area beneath the finger and enclosed by heart line is called as tri-radiated region or inter-distal region. This specific area of palm contains features which are unique and universally discriminating. In this paper we present a simple method to extract ridges in tri-radiated section also called as inter-distal region of palm. Different orientation of ridges extracted from inter-distal region appears as a fine texture. We use these fine textures for validating samples of Palm print. Reduction in size of the image, its optimal storage, retrieval, computational efficiency without compromising the fine features of the palm sample and use of simple discriminating features to validate a given palm sample has motivated this paper. The results confirm the proposed methodology in this paper is most efficient one.
- Rafal Kozik and Michal Chora "Combined Shape and Texture Information for Palmprint Biometrics"; Journal of Information Assurance and Security vol. 5 2010 PP 60-66.

Index Terms

Computer Science  Pattern Recognition

Keywords

Inter-distal Region  Tri-radiated Section  Low Pass Filter  Gabor Filter  Texture Feature

Manhattan Distance