A Model based Approach for Multimodal Biometric Recognition

International Journal of Computer Applications
© 2014 by IJCA Journal

Volume 104 - Number 11
Year of Publication: 2014

Authors:
Manas Kumar Choudhury
Y. Srinivas

10.5120/18250-9338

Abstract

This paper presents a novel method for recognition of user identity based on multiple traits. In this approach, the concepts of fusion together with Generalized Gamma Distribution (GGD) are utilized. The performance of the model is evaluated using synthetic data and evaluation is carried out by considering metrics like False Acceptance Rate (FAR), and False Rejection Rate (FRR).

References

A Model based Approach for Multimodal Biometric Recognition

- David Zhang, Akbar Ghobakhlo and Nikola Kasabov, An Adaptive Model of Person Identification Combining Speech and Image Information; 2004 8th International Conference on Control, Automation, Robotics and Vision Kunming, China, 6-9th December 2004
- Michael Goh Kah Ong, Tee Connie, Andrew Teoh Beng Jin, David Ngo Chek Ling, A single-sensor hand geometry and palm print verification system; Proceedings of the 2003 ACM SIGMM workshop
- John Daugman, How Iris Recognition Works; IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS FOR VIDEO TECHNOLOGY, VOL. 14, NO. 1, JANUARY 2004
- Arun Rose, Anil Jain and Sharat Pankanti, A Hand Geometry Based Verification System;
- Boreki, Guilherm, Zimmer, Alessandro, Hand Geometry Feature Extraction through Curvature Profile Analysis; UNICENP, Computer Engineering Department, 2004
- John Daugman, Biometric Decision Landscapes; University of Cambridge the Computer Laboratory, England.

Index Terms

Computer Science

Security
A Model based Approach for Multimodal Biometric Recognition

Keywords
Multimodal biometric  Fusion  Generalized Gamma Distribution (GGD)  FAR  FRR