Abstract

To obtain secure and accurate authentication system using most accepted biometrics Hand geometry in multimodal approach. Implement multi modal person authentication system using single input image with efficient features. In this proposed method Hand geometry and selected window size palm print features computed from same image is used for authentication. Integrating the features increases robustness of the system. Discrete Wavelet Transform (DWT) is used for feature extraction and Support Vector Machine (SVM) is proposed for classification. The final decision is made by fusion at matching score level. Experiments are carried out on the publicly available GPDS Hand Database. The achieved experimental results GAR=99.47%, FAR=0% showed the effectiveness of system considered for high security applications.

References

Multimodal Biometrics for Person Authentication using Hand Image


Multimodal Biometrics for Person Authentication using Hand Image

Intelligence”, vol. 27, no. 11, pp. 1698-1709, November 2005.

- GPDS hand database, http://www.gpds.ulpgc.es/download/.

Index Terms

Computer Science

Pattern Recognition
Keywords
Hand geometry  palm print  multi modal biometrics  DWT  SVM  Score level fusion