

Multimodal biometric recognition based on fusion of low resolution face and finger veins

Abstract:

Multimodal biometric systems utilize multiple biometric sources in order to increase robustness as compared to single biometric system. Most of the biometric systems in real are single or multimodal authentication system. This paper presents an efficient multimodal low resolution face and finger veins biometric recognition system based on class specific liner discriminant to client specific discriminant analysis and finger veins fusion at score level. Simulation results show that the proposed multimodal recognition system is very efficient to reduce the FAR and increase GAR, but it is more computationally complex due to processing involved in layered computation of LDA and CSLDA at runtime.