Abstract

Many recent events, such as terrorist attacks, have exposed the serious weaknesses in most sophisticated security systems. Three dimensional (3D) human face recognition is emerging as a significant biometric technology. Research interest in 3D face recognition has increased during recent years due to the availability of improved 3D acquisition devices and processing algorithms. In this paper, the novel method for three dimensional (3D) face recognition using Radon transform and Symbolic LDA based features of 3D range face images is proposed. In this method, the Symbolic LDA based feature computation takes into account the face image variations to a larger extent and has the advantage of dimensionality reduction. The experimental results have yielded 99.50% recognition performance with reduced computational cost, which compares well with other state-of-the-art methods.

References


**Index Terms**

Computer Science

Pattern Recognition
Keywords
3D face recognition  range image  radon transform  Symbolic  LDA