Abstract

This paper proposes a novel and efficient methodology for the detection of smile in face images captured in real-world scenarios. It is a challenging research area and possesses so many potential applications in new interface for entertainment systems, expression recognition technologies, social robots etc. This project proposes an efficient approach to multiview smile detection, in which the intensity differences between pixels in the grey scale face images are used as simple features. Gabor wavelet features in which facial expressions are analysed using a multi-orientation set of Gabor wavelets which are in alignment with the face is adopted in this work. Decision tree Classifier is chosen for classification of smile and non-smile faces. The experimental results illustrates that the algorithm achieves very good performance on the database, exceeding or competing with the state-of-art methods. The proposed method is compared with the existing methods and this method is efficient and has good accuracy.
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Index Terms

Computer Science
Pattern Recognition
Keywords
  Gabor wavelet Feature Extraction  Decision tree classifier