Abstract

Ear detection is a new class of relatively stable biometrics which is not affected by facial expressions, cosmetics, eye glasses and aging effects. Ear detection is the first step of an ear recognition system, to use ear biometrics for human identification. In this paper, we have presented two approaches to detect ear from 2D side face images. One is edge detection based method and the other is template matching method. For both the methods, the
correctness of the detected ear is verified using support vector machine tool. For template matching method it is also verified by Euclidian distance. The purpose of the paper is also to compare the results of both the presented methods. The experimental results prove the effectiveness of these methods.

Reference

- B V Srinivasan “Ear Extraction From the Image of a Human Face”. University of Maryland, College Park.

Index Terms

Computer Science
Intelligent Systems
Key words

Ear biometrics
ear
detection
ear verification

detection

edge detection

template matching