Abstract

This paper aims to detect the face in the digital image with the combination of morphological operations, Local Binary Pattern descriptor and with the moment invariants. In the digital image, the detection of face has gained much importance in the last decade, with enormous applications in the field of law enforcement and security. Although, to detect the face is an extremely simple task for the human eye, automating the process to a computer requires the use of various image processing techniques. In this paper since the combined approach is used, it strengthens the detection phase and also it helps to find the symmetric property of the face. Since the face detection is the initial step for face recognition, this proposed method can be used to detect the face in recognition of the face.

References

- Raphael Feraud, Olivier J. Bernier, Jean-Emmanuel Viallet, and Michel Collobert, "A Fast and Accurate Face Detector Based on Neural Networks," IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE, VOL. 23, NO. 1, JANUARY 2001
A Combined Approach for Face Detection


**Index Terms**

Computer Science  
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**Keywords**

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