Abstract

Face recognition is a high-dimensional pattern recognition problem. It has rapidly evolved and has become very popular in recent years. In this paper, an efficient technique for face recognition based on genetic programming is proposed. Genetic programming is an evolutionary computation technique that automatically solves problems without having to tell the computer explicitly how to do it. Features extracting is one of the most important steps in this technique. The main goal of this paper is to answer the question "Who am I?". Further, the proposed technique is not affected by face recognition aspects such as lighting condition, varying facial expression, and varying pose. The results demonstrate that the proposed technique can obtain better performances than other existing face recognition techniques.

References

- Jie Zou, Qiang Ji, and George Nagy, "A Comparative Study of Local Matching"
- V. Akalin, "Face Recognition Using Eigenfaces and Neural Networks," A thesis submitted to the graduate school of natural and applied sciences of the Middle East Technical University, December, 2003.
Genetic Programming based Face Recognition


Index Terms

Computer Science

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Keywords

Face recognition  genetic programming  and geometric feature based method