عنوان مقاله:

Artificial neural networks-based face recognition

محل انتشار:

نویسنده:

Mohammadnabi Omidvar - *Department of Computer Engineering, Firoozabad Branch , Islamic Azad University, Firoozabad , Iran*

خلاصه مقاله:

Image processing is considered one of the important branches of computer science and researchers are recently using artificial intelligence in this field. Face recognition is one of the most challengeable technologies, which is based on biometrics, and also one of the most potential technologies[۱۳]. This paper present a new method of face recognition based on integrating the results of two different neural networks. this method is not relying on the positions of eyes and lip and even if the face is partially covered, the method appears fault tolerant. we learned that by the help of other face specifications, it could be recognized by an acceptable percentage. All the experiments of the study were carried out based on the ORL (Olivetti Research Laboratory) database. For the selected numbers of ۲۰, ۳۰, and ۴۰ subjects, we came to the results of ۹۰%, ۸۶%, and ۸۴.۵% respectively and with time delay of ۰.۰۶۲۹ sec per image. Considering that this method was previously implemented with a combination of ear positions, we concluded that in terms of execution time, the new method has less time and in terms of accuracy, this method has recorded a higheraccuracy.

کلمات کلیدی:

image processing, Face recognition, neural network, back propagation algorithm

لینک ثابت مقاله در پایگاه سیویلیکا: