Abstract

In recent days, the need of biometric security system is heightened for providing safety and security against terrorist attacks, robbery, etc. The demand of biometric system has risen due to its strength, efficiency and easy availability. One of the most effective, highly authenticated and easily adaptable biometric security systems is facial feature recognition. This paper has covered almost all the techniques for face recognition approaches. It also covers the relative analysis between all the approaches which are useful in face recognition. Consideration of merits and demerits of all techniques is done and recognition rates of all the techniques are also compared.

References

- Proyecto Fin de Carrera, Face Recognition Algorithms.
- F. Samaria, &quot;Face Recognition Using Hidden Markov Models,&quot; PhD dissertation, Trinity College, University of Cambridge.
- T. Cootes, C. Taylor, Statistical models of appearance for computer vision, Technical Report, University of Manchester, Imaging Science and Biomedical Engineering, Manchester M13 9PT, United Kingdom, September 1999.
Comparative Analysis of Face Recognition Approaches: A Survey

- Danijela Vukadinovic and Maja Pantic &quot;Fully Automatic Facial Feature Point Detection Using Gabor Feature Based Boosted Classifiers,&quot; 2005 IEEE International Conference on Systems, Man and Cybernetics Waikoloa, Hawaii October 10-12, 2005
- Jing Shao, Jia-fu Jiang, Xiao-wei Liu, "Biomimetic Pattern Face Recognition Based on DCT and LDA," Artificial Intelligence and Computational Intelligence Lecture Notes in
Comparative Analysis of Face Recognition Approaches: A Survey

Comparative Analysis of Face Recognition Approaches: A Survey

Computer Science Volume 7004, 2011, pp 170-177


- Randa Atta and Mohammad Ghanbari, &apos;Low-Memory Requirement and Efficient Face Recognition System Based on DCT Pyramid&apos;, IEEE Transactions on Consumer Electronics, Vol. 56, No. 3, August 2010


- D. J. Beymer, Face recognition under varying pose, in A. I. Memo, MITAI Lab, no. 1464, 1993.

- D. Beymer, A. Shashua, and T. Poggio, Example based image analysis and synthesis, in A. I. Memo, Artificial Intelligence Laboratory, MIT, no. 1431, 1993.


Comparative Analysis of Face Recognition Approaches: A Survey

- Face Recognition Using Self-Organizing Maps, Qiu Chen, Koji Kotani, Feifei Lee and Tadahiro Ohmi, Tohoku University, Japan.
Comparative Analysis of Face Recognition Approaches: A Survey

- Gregoire Lefebvre and Christophe Garcia, A probabilistic Self-Organizing Map for facial recognition, 19th International Conference on Pattern Recognition, (ICPR) 8-11 Dec. 2008 Page(s): 1 - 4
- Wenchao Zhang, Shiguang Shan, Xilin Chen and Wen Gao, Local Gabor Binary Patterns Based on Kullback–Leibler Divergence for Partially Occluded Face Recognition, IEEE signal processing letters, vol. 14, no. 11, November 2007.
- Zhifeng Li, Unsang Park, and Anil K. Jain A Discriminative Model for Age
Invarianc e Face Recognition”- IEEE transactions on information forensics and security, vol.6, no. 3, september 2011.
- A. Nefian,”A Hidden Markov Model-Based Approach for Face Detection and Recognition”, PhD dissertation in Electrical Engineering, Georgia Institute of Technology

Index Terms

Computer Science Pattern Recognition

Keywords

Still Face Recognition Video Face Recognition Biometric System