A Face Recognition System using PCA and AI Technique

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Abstract

In this paper a proficient posture invariant face recognition framework utilizing PCA and AI has been proposed. The peculiarities of an image under test have been extracted utilizing PCA then neuro fuzzy based framework ANFIS is utilized for recognition. The primary reason for this paper is to decrease the computational complexities in the face recognition framework. The proposed framework will perceive the face images under an assortment of stance conditions by utilizing AI based system. The preparation face image dataset will be handled by PCA procedure to register the score esteem, which will be then used in the recognition process. The score values from the distinctive posture images will be given as data to the Neuro-Fuzzy based ANFIS System. The Neuro-Fuzzy based ANFIS System will achieve the recognition transform by taking the info score estimations of the data images and perceive the information face images with the assistance of predefined limit esteem. The proposed face recognition system with Neuro-Fuzzy based ANFIS System will perceive the information face images productively with high recognition proportion. The proposed methodology will be actualized in the MATLAB stage and it will be assessed by utilizing an assortment of database images under different
posture invariant conditions. Accordingly, proposed framework will effectively perceive the face images focused around the blend of scores acquired from the posture invariant procedure.

**References**

8. Xi Li, Kazuhiro Fukui and Nanning Zheng, "Image-set based Face Recognition Using Boosted Global and Local Principal Angles", Springer Lecture Notes in Computer Science (LNCS), 2009
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Index Terms

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Keywords

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