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RESEARCH ARTICLE

An Investigation of Face Recognition Characteristics Using PCA and ICA

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Abstract

This aims to investigate the face recognition characteristics using widely adopted statistical approaches (i.e., Principal Component Analysis (PCA) and Independent Component Analysis (ICA)). This paper focus on Eigen faces approach for implementing the face recognition and detection on the images to compare the performance of PCA and ICA. Moreover, our results are reveals that based on applied condition and performance metric, turning ICA produce better results than PCA. The managerial practices and results of the paper have presented.

Key words: face detection, recognition, PCA, ICA, image processing, embedded system

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