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# COMPARATIVE STUDY OF FACE REPRESENTATION METHODS FOR EFFICIENT FACE RECOGNITION USING SINGULAR FEATURES

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**Abstract**

Automatic human face recognition is a difficult but significant problem. A method for face recognition based on singular-value feature vectors is discussed. Three algorithms of face recognition based on singular-value feature vectors are proposed. These algorithms are face recognition using principal component analysis based on singular-value feature vectors, face recognition by Fisher linear discriminant analysis based on singular-value feature vectors, and face recognition using the discriminant Karhunen Loeve (DKL) transform based on singular-value feature vectors. Experimental results show that face recognition based on singular-value feature vectors is effective

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**Keywords :** Automatic face recognition, Appearance based recognition, Principal component Feature extraction statistical approaches ,template based approaches),and feature based methods eigenface fisherface Fisher's Linear Discriminant (FLD) ,singular values, fractional Singular value