



## FACE RECOGNITION USING COMMON MATRIX APPROACH (ThuAmOR3)

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★ Abstract :

In this paper, a new approach which is called the common matrix approach is proposed for face recognition. The common matrix for each class can be calculated either using Gram–Schmidt orthogonalization method or using scatter matrix of each class. In both methods, orthonormal matrices in the indifference subspace represent the directions that contain important discriminative information. The proposed approach overcomes the small sample size problem and the dimensionality problem in face recognition. The applications on AR–Face database give satisfactory results.