

BIASED DISCRIMINANT ACTIVE CLASSIFICATION TECHNIQUE

S. ARUNA MASTANI

Abstract

The important stages in any pattern recognition system are the Data representation, Feature extraction and Classification. To some extent the division of feature extraction and classification is artificial, because a good Feature extractor which extracts the discriminant features makes the job of Classifier trivial, and conversely an omnipotent classifier may not need the help of good feature extractor. However most of the pattern recognition systems design a classifier based on the features extracted from the training samples, so if an efficient classifier which is strong enough that feature extraction stage is subsided the system will be faster. Keeping this in view a strong classifier is designed that is based on invariant clustering criteria and is compared through experiments using the well-known ORL and UMIST face databases. with traditional face recognition systems like the Fisher's Linear Discriminant Analysis(FLDA), Direct Discriminant Analysis(DLDA), Nullspace Discriminant Analysis(NLDA).

Key Words : *Feature extraction, Unsupervised Classification, Clustering, Biased Discriminant Analysis, Face Recognition.*

©Ascent Publication House: [http:// www.ascent-journals.com](http://www.ascent-journals.com)