



RESEARCH ARTICLE

Modified Approaches on Face Recognition By using Multisensory Image

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Abstract— A feature selection technique along with an information fusion procedure for improving the recognition accuracy of a visual and thermal image-based facial recognition system is presented in this study. A novel modular Kernel Eigen spaces approach is developed and implemented on the phase congruency feature maps extracted from the visual and thermal images individually. This study proposes a novel face recognition method which exploits both global and local discriminative features. In this method, global features are extracted from the whole face images by keeping the low-frequency coefficients of fourier transform, which we believe encodes the holistic facial Information, such as facial contour. For local feature extraction, Gabor wavelets are exploited considering their biological relevance. After that, to the global fourier features and each local patch of Gabor features.

Key Terms: - Ensemble classifier; face recognition; feature extraction; Fisher's Linear Discriminant (FLD); image fusion; kernel methods; phase congruency

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