MUGSHOT IDENTIFICATION FROM MANIPULATED FACIAL IMAGES

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Abstract- Editing digital images is ubiquitous. Identification of deliberately modified facial images is a new challenge for face identification system. In this paper, we address the problem of identification of a face or person from heavily altered facial images. Query is a manipulated or transformed face image and the system reports back the determined identity from a database of known individuals. Such a system can be useful in mugshot identification in which mugshot database contains two views (frontal and profile) of each criminal. We considered only frontal view from the available database for face identification. We propose SIFT features for efficient face identification in this scenario. Further comparative analysis has been given with well known eigenface approach. Experiments have been conducted with real case images to evaluate the performance of both methods.

Keywords- Mugshots, Image Tampering, Face Identification, SIFT, PCA.

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