A New Approach to Predicting Physical Biometrics from Behavioural Biometrics

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Abstract : A relationship between face and signature biometrics is established in this paper. A new approach is developed to predict faces from signatures by using artificial intelligence. A multilayer perceptron (MLP) neural network is used to generate face details from features extracted from signatures, here face is the physical biometric and signatures is the behavioural biometric. The new method establishes a relationship between the two biometrics and regenerates a visible face image from the signature features. Furthermore, the performance efficiencies of our new technique are demonstrated in terms of minimum error rates compared to published work.