

New Approach for Constructing a Secure Biometric Database

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Abstract : The multimodal biometric identification is the combination of several biometric systems. The challenge of this combination is to reduce some limitations of systems based on a single modality while significantly improving performance. In this paper, we propose a new approach to the construction and the protection of a multimodal biometric database dedicated to an identification system. We use a topological watermarking to hide the relation between face image and the registered descriptors extracted from other modalities of the same person for more secure user identification.

Keywords : biometric databases, multimodal biometrics, security authentication, digital watermarking

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