Size-Reduction Strategies for Iris Codes

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Abstract : Iris codes contain bits with different entropy. This work investigates different strategies to reduce the size of iris code templates with the aim of reducing storage requirements and computational demand in the matching process. Besides simple sub-sampling schemes, also a binary multi-resolution representation as used in the JBIG hierarchical coding mode is assessed. We find that iris code template size can be reduced significantly while maintaining recognition accuracy. Besides, we propose a two stage identification approach, using small-sized iris code templates in a pre-selection satge, and full resolution templates for final identification, which shows promising recognition behaviour.

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