Unconstrained Biometrics: Advances and Trends

A Special Track of the

6th International Symposium on Visual Computing (ISVC10)

http://www.isvc.net

Scope:

Some of the biological traits used to perform biometric recognition support contactless data acquisition and can be acquired covertly. Thus, at least in theory, the subsequent biometric recognition procedure can be performed without subjects' knowledge and in uncontrolled scenarios. The feasibility of this type of recognition has received increasing attention and is of particular interest in visual surveillance, computer forensics, threat assessment, and other security applications. Though a growing number of researchers are involved in the development of biometric recognition systems that can operate in unconstrained conditions, many problems remain to be solved, including the design of techniques to handle varying illumination sources, changes in poses and distances, or blurred and low quality data resulting from such acquisition conditions. The development of techniques effective in such challenging situations requires vigorous research efforts. This special track is particularly interested in emerging strategies to perform biometric recognition under uncontrolled data acquisition conditions that can be ideally used in covert applications.

Topics:

The topics of interest include but are not limited to the following areas:

- Less controlled / covert data acquisition frameworks.
- Segmentation of poor quality biometric data.
- Biometric data quality assessment.
- Normalization of poor quality biometric data.
- Contactless biometric recognition strategies (iris/gait/ear/face/body thermal…).
- Biometric recognition robustness to data resolution, illumination, distance, pose, motion, occlusions.
- Multispectral biometric recognition.
- Multimodal biometrics; fusion at different levels.
- High confidence automatic surveillance.
- Announcement of challenging biometric data sets.
- Biometric recognition benchmarks for unconstrained data acquisition environments.

Paper Submission Procedure:

Papers submitted to ISVC 2010 Special Track must not have been previously published and must not be currently under consideration for publication elsewhere. Manuscripts should be submitted in camera-ready format and should not exceed **12 pages**, including figures and tables (see http://www.isvc.net for details). All papers accepted will appear in the symposium proceedings which will be published by **Springer-Verlag** in the **Lecture Notes in Computer Science (LNCS)** series.

Important Dates:

Paper submissions	July 12, 2010
Notification of acceptance	August 31, 2010
Final camera ready paper	September 15, 2010
Advance Registration	September 15, 2010
ISVC10 Symposium	November 29 - December 1, 2010

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