

# Unconstrained Biometrics: Challenges and Applications

# A Special Track of the 10<sup>th</sup> International Symposium on Visual Computing (ISVC'14)

# http://www.isvc.net

# December 8-10, 2014, Las Vegas, Nevada, USA

#### Scope:

Some of the traits used to perform biometric recognition support contactless data acquisition and can be acquired covertly, which is particularly interesting to bridge the gap between "biometrics", "visual surveillance" and "forensics". 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. Also, particular attention will be given to biometric recognition from handheld devices and to the assessment of soft biometric information (e.g., gender, race, age,...) using data acquired from such type of devices.

# **Topics:**

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

- Biometric recognition robustness to data resolution, illumination, distance, pose, motion and occlusions.
- Multimodal biometrics; fusion at different levels.
- High confidence automatic surveillance.
- Less controlled / covert data acquisition frameworks.
- Contactless biometric recognition strategies (iris/gait/ear/face/body thermal...).
- Announcement of challenging biometric data sets.
- Biometric recognition benchmarks for unconstrained data acquisition environments.
- Biometric recognition in handheld devices.
- Negative biometric recognition from degraded data.
- Assessment of soft biometric traits.

# Paper Submission Procedure:

Papers submitted to ISVC 2014 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 <a href="http://www.isvc.net">http://www.isvc.net</a> 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 Notification of acceptance Final camera ready paper Advance Registration ISVC'14 Symposium August 23, 2014 October 7, 2014 October 31, 2014 October 31, 2014 December 8-10, 2014

# **Organizers:**

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