

Call for Papers

Signal, Image and Video Processing Journal

Special Issue on

"Unconstrained Biometrics: Advances and Trends"

Signal, Image and Video Processing Journal (Springer publishing) seeks original manuscripts for a Special Issue on "*Unconstrained Biometrics: Advances and Trends*", scheduled to appear in the third issue of 2011.

Some of the biological traits used to perform biometric recognition support contactless data acquisition and can be imaged covertly. Thus, at least theoretically, 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 areas. Though a growing number of researchers are concerned about the development of biometric recognition systems that operate in unconstrained conditions, many problems remain to be solved: how to deal with varying illumination sources, variations in poses and distances or blurred and low quality data resultant of such acquisition conditions. The proposal of techniques effective in such challenging situations requires vigorous research efforts. This special issue is particularly interested in emerging strategies to perform biometric recognition under uncontrolled data acquisition conditions, ideally fully covert ones.

Topics of interest include, but are not strictly limited to:

- 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; 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.

Submitted papers should not have been previously published or currently submitted for journal publication elsewhere. Authors should follow the format instructions (*available at the journal's web page: <http://www.springer.com/engineering/signals/journal/11760>*) and submit an electronic copy of their manuscript via the web-based submission system at: <http://sigpro.di.ubi.pt>. All submissions will be peer-reviewed by at least three referees. Please feel free to contact the guest editors at: hugomcp@di.ubi.pt, yidu@iupui.edu or jacobs@inf.ufrgs.br, in case of any doubt or question.

Please note the following important dates:

- Submission deadline: September 15th, 2010.
- First notification: November 15th, 2010.
- Revisions due: February 15th, 2010.
- Notification of final decision: March 31th, 2011.
- Final manuscript due: April 15th, 2011.
- Publication date: third issue of 2011.

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