IEEE Transactions on Systems, Man and Cybernetics: Systems Special Issue on "Biometric Systems and Applications"

Biometrics is nowadays an important application area receiving continuously growing interest from the academia, the industry, the government, and the general public, due to the criticality and the social impact of the applications themselves. The increasing needs for security and medical diagnosis as well as for adaptive environments make biometrics more and more valuable world-wide, both as theory, technologies, design methodologies, systems and applications are concerned.

Biometrics is highly interdisciplinary, encompassing various aspects in different disciplines (e.g., physiology, biology, medicine, psychology, sociology, chemistry, physics, material sciences, computer science, computer engineering, electronics, system automation, telecommunications, and economics). Inter-disciplinary and synergetic interactions among disciplines are key aspects of this area. To create a biometric system various issues need to be studied in an integrated way: from sensing to measurement procedures, from signal analysis and interpretation to quality assessment, from feature extraction to classification and analysis, from knowledge creation to extraction, from algorithms to data structure, from large data base management to interoperability, from computational complexity to system performance, from system engineering to software engineering, from privacy to social implications, and much more. Integration and cooperative combination are another key aspects if biometrics systems and applications.

This special issue is directed to collect original papers that address any aspect of the design, implementation and application of biometrics systems. Research areas of relevance to this issue would therefore include, but not be limited to, the following topics at system level:

- Biometrics sensing systems
- Multi-sensor multi-modal analysis, fusion and features extraction in biometrics systems
- Biometrics systems engineering
- Networking biometrics systems and applications
- Privacy, anonymity and security in biometrics systems
- Biometric knowledge systems
- Integration and interoperability in biometrics systems
- Adaptable biometrics systems
- Reliability, availability and dependability of biometrics systems
- Human factors in biometrics systems
- Biometrics systems for security applications (e.g., authentication, surveillance, computer security, national defense, transportation)
- Biometrics systems for secure applications (e.g., e-commerce, e-banking, e-government)
- Biometrics systems for medical applications
- Biometric systems for adaptive environments
- Management and operations of biometrics systems
- Social implications of biometrics systems

SUBMISSION DETAILS

Authors are invited to submit original research contributions in PDF format the IEEE T-SMCA Submission System at http://mc.manuscriptcentral.com/smca-ieee. Authors should put the following text in the Cover Letter to Editor-in-Chief section: "This manuscript is submitted for the Special Issue on Biometric Systems and Applications (editors: M. Nappi, V. Piuri, T. Tan, D. Zhang)". For detailed submission information, please refer to Information for Authors at http://www.ieee-smc.org/publications/index.html. Questions about the special issue should be directed to Prof. Vincenzo Piuri (vincenzo.piuri@unimi.it).

SCHEDULE

Submission deadline:	March 31, 2013	Minor revision deadline:	October 20, 2013
Notification of first review:	June 15, 2013	Final recommendation:	November 30, 2013
Revised submission deadline:	July 31, 2013	Final manuscript:	December 20, 2013
Notification of the re-review:	September 20, 2013	Expected publication:	late 2014

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