



SPIE

Connecting minds. Advancing light.

Call for Papers

Biometric Technology for Human Identification VII (DS108)

Part of the SPIE International Symposium on Defense, Security + Sensing
5-9 April 2010 • Orlando World Center Marriott Resort & Convention Center • Orlando, FL United States

Conference Chairs: **B.V.K. Vijaya Kumar**, Carnegie Mellon Univ. (United States); **Salil Prabhakar**, DigitalPersona, Inc. (United States); **Arun A. Ross**, West Virginia Univ. (United States)

Program Committee: **George N. Bebis**, Univ. of Nevada/Reno (United States); **Patrizio Campisi**, Univ. degli Studi di Roma Tre (Italy); **Dirk J. Colbry**, Michigan State Univ. (United States); **Julian Fierrez**, Univ. Autónoma de Madrid (Spain); **Patrick J. Flynn**, Univ. of Notre Dame (United States); **Michael D. Garris**, National Institute of Standards and Technology (United States); **Venu Govindaraju**, University at Buffalo (United States); **John M. Irvine**, Charles Stark Draper Labs (United States); **Anil K. Jain**, Michigan State Univ. (United States); **Sabah Jassim**, University of Buckingham (United Kingdom); **Ioannis Kakadiaris**, University of Houston (United States); **Josef Kittler**, Univ. of Surrey (United Kingdom); **Ajay Kumar**, Hong Kong Polytechnic University (Hong Kong); **Stan Z. Li**, Chinese Academy of Sciences (China); **Davide Maltoni**, Univ. degli Studi di Bologna (Italy); **Brian Martin**, L-1 Identity Solutions (United States); **Karthik Nandakumar**, Institute for InfoComm Research (Singapore); **Lisa A. Osadciw**, Syracuse Univ. (United States); **Konstantinos N. Plataniotis**, Univ. of Toronto (Canada); **Amit Roy-Chowdhury**, Univ. of California/Riverside (United States); **Sudeep Sarkar**, Univ. of South Florida (United States); **Marios Savvides**, Carnegie Mellon Univ. (United States); **Michael E. Schuckers**, St. Lawrence Univ. (United States); **Alex Stoianov**, Information and Privacy Commissioner/Ontario (Canada); **Kar-Ann Toh**, Yonsei Univ. (Korea, Republic of); **Berrin Yanikoglu**, Sabanci Univ. (Turkey)

FOR CONFERENCE DS108 ONLY

In addition to the abstract that is due in September, prospective authors are REQUIRED to submit, at the same time, a Supplemental File that includes a full paper (maximum of 12 pages including text, figures, and bibliography) to facilitate the review process.

Abstract submissions without the required Supplemental File will neither be reviewed nor considered for acceptance.

Biometrics is the science of establishing human identity based on the physical and behavioral characteristics of an individual such as fingerprints, iris, face, voice, hand geometry, gait, etc. Reliable automatic recognition of humans is a very important topic in a number of law enforcement (e.g., criminal investigation), government (e.g., border control), and commercial (e.g., logical and physical access control) applications. With increased emphasis on national and global security, there is a growing and urgent need to automatically identify humans both locally and remotely on a routine basis. Biometrics is a rapidly evolving field that engages the research of multiple disciplines including sensor design, pattern recognition, computer vision, image analysis, signal processing, statistics, computer security, etc. The purpose of this conference is to provide a scientific forum for researchers, engineers, system architects, and designers to report recent advances in this important area of human identification using biometrics. Suggested topics for presentation include, but are not limited to:

Biometric Theory

- pattern recognition
- computer vision
- image processing
- statistical analysis.

Biometric Acquisition and Transmission

- novel sensor design

- collaborative data acquisition
- multi-sensor biometric networks
- secure biometric transmission

Biometric Modalities

- fingerprint and palmprint
- face (grayscale, color, multispectral, 3D, video, etc.)
- iris
- hand geometry
- speech
- signature/handwriting
- gait
- novel biometrics
- multimodal biometrics.

Biometric System Design and Evaluation

- scalable identification architectures
- real-time embedded systems
- biometric smart cards
- integration with RFID
- system interoperability
- performance prediction models

Biometric Security and Privacy

- liveness (spoof) detection
- template protection
- cancelable templates
- encryption and watermarking
- security analysis
- privacy enhancing technology
- template aging
- individuality models

Biometric Applications

- travel and transportation
- border control
- homeland security
- access control
- airport security
- law enforcement
- e-authentication.

Paper Submission Deadline: September 21, 2009
Final Manuscript Due Date: January 25, 2010