18th Int.l Summer School for
Advanced Studies on Biometrics for Secure Authentication

BIOMETRICS FOR AI / AI FOR BIOMETRICS

ENDORSED BY THE IAPR TECHNICAL COMMITTEE ON BIOMETRICS TC-4 (*IAPR APPROVAL PENDING)

TECHNICALLY CO-SPONSORED BY THE IEEE (*APPROVAL PENDING)

Alghero, Italy – May 31st – June 4th 2021

Contact: **tista@uniss.it**

http://biometrics.uniss.it

To face the expected travel limitations due to the Covid-19 outbreak, the school is planned as a mixed virtual event, allowing participation both in person and remotely with videoconference facilities

From the early days, when security was the driving force behind biometric research, today's challenges go far beyond security. Machine learning, Image understanding, Signal analysis, Neuroscience, Robotics, Forensic science, Digital forensics and other disciplines, converged in a truly multidisciplinary effort to devise and build advanced systems to facilitate the interpretation of signals recorded from individuals acting in a given environment. This is what we simply call today "Biometrics".

For the last eighteen years, the International Summer School on Biometrics has been closely following the developments in science and technology to offer a cutting edge, intensive training course, always up to date with the current state-of-the-art.

What are the most up-to-date core biometric technologies developed in the field? What is the potential impact of biometrics in forensic investigation and crime prevention? What can we learn from human perception? How to deploy current Deep Learning approaches? How to deal with *adversarial attacks* in biometric recognition?

This school follows the successful track of the International Summer Schools on Biometrics held since 2003. In this 18th edition, the courses will mainly focus on new and emerging issues:

- The impact of AI in Biometrics and Biometrics in AI;
- How to make "Deep Biometrics" systems *explainable*;
- Biometrics for social interactions and emerging applications;
- How to exploit new biometric technologies in forensic and security applications.

The courses will provide a clear and in-depth picture on the state-of-the-art in biometric verification/identification technology, both under the theoretical and scientific point of view as well as in diverse application domains. The lectures will be given by 18 outstanding experts in the field, from both academia and industry. An advanced feature of this summer school will be some practical sessions to better understand, "hands on", the real potential of today's biometric technologies.

APPLICATION DEADLINE: February 15th 2021
download application form: http://biometrics.uniss.it

University of Sassari

Participant application

The school will be open to about 50 highly qualified, motivated and pre-selected applicants. Phd students, post-docs, researchers, forensic examiners, police officers and professionals are encouraged to apply. The expected school fees will be in the order of 1,600 € (400 € in videoconference) for students and 2,100 € (800 € in videoconference) for others. The fees will include full board accommodation, all courses and handling material.

A limited number of scholarships, partially covering the fees, will be awarded to Phd students, selected on the basis of their scientific background and on-going research work.
The scholarship request form can be downloaded from the school web site http://biometrics.uniss.it .

Phd students, researchers and post-docs are encouraged to submit a short paper (6 pages maximum) for an oral presentation on their recent research activity. Poster boards (both physical and electronic) will be also available to all participants to display their current research advances.

Send a filled application form (download from http://biometrics.uniss.it) together with a short curriculum vitae to:
Prof. Massimo Tistarelli – e-mail: biometricsummerschool@gmail.com

Advance pre-registration is strictly required by February 15th 2021

School location

The school will be hosted by Hotel Dei Pini (https://www.hoteldeipini.com/) in the Capo Caccia bay, near Alghero, Sardinia. This is one of the most beautiful resorts in the Mediterranean Sea. The structure is beautifully immersed into the Capo Caccia bay. The hotel Dei Pini has a recently renovated conference centre, fully equipped for scientific events. The school venue, as well as the surroundings, proved to be a perfect environment for the school activities.

School Committee

Massimo Tistarelli
Computer Vision Laboratory
University of Sassari, Italy

Josef Bigun
Department of Computer Science
Halmstad University, Sweden

Enrico Grosso
Computer Vision Laboratory
University of Sassari, Italy

Anil K. Jain
Biometrics laboratory
Michigan State University, US

Distinguished lecturers from past school editions

Josef Bigun
Halmstad University – Sweden

Thirimachos Bourlai
West Virginia University – USA

Kevin Bowyer
University of Notre Dame – USA

Vincent Bouatou
Safran Morpho – France

Deepak Chandra
Google Inc. – USA

Rama Chellappa
University of Maryland – USA

John Daugman
Cambridge University – UK

Farzin Deravi
University of Kent – UK

Andrzej Drygajlo
EPFL – Switzerland

Ida Gobbini
Dartmouth University – USA

James Haxby
Dartmouth University – USA

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Michigan State University – USA

Joseph Kittler
University of Surrey – UK

Chang-Tsun Li
Warwick University – UK

Davide Maltoni
Università di Bologna – Italy

Sebastien Marcel
IDIAP – Switzerland

John Mason
Swansea University – UK

Aldo Mattei
Arma dei Carabinieri – Italy

Didier Meuwly
Netherlands Forensic Institute – NL

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Responsible Technology – Italy

Mark Nixon
University of Southampton – UK

Alice O'Toole
University of Texas – USA

Maja Pantic
Imperial College – UK

Vishal Patel
Johns Hopkins University – USA

Jonhaton Phillips
NIST – USA

Tomaso Poggio
MIT – USA

Nalini Ratha
IBM – USA

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Harry Wechsler
George Mason University – USA

Lior Wolf
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