



**The Institute of Electrical and Electronics Engineers
(IEEE)
Galveston Bay Section
Joint Societies Chapters, LM-AG and Consulting-AG**



ONLINE Virtual Meeting

Friday, May 7th, 2021 10:00 AM- 11:00 AM US-CDT(Houston)

TOPIC: “Advanced Biometric Techniques”

Speaker: Prof. Vincenzo Piuri, FIEEE, Università degli Studi di Milano, Italy

Presentation: Biometrics concerns the study of automated methods for identifying an individual or recognizing an individual among many people by measuring one or more physical or behavioral features. Certain physical human features or behaviors are characteristics that are specific and can be uniquely associated to one person. Retinas, iris, DNA, fingerprint, palm print, or pattern of finger lengths are typical physical features that are specific to individuals. Also, the voice print, gait, or handwriting can be used to this purpose.

Nowadays biometrics is rapidly evolving. This science is getting more and more accurate in recognizing and identifying persons and behaviors. Consequently, these technologies become more and more attractive and effective in critical applications, such as to create safe personal IDs, to control the access to personal information or physical areas, to recognize terrorists or criminals, to study the movements of people, to monitor the human behavior, and to create adaptive environments. The use of biometrics in the real life often requires very complex signal and image processing and scene analysis, for example encompassing biometric feature extraction and identification, individual tracking, face tracking, eye tracking, liveness/anti-spoofing tests, and facial expression recognition.

This talk will review the main biometric traits and analyze the opportunities offered by biometric technologies and applications to support a broad variety of applications. Attention will be given to the current trends in research and applications.

Speaker: Vincenzo Piuri has received his Ph.D. in computer engineering at Polytechnic of Milan, Italy (1989). He is Full Professor in computer engineering at the University of Milan, Italy (since 2000). He has been Associate Professor at Polytechnic of Milan, Italy and Visiting Professor at the University of Texas at Austin, USA, and visiting researcher at George Mason University, USA. His main research interests are: artificial intelligence, computational intelligence, intelligent systems, machine learning, pattern analysis and recognition, signal and image processing, biometrics, intelligent measurement systems, industrial applications, digital processing architectures, fault tolerance, cloud computing infrastructures, and internet-of-things. Original results have been published in 400+ papers in international journals, proceedings of international conferences, books, and book chapters. He is Fellow of the IEEE, Distinguished Scientist of ACM, and Senior Member of INNS. He is President of the IEEE Systems Council (2020-21) and IEEE Region 8 Director-elect (2021-22), and has been IEEE Vice President for Technical Activities (2015), IEEE Director, President of the IEEE Computational Intelligence Society, Vice President for Education of the IEEE Biometrics Council, Vice President for Publications of the IEEE Instrumentation and Measurement Society and the IEEE Systems Council, and Vice President for Membership of the IEEE Computational Intelligence Society. He has been Editor-in-Chief of the IEEE Systems Journal (2013-19). He is Associate Editor of the IEEE Transactions on Cloud Computing and has been Associate Editor of the IEEE Transactions on Computers, the IEEE Transactions on Neural Networks, the IEEE Transactions on Instrumentation and Measurement, and IEEE Access.

He received the IEEE Instrumentation and Measurement Society Technical Award (2002) and the IEEE TAB Hall of Honor (2019). He is Honorary Professor at: Obuda University, Hungary; Guangdong University of Petrochemical Technology, China; Northeastern University, China; Muroran Institute of Technology, Japan; Amity University, India; and Galgotias University, India.

Registration is required by Thursday May 6th ,2021 5:00 PM Houston time to attend.

THIS SPECIAL PRESENTATION IS COMPLIMENTARY FOR ALL ATTENDEES (IEEE and Non-IEEE)

FOR REGISTRATION GO TO <https://events.vtools.ieee.org/m/270927>

Log-in Information will be provided to all registrants on Thursday May 6th after registration is closed.