Advanced Computational Technologies for Biomedical and Environmental Applications



Carlos M. Travieso-Gonzalez
University of Las Palmas de Gran Canaria, Spain

24 Giugno 2026, ore 15:00, Aula S, Edificio delle Bioscienze
Google Meet URL: https://meet.google.com/mqz-kvvi-msz

Abstract

This presentation introduces the University of Las Palmas de Gran Canaria and highlights a range of interdisciplinary bioapplications developed through research and innovation activities. The talk will provide an overview of applications in biometrics, biodiversity conservation, biomedicine, renewable energies, and other emerging fields where data-driven technologies contribute to solving real-world challenges. Particular emphasis will be placed on biomedical applications, including artificial intelligence solutions for dermatology, the development of digital twins for intensive care units (ICUs), and methods for detecting emotional states in patients with Alzheimer's disease and other neurodegenerative disorders. These examples illustrate the potential of advanced computational techniques to support healthcare, sustainability, and scientific progress.

Short bio

Carlos M. Travieso-González received an M.Sc. degree in 1997 in Telecommunication Engineering at the Polytechnic University of Catalonia (UPC), Spain; and a Ph.D. degree in 2002 at the University of Las Palmas de Gran Canaria (ULPGC-Spain). He is a Full Professor and Head of the Signals and Communications Department at the University of Las Palmas de Gran Canaria (ULPGC). He has been a faculty member at ULPGC since 2001, teaching signal processing, biomedicine, pattern recognition, and learning theory. His research interests encompass biometrics, biomedical signal and image processing, data mining, classification systems, machine learning, and environmental intelligence. He has researched in more than 53 International and Spanish Research Projects, some of them as head researcher. He is co-author of 4 books, co-editor of 25 Proceedings Books, and Guest Editor for eight JCR-ISI international journals and up to 24 book chapters. He has over 510 papers published in international journals and conferences (112 indexed on JCR – ISI - Web of Science). He has published 7 patents in the Spanish Patent and Trademark Office. He has been a supervisor on 13 PhD Thesis (7 more are under supervision) and 150 Master Thesis. He is the founder of The IEEE IWOBI conference series and President of its Steering Committee, The InnoEducaTIC conference series; and The APPIS conference series. He will be APPIS 2027 General Chair and was General Chair in APPIS 2026, CAIP 2025, APPIS 2025, APPIS 2024, APPIS 2023, APPIS 2022, APPIS 2020, IEEE-IWOBI 2020, APPIS 2019, IEEE-IWOBI 2019, IEEE-IWOBI 2018, APPIS 2018, InnoEducaTIC 2017, IEEE-IWOBI 2017, IEEE-IWOBI 2015, InnoEducaTIC 2014, IEEE-IWOBI 2014, IEEE-INES 2013, NoLISP 2011, JRBP 2012 and IEEE-ICCST 2005.

Contacts: Prof.ssa Marianna Milano (m.milano@unicz.it)