



UNIVERSITÀ
DI PAVIA

Ph.D. Program in Electronics, Computer Science and Electrical Engineering

SEMINAR

Image Processing and Hyperspectral Imaging in Industrial Applications

Dr Jaime Zabalza
University of Strathclyde

3rd September 2024 (11am)
Magenta Seminar Room, D Floor, Engineering School

Abstract:

Image processing and Hyperspectral Imaging (HSI) are transforming many industrial applications, making related techniques and tools invaluable in several sectors. HSI is becoming more accessible in recent years, allowing the development of potential new applications. However, these opportunities come at the cost of effective data processing, where pre-processing stages such as feature extraction can make a difference in the performance of the imaging techniques. This seminar will provide an overview of some case studies for real-world applications in industry, where different imaging modalities such as X-ray, RGB, video or HSI are used to capture data which is processed in a specific manner to meet the requirements for each application.

Bio:

Dr Jaime Zabalza (Member, IEEE) received the M.Eng. degree in Industrial Engineering from the Universitat Jaume I (UJI), Castellon, Spain, and the M.Sc. and Ph.D. degrees in Electronic and Electrical Engineering (EEE) from the University of Strathclyde, Glasgow, U.K. Shortly after completing his Ph.D. thesis, Dr. Zabalza was the recipient of the IET Image and Vision Section prize for Best Ph.D. Thesis, in London, 2016, for his work in hyperspectral remote sensing. After a prolific career as a post-doctoral researcher working with several industrial partners on real-world challenges, he is currently a Chancellor's Fellow (Assistant Professor/Lecturer) with the Centre for Signal and Image Processing (CeSIP) and the Advanced Nuclear Research Centre (ANRC), EEE Department, University of Strathclyde. His research interests include hyperspectral data analysis as well as signal and image processing in a wide range of applications.

Organizer

Prof. Paolo Gamba

Ph.D. Coordinator

Prof.ssa Ilaria Cristiani

Seminar in English

For more information: paolo.gamba@unipv.it