



University of Pavia

Ph.D. School of Electrical and Electronics Engineering and Computer Science

## SEMINAR

### Human Identification in the Wild: from Local to Holistic Approaches

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Aula Seminari (Ex Dip. di Elettronica), D floor  
Via Ferrata 5, Pavia

**Abstract:** The enormous availability of images, videos and multimedia contents freely shared on social networks have increased the interest in developing algorithms that, relying on biometric features, can recognize the same individual on different imagery taken under challenging conditions. Despite being a classic problem in computer vision, "Human Identification in the Wild" is still far from being solved. The term "In the Wild" highlights the complexity of the conditions under which people are captured, such as: changes in illumination, target's pose, occlusions and a variety of other factors. This seminar aims to introduce the problem of human identification and how the literature on this topic has rapidly grown in recent years. Computer vision approaches generally addressed this problem by designing local feature descriptors; these are human engineered descriptors built in order to capture recurring patterns in the image pixels or some related characteristics. Recently, deep learning approaches have been exploited to address such a task. It has been extensively demonstrated that such networks are able to retain the discriminative information of an image even in challenging conditions and perform recognition accurately.

**Bio:** Giuseppe Lisanti received the PhD degree in Computer Engineering, Multimedia and Telecommunication from the University of Florence in 2012. Since 2012 to 2017, he had been Postdoctoral Researcher at the Media Integration and Communication Center of the University of Florence and he is currently an Assistant Professor (L.240/2010 A.24 C.3 lettera a) at the University of Pavia. His research interests focus on computer vision, pattern recognition and machine learning for person detection and tracking, person re-identification and face recognition. He published more than 30 papers in the most prestigious journals and conferences on computer vision, multimedia and image processing. He is the lead organizer of the "International Workshop on Cross-domain Human Identification (ICCV'17)" and he gave a tutorial on "Person Re-Identification: Theory and Best Practice" at a conference of international relevance. He was also involved as area chair, publication chair and program committee member for several conferences and workshops of international relevance.

#### Organizer

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Seminar in English

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