



## [IJCNN 2017 Special Session on Machine Learning Methods applied to Vision and Robotics \(MLMVR\)](#)



Aims:

Over the last decades there has been an increasing interest in using machine learning methods combined with computer vision techniques to create autonomous systems that solve vision problems in different fields. This special session is designed to serve researchers and developers to publish original, innovative and state-of-the art algorithms and architectures for real time applications in the areas of computer vision, image processing, biometrics, virtual and augmented reality, neural networks, intelligent interfaces and biomimetic object-vision recognition.

This special session provides a platform for academics, developers, and industry-related researchers belonging to the vast communities of \*Neural Networks\*, \*Computational Intelligence\*, \*Machine Learning\*, \*Biometrics\*, \*Vision systems\*, and \*Robotics\*, to discuss, share experience and explore traditional and new areas of the computer vision and machine learning combined to solve a range of problems. The objective of the workshop is to integrate the growing international community of researchers working on the application of Machine Learning Methods in Vision and Robotics to a fruitful discussion on the evolution and the benefits of this technology to the society.

The Special Session topics can be identified by, but are not limited to, the following subjects:

- Artificial Vision
- Video tracking
- 3D Scene reconstruction
- 3D Tracking in Virtual Reality Environments
- 3D Volume visualization

- Computational Intelligence
- Machine Learning
- Intelligent Interfaces (User-friendly Man Machine Interface)
- Self-adaptation and self-organisational systems
- Deep Learning Architectures for vision
- Multi-camera and RGB-D camera systems
- Robust computer vision algorithms (operation under variable conditions, object tracking, behaviour analysis and learning, scene segmentation)
- Multi-modal Human Pose Recovery and Behavior Analysis
- Gesture and posture analysis and recognition
- Biometric Identification and Recognition
- Extraction of Biometric Features (fingerprint, iris, face, voice, palm, gait)
- Surveillance systems
- Robotic vision
- Hardware implementation and algorithms acceleration (GPUs, FPGA,s,...)

**Important dates:**

Paper Submission Deadline  
November 15, 2016

**Paper acceptance notification date**

January 20, 2017

**Final paper submission deadline**

February 20, 2017

**Conference**

May 14-19, 2017

**Submission Guidelines:**

Please follow the regular submission guidelines of IJCNN 2017. Please notify the chairs of your submission by sending an email to: [jgarcia@dtic.ua.es](mailto:jgarcia@dtic.ua.es).

**Journal special Issue**

A Journal special Issue with extended versions of best special session papers is being managed.

Previous special session best papers were published in Neural Processing Letters 2014 and Neural Computing and Applications 2015

**Chairs:**

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Main Conference webpage: <http://www.ijcnn.org/>  
Special session webpage: <http://www.dtic.ua.es/~jgarcia/IJCNN2017/>