

## INVITED SESSION SUMMARY

**Title of Session:**

Pattern Recognition for Decision Making Systems

**Name, Title and Affiliation of Chair:**

Dr. Paolo Crippa, Department of Information Engineering, Università Politecnica delle Marche  
Prof. Claudio Turchetti, Department of Information Engineering, Università Politecnica delle Marche

**Details of Session (including aim and scope):**

Pattern recognition is a fundamental issue in the design of many automated decision making systems. In these systems input data are typically acquired using sensors, then a representation of the acquired data is usually obtained using a feature extraction algorithm, and finally a decision is made based on the feature vector.

Particular interest is addressed to decision making systems based on pattern classification i.e. systems that are able to assign an unknown input pattern  $x$  to one out of more than two classes. Typical examples are image and face recognition, medical and healthcare decision making (ECG, EEG, sEMG, PPG, ...), and industrial quality control systems.

This session aims to present original, unpublished results on recent advances in pattern recognition for decision making systems. The suggested but not limited scope of the session includes the following topics:

- Healthcare Applications of Pattern Recognition
- Industrial and Medical Applications of Pattern Recognition;
- ECG, EEG, sEMG, PPG Based Recognition Systems
- Bioinformatics;
- Face Recognition;
- Speaker Recognition: Identification and Verification;
- Speech Recognition;
- Image Coding, Processing and Analysis;
- Computer Vision and Image understanding;
- Artificial Intelligent Techniques and Recognition;
- Document Processing and Recognition;
- Fuzzy and Hybrid Techniques in Pattern Recognition;
- Logical Combinatorial Pattern Recognition;
- Statistical & Structural Pattern Recognition;
- Neural Networks;
- Parallel and Distributed Pattern Recognition;
- Dimensionality Reduction in Pattern Recognition;
- Robotics and Remote Sensing Applications of Pattern Recognition;
- Shape and Texture Analysis;
- Signal Processing and Analysis;
- Special Hardware Architectures;
- Embedded Systems.

Not only theoretical papers but also practical application papers will be welcome.

The invited session papers should be prepared in Springer style and must be submitted electronically using the [KES-IDT 2017 conference web page](#) (follow the KES-IDT 2017 guidelines for more information on paper submission).

**Publication:**

The conference proceedings will be published by Springer as book chapters in a volume of the [KES Smart Innovation Systems and Technologies](#) series.

**Important dates:**

- Paper submission: **Extended 13 February 2017.**
- Notification of acceptance: **Extended 6 March 2017.**
- Camera ready papers submission: **Extended 20 March 2017.**
- Conference: 21 – 23 June 2017.

**Main Contributing Researchers / Research Centres (tentative, if known at this stage):****Website URL of Call for Papers (if any):****Email & Contact Details:**

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