

## September 12 – 15, 2017 - Limassol, Cyprus

# Call for Papers / Invitation to Special Session SS02. Emerging wireless technologies for human-machine interaction

### **Special Session Organizers**

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#### Aim:

The aim of the special session "Emerging wireless technologies for human-machine interaction" is to look for new research opportunities in the field of advanced human-machine interaction, with special focus on emerging solutions for learning/perception, communication and remote control. Collaborative human-machine environments consist of human operators and fixed/mobile machines (robots, manipulators, assembly line equipment, unmanned vehicles, etc...) working in cooperation while sharing the same space. Such interaction requires several technological challenges to be addressed, namely the real-time perception of the space as well as the accurate human body motion, gesture and activity recognition. In addition, the real-time control of machines imposes stringent requirements on the wireless communication technology, such as deterministic low latency (sub-1ms cycle time) and jitter, as well as high reliability. Such requirements will be target of next generation wireless communication standards (5G).

This special session will be focusing on (but not limited to) the following topics:

- Advanced vision and computing platforms for human-machine interaction applications, including collaborative manufacturing, robot safety systems, crowd sensing, assisted working/living, and applications
- Novel human sensing techniques for activity, gesture recognition, and sentiment perception, including wearable and haptic technologies
- Localization, human detection and motion tracking technologies in human machine shared workplaces
- Ultra-low latency communication systems for tight control loop applications

**Submission of Papers:** The working language of the conference is English. Papers are limited to 8 double column pages in a font no smaller than 10-points. Manuscripts must be submitted electronically in PDF format, according to the instructions contained in the Conference web site.

**Paper Acceptance:** Each accepted paper must be presented at the conference by one of the authors. The final manuscript must be accompanied by a registration form and a registration fee payment proof. All conference attendees, including authors and session chairpersons, must pay the conference registration fee, and their travel expenses.

**No-show Policy:** The ETFA2017 Organizing Committee reserves the right to exclude a paper from distribution after the conference at IEEE Xplore if the paper is not presented at the conference.

#### Author's Schedule:

Deadline for submission of special sessions papers: Notification of acceptance of special sessions papers: Deadline for submission of final manuscripts – special sessions: April 9, 2017 May 15, 2017 July 2, 2017