# STRUCTURES, ALGORITHMS, METHODS AND APPLICATIONS IN ARTIFICIAL INTELLIGENCE

#### Proposal for an INVITED SESSION at ICSTCC 2016

Invited session identification code: hhb34

## **Organizers:**

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#### **Motivation and objectives:**

The main aim of this session is to emphasize the "bidirectional interconnections" between the main research areas encompassed by ICSTCC 2016 (i.e. Automation and Robotics, Computer Science and Computer Engineering , Electronics and Instrumentation) and the research domains of the Artificial Intelligence (AI) field (genetic algorithms, neural networks, fuzzy systems etc.). Consequently, this session will provide a motivating environment for presenting and discussing research results concerning:

- approaches and trends in providing AI-based solutions (algorithms, structures, devices etc.) for solving challenging problems arising from these engineering fields (but not limited to them),
- ideas and suggestions emerging from engineering and science fields useful for the design of new algorithms, structures or devices for the Artificial Intelligence field.

This is an open point of view which allows integration of standard approaches for solving problems of Engineering, Mathematical Physics and other sciences with the bio-inspired approaches of AI field used in solving such tasks as pattern recognition, computer and robotic vision, decision making, multimedia and signal processing.

All submitted papers are expected to have a high scientific level and be within the area encompassed by the motivation and objectives of this session.

#### Note:

- 1. Papers submitted for a special session will be treated in the same manner as the regular papers.
- 2. The code of this invited session proposal is: hhb34