

INVITED SESSION SUMMARY

12th International KES Conference on AGENTS AND MULTI-AGENT SYSTEMS: TECHNOLOGIES AND APPLICATIONS

KES-AMSTA-18

Title of Session:

The design and implementation of Intelligent Agents and Multi-Agent Systems http://amsta-18.kesinternational.org/index.php

Name, Title and Affiliation of Chair: Lenin G. Lemus-Zúñiga- Universitat Politècnica de València. España

Co-Chair

Arnulfo Alanis Garza- Instituto Tecnológico de Tijuana. México

Details of Session (including aim and scope):

Energy systems are evolving. The importance of individual energy sources and options for power generation are changing, as are the ways in which electricity is transmitted and distributed. Power generation is becoming more and more decentralized making grid management increasingly complex. Electrical consumption continues to steadily rise all over the world. These challenges require cutting-edge products and services covering the entire energy value chain. Information and Communications Technologies (ICT) and IoT combined with Agents technology offers a good combination to provide smart solutions to Energy Systems challenges.

On the other, e-health can be defined as systems based on ICT, mobile and wireless communications, for healthcare purposes. These systems offer opportunities to improve the efficiency of care delivery, foster patient participation in treatment, allow real-time analysis of chronic disease and make it easier to put the patient first.

And last but not least, it is necessary to teach people topics related with ICT and Artificial Intelligence trends, for that purpose it is recommended to apply learning analytics.

And last but not least, agent based learning analytics can be use in teaching and learning environments, for example in teaching topics related with ICT and Artificial Intelligence.

To tackle challenges related with e-health, energy grids and assessment, agent technology can be applied because agent-oriented software is a mature technology.

List of topics of interest

- Co-operation between intelligent agents to improve patient management (e.g., distributed patient scheduling).
- Agents that provide remote or elderly care delivery.
- Agents that provide information about medical services.
- Multi-agent systems (MAS) for patient monitoring and diagnosis.
- Successful applications of agents and multi-agent systems in health care.
- MAS that improve medical training or education (e.g. tutoring systems).
- Medical agent-based decision support systems.
- Social acceptance of agent-based systems.
- Integration and use of medical ontologies.
- Use of ICT technologies to build GEI monitoring systems
- Design of Score boards to show in an efficient way assessment using agent technologies.
- Agents that provide information about energy consumptions and generation profiles.
- Multi-agent systems (MAS) for energy system monitoring.
- MAS that improve energy saving training.
- MAS applied to assessment.

Please submit your 5 to 10 page paper using the conference web page. http://amsta-18.kesinternational.org/prose.php

Publication:

Accepted papers will be published by Springer in a volume of the Book Series entitled: "Smart Innovation, Systems and Technologies Series" <u>http://www.springer.com/series/8767</u>

Papers to be considered for the conference must be submitted through the PROSE online Submission and review system available here.

Timelines

- Submission of Papers: 9 February 2018
- Notification of Acceptance: 18 February 2018
- Final paper publication files to be received by: 16 March 2018

Main Contributing Researchers / Research Centres (tentative, if known at this stage):

Dr. Lenin G. Lemus-Zúñiga (Universitat Politècnica de València. España) Dr. Arnulfo Alanis Garza (Instituto Tecnológico de Tijuana. México) Dra. María del Rosario Baltazar Flores (Instituto Tecnológico de León. México) Dr .Bogart Yail Márquez Lobato (Instituto Tecnológico de Tijuana. México) Dr. José Sergio Magdaleno Palencia (Instituto Tecnológico de Tijuana. México) Dr. Carlos Lino Ramírez (Instituto Tecnológico de León. México) Dra. Eva Cerezo Bagdassarian (Universidad de Zaragoza, España) Website URL of Call for Papers (if any):

Email & Contact Details: Lenin G. Lemus-Zúñiga- <u>lemus@upv.es</u> Arnulfo Alanis Garza- <u>alanis@tectijuana.edu.mx</u>