

# International



Innovation in Knowledge Based and Intelligent Engineering Systems

## INVITED SESSION SUMMARY

## Title of Session:

Innovative Technology in Mental Healthcare

#### Name of Chair/co-chairs:

- Antonio Fernández-Caballero, Professor, Computer Science, Universidad de Castilla-La Mancha, Instituto de Investigación en Informática, Albacete, Spain
- Roberto Rodríguez-Jiménez, PhD MD, Psychiatry, Hospital 12 de Octubre, Madrid, Spain
- José Miguel Latorre, Associate Professor, Applied Psychology, Universidad de Castilla-La Mancha, Centro de Investigación en Criminología, Albacete, Spain
- José Manuel Pastor, Associate Professor, Systems Engineering and Automatic Control, Universidad de Castilla-La Mancha, Instituto de Tecnologías Audiovisuales, Cuenca, Spain

#### **Details of Session:**

Although traditional psychotherapy is undoubtedly effective for many, some mental health professionals are actively searching for new treatment methods based on innovative technology. Ultimately, they argue that alternative and/or complementary forms of treatment other than psychotherapy are necessary.

Innovative technology will radically change the way mental healthcare is delivered. We think there are likely to be tremendous possibilities. Not only the potential improvements to medication delivery mechanisms are being studied, but it is also likely that innovative technology will also help people with mental health problems simply to lead the sort of lives they want through tools for well-being.

The purpose of this special session on "Innovative Technology in Mental Healthcare" is to exchange the new ideas, trends and research results in the following research fields:

- Internet-supported mental healthcare
- Mobile and wearable technology in mental healthcare
- · Brain-computer interfaces in mental healthcare
- Virtual/augmented reality in mental healthcare
- · Robotics in mental healthcare
- · Vision systems in mental healthcare
- · Intelligent decision support in mental healthcare
- · Social media in mental healthcare
- · Specific sensors and actuators in mental healthcare
- Other aspects of innovative technology in mental healthcare

Both researchers and practitioners are welcome to submit their contributed papers.

## **International Program Committee:**

- Ahmad Taher Azar, Benha University, Egypt
- Akram Alomainy, Queen Mary University of London, UK
- Albert "Skip" Rizzo, University of Southern California, USA
- Ana Respício, Universidade de Lisboa, Portugal
- Arnulfo Alanis, Instituto Tecnologico de Tijuana, Mexico

- Balwant Godara, World Health Organization, India
- Daniel R. Mestre, Aix Marseille Université, France
- Dimitrios Fotiadis, University of Ioannina, Greece
- Elena Navarro, Universidad de castilla-La Mancha, Spain
- Elisa Pedroli, IRCCS Istituto Auxologico Italiano, Italy
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- Félix de la Paz, Universidad Nacional de Educación a Distancia, Spain
- · Geng Yang, Fudan University, Shanghai, China
- Girijesh Prasad, Ulster University, UK
- Hongying Meng, Brunel University London, UK
- Jongwa Kim, University of Augsburg, Germany
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- José Manuel Ferrández, Universidad Politécnica de Cartagena, Spain
- José Ramón Álvarez, Universidad Nacional de Educación a Distancia, Spain
- Kanav Kahol, Public Health Foundation of India
- Luis Kun, National Defense University, DC, USA
- Marina V. Sokolova, Southwest State University, Russia Federation
- Mark Hoogendoorn, VU University Amsterdam, The Netherlands
- Michel Valstar, University of Nottingham, UK
- Miguel Ángel Salichs, Universidad Carlos III de Madrid, Spain
- Monica Huerta, Universidad Simón Bolívar, Venezuela
- Neal Lathia, University of Cambridge, UK
- Óscar Martínez Mozos, University of Lincoln, UK
- Ouri Wolfson, University of Illinois at Chicago, USA
- Pascual González, Universidad de Castilla-La Mancha, Spain
- Paulo Novais, Universidade do Minho, Portugal
- Pedro Gamito, Universidade Lusófona, Portugal
- Pietro Cipresso, Catholic University of the Sacred Heart of Milan, Italy
- Rafael Martínez-Tomás, Universidad Nacional de Educación a Distancia, Spain
- Sofian Berrouiguet, Centre Hospitalier Régional et Universitaire de Brest, France

(To be extended)

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