Introduction: Intelligent application of ICT

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The development and implementation of new intelligent application of the information and communication technologies (ICT) opens a wide front for fast productivity and quality improvement of new products, business models, services and marketing channels. Specific for the intelligent ICT applications is that they are based on the use of new mathematical approaches related to statistical modelling, deep learning of neural network (NN), biological mathematical models, etc.

In this special issue of *IJRIS* seven articles appear, selected from the papers presented at the 'International Congress of Information and Communication Technology'

(ICICT'2018), Xiamen, China, 27–28 January 2018. The extended versions of the papers were approved for publication in this issue, after new reviewing. They expand our knowledge in some specific application areas of ICT, as: intelligent control of moving objects, multi-criteria clustering, image quality enhancement, fault diagnosis using ontology, spleen segmentation in MRI sequences, classification of radar non-homogenous through NN, and the development of a special chair for elderly people assistance.

The titles of the papers in the special issue are given below:

1 'Onboard reasoning and other applications of the logic-based approach to the moving objects intelligent control'

2 'Multi-criteria clustering-based recommendation using Mahalanobis distance'

3 'Fast algorithm of image enhancement based on multi-scale retinex'

4 'Exchanging deep knowledge for fault diagnosis using ontologies'

5 'Multistage approach for automatic spleen segmentation in MRI sequences'

6 'Classification of radar non-homogenous clutter based on statistical features using neural network'

7 'Development of a sit-to-stand assistance chair for elderly people'.

We hope that the papers in this special issue of IJRIS will contribute to the scientific experience exchange between researchers from different countries, and will present recent ideas and achievements to the young scientists, PhD students and investigators about the new areas of the ICT applications. The impact of the selected papers could be a good basis for the development of new application platforms, diagnostic, information and communication systems, etc., based on the contemporary AI principles.