GUEST EDITORIAL

Nowadays, Internet has evolved into a platform that reshapes modern life and removes borders between real, social and cyber worlds. Internet of Things (IoT) is an emerging paradigm and a cutting edge technology that harnesses a network of embedded, interconnected objects (sensors, actuators, tags or mobile devices) in order to collect various types of information at anytime and anywhere. These devices can be used for building different complex smart environments [1], such as smart homes [2][3], smart classrooms [4], smart offices [5], smart factories [6], smart cities [7], intelligent transportation systems [8], smart power grids [9] or smart e-government. Furthermore, networks of devices are based on advanced Internet standards. IoT implies seamless integration of numerous types of devices into the existing Internet infrastructure. Smart environments can be customized according to users' needs and preferences which are suitable for automating these environments. Internet of things solutions often encompass integration with cloud-based systems and services [7]: Infrastructure as a service (IaaS), Platform as a service (PaaS) and Software as a service (SaaS).

The main subject of the special issue is Internet of things and its application in business, industry, research and academic community works. This special issue aims to provide state-of-art and innovative papers on the design, implementation, and usage of intelligent IoT and related technologies, such as: cloud computing, big data, pervasive computing, social computing, etc. The primary goal is to provide a variety of research and survey articles in the field of the Internet of things and their application in different aspects of human activities. Findings and discussion should foster potentials and capabilities of research, academic community, and industry as well.

The first invited paper in this issue "Design and Technologies for Implementing a Smart Educational Building: Case Study" gives a design of an educational smart building at the Florida Atlantic University. The building was designed as a "living laboratory" so that students and faculty may actually see how IoT for smart buildings works. Furthermore, it represents a good example for designing and building smart buildings at other universities.

The second invited paper "Swarm Intelligence Based Reliable and Energy Balance Routing Algorithm for Wireless Sensor Network" deals with the aspects of energy efficient routing in wireless sensor networks and proposes a new algorithm for energy-balanced routing.

The following two papers "An architectural design for cloud of things" and "From Intelligent Web of Things to Social Web of Things" discuss the architecture aspects of cloud and web for IoT, and propose new models and applications. The next paper "Smart outlier detection of wireless sensor network" deals with unreliability of data sets collected from wireless sensor networks, and proposes a technique to detect outliers among data collected by geographically distributed sensors. In the paper "A New Telerehabilitation System Based on Internet of Things" the authors propose a telerehabilitation system that uses wearable muscle sensor and Microsoft Kinect to create interactive personalized physical therapy that can be carried out at home. Then, the authors of the paper "A Platform for a Smart Learning Environment" propose a solution for integration of e-learning and IoT services within a smart learning environment. The paper "Using Internet

of Things in Monitoring and Management of Dams in Serbia" presents an example of IoT application in dam safety management. Authors of the paper "A Hadoop-Enabled Sensor-Oriented Information System for Knowledge Discovery about Target-of-Interest" present a generic sensor-oriented information system based on Hadoop Ecosystem used for real-time situational awareness about the specific behavior of targets-of-interest. The following two papers "A Smart Home System Based on Sensor Technology" and "Designing an Intelligent Home Media Center" present applications of sensor technologies in smart homes. Finally, the paper "Bridging the SNMP Gap: Simple Network Monitoring the Internet of Things" deals with the problem of network management in IoT and smart environments.

Finally, we would like to take the opportunity to thank authors and reviewers for their endeavor. Without the great efforts from them, this special issue could not have been made. We would also like to thank the Editor-in-Chief, Professor Ninoslav Stojadinović for the opportunity to edit this special issue and all his support throughout the editing process.

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