Guest Editorial

BUE International Conference on
Sustainable Vital Technologies in Engineering and Informatics

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This first BUE International Conference on Sustainable Vital Technologies in Engineering and Informatics took place from 07-09 November 2016 at Fairmont Hotel (Heliopolis) and BUE campus in Cairo/Egypt. This Conference captures a three-day programme of presentations, panel discussions and interactive dialogue.

The event brought together over 75 of researchers in promoting higher education in Egypt and to present the up-to-date research in Informatics and Engineering. It also provides a valuable networking opportunity and set the stage for further cooperation among BUE staff and other colleagues in Europe, USA and beyond, including countries at different stages of development.

Altogether 70 papers have been accepted for presentation in Engineering as well as Informatics and Computer Science. Out of these papers, 53 were in engineering while 20 were in Informatics & Computer Science.

All accepted papers in the **Emerging Technologies in Informatics (ETI)** track ware subject to a double-blind per-review process by at least two international reviewers with expertise in the relevant subject area.

This special issue of the International Journal of Interactive Mobile Technologies is a collection of relevant papers presented in the first international conference on Sustainable Vital Technologies in Engineering and Informatics (BUEACE1). Modern technologies and techniques in engineering and informatics have been multiplying in the last few decades, affecting the lives of people around the world. Such technologies have come to define modern lifestyles and must face up to the increasing challenges of sustainable and green technologies. The integration among informatics and engineering is inevitable due to recent advances that result in facilitating solutions of complex modelling and analysis problems. Cloud Computing, Big data, and Mobile Computing are rapidly expanding research areas spanning the fields of computer science and information management, and has become central in understanding and

solving complex problems in different disciplinary fields. Cloud computing is the evolution of distributed computing combined with Service-oriented architecture, leveraging most of the GRID features and virtualization merits.

Artificial Intelligence is an established area of computer science aiming at the simulation of human intelligence processes by machines. Several advancement are presented in this special issue regarding several aspects of these challenging and rapidly growing research areas.

Cloud computing is becoming a de-facto standard for the current and future applications with its characteristics of power, cost efficiency and accessibility. Big Data are being generated from sensors and things in the Internet of Things (IoT) in smart homes, smart grids and smart cities. Storage and processing of such huge streams of data require efficient and reliable cloud infrastructures, yet in an affordable manner. Several researches are presented tackling some of those issues.

Internet of Things is also a new paradigm with its own requirements and challenges, among those come security and data analysis.

Mobile Technologies are crucial for sustainable environment. They are becoming corner stone in software development and connectivity of humans. The increasing processing power in those handheld devices attracts more and more application to utilize such a distributed platform.