



## **International Journal of Intelligent Enterprise**

### **Call for Papers for Special issue on: “Innovative Business Aspects in Embedded Systems”**

#### **Guest Editors**

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Embedded systems are increasingly becoming a key technological component of all kinds of complex technical systems, including vehicles, telephones, audio-video equipment, aircraft, toys, security systems, medical diagnostics, pacemakers, climate control systems, manufacturing systems, intelligent power systems, etc. The focus of this special issue is on their various applications in future society with a wider view on social systems, innovative business models for embedded systems, and the state of the art of all aspects of embedded computing systems with emphasis on algorithms, systems, models, compilers, architectures, tools, design methodologies, test and applications.

In many cases, signal processing algorithms for embedded systems are developed and verified as theoretically sound for embedded systems applications. The investigation of embedded systems applying advanced signal processing techniques can improve system performance. Therefore, embedded systems with real-time signal processing are becoming more and more important for multimedia applications for both academia and industry. Although embedded systems play an important role, many challenging issues remain to be resolved. Research into embedded systems with business models and their aspects demands an essentially multi-disciplinary approach, exploiting ideas from areas as diverse as signal processing techniques, computational intelligence and embedded system design. To accomplish its real-time performance, trade-off analysis of business aspects is needed during the embedded applications' real-time implementation.

In this special issue, we intend to bring together researchers in the related fields to demonstrate the latest developments and solutions regarding various business aspects of real-time signal processing tools in embedded systems. The special issue aims to solve embedded system issues relating to business and the practice of signal processing in real-time applications. We invite investigators to contribute original research articles as well as review articles that will stimulate continuing efforts to understand the business aspect of real-time signal processing for embedded systems.

The issue will carry revised and substantially extended versions of selected papers presented at the [International Conference on Engineering and Management of Information System \(ICEMIS 2016\)](#), but we are also inviting other experts to submit articles for this call.

### **Subject Coverage**

Suitable topics include, but are not limited to, the following:

- Embedded access technologies
- Integration with business logic
- Business process models for real-time embedded systems
- Embedded systems in business advantage
- Integration with service-oriented architecture
- Networked embedded systems
- Complex homogeneous and heterogeneous embedded systems
- Modelling and verification techniques using agile processing
- New design flows in embedded-based business models
- Design methodologies and synthesis methods
- Platform-based design
- Component-based design
- Rapid prototyping
- Soft computing approaches for embedded multimedia systems
- Software optimisation and compiler techniques
- Real-time signal processing and vision
- Software engineering for embedded systems
- Effects of privacy and security issues on business aspects in embedded systems

### **Notes for Prospective Authors**

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. (N.B. Conference papers may only be submitted if the paper has been completely re-written and if appropriate written permissions have been obtained from any copyright holders of the original paper).

All papers are refereed through a peer review process.

All papers must be submitted online. Please read our [Submitting articles](#) page.

If you have any queries concerning this special issue, please email the Guest Editors:

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### **Important Dates**

Submission deadline: *10 November, 2016*

Review notification: *28 December, 2016*

Submission of revised papers: *15 February, 2017*

Notification of final review results: *15 March, 2017*