

IEEE International Symposium on Industrial Electronics ISIE'17

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Special Session on

“Building Automation and IoT Applications for Energy Efficiency”

organized by

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Call for Papers

Theme:

Building automation enables energy efficient operation and optimisation of buildings. Successful energy management in buildings requires smart controls and semantic sensory information, but shall also be resilient and secure to avoid outages and failures. Internet of Things applications naturally support human users in their daily work by embedded systems that make information about the physical world accessible. As such it is the consequent extension of existing building automation systems.

This session welcomes research on advancements in the domains of controls, IoT applications, data processing, semantic technologies, IT security as well as sensor and actuator technologies, which contribute to the field of energy efficiency in building automation.

Topics of interest include, but are not limited to:

- Data analytics, semantic technologies, and meta-data representations using OPC UA, Building Information Model (BIM) or other information models

- IoT applications and technologies for energy efficiency
- Advanced control (predictive control, model-predictive control, cooperative systems, agent-based optimization)
- Sensor and actuator networks (wireless networks, wired networks, hybrid technologies)
- Methods and tools to ensure secure and safe operation of IoT devices, sensors, and actuators in a building automation environment
- Analysis methods and tools to identify security and safety problems within a building automation system
- Integration aspects (component-based architectures, service-oriented architecture, ontologies, cloud computing, integration into smart grids and IoT)
- Smart Home Technologies (Sensor Technologies, Human User Interaction, Multimedia Integration)

The Special Session is sponsored by the Technical Committee on Building Automation, Control, and Management (TC BACM).

Submission procedure, deadlines, and author instructions:

A manuscript submitted to the Special Session of ISIE 2017 must be in the IEEE double format with single space 10p fonts and figures included in the text, so the length of the manuscript of 8 pages long in PDF format can be evaluated. For your convenience you may download the WORD template.doc from the conference website: <http://www.ISIE2017.org>

Deadlines:

- Reception of full paper: December 15th 2016
- Paper acceptance notification: March 1st 2017
- Camera ready paper reception: April 10th 2017