

17th IEEE International Conference on Emerging Technologies & Factory Automation

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Call for Papers / Invitation to Special Session SS08 BUILDING AUTOMATION AND SMART HOMES

Special Session Organizers

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Aim: Building Automation and Smart Homes are rapidly developing automation topics. Established industrial and academic research and engineering are focused on important base topics like fieldbus technologies, commissioning, and applications mainly in the area of heating, ventilation and air-conditioning, and lighting/shading in large buildings. Currently, exciting new topics and possibilities are emerging: An important trend is the increasing deployment of automation systems in the residential sector and private homes. There, also topics like integration, engineering effort, energy efficiency, comfort, context awareness, security and safety need to be explored. The fusion of traditional fieldbuses and Internet technologies on various layers is important for both the commercial and the residential sector. From the user perspective, both sectors ask for new solutions in areas such as assisted living, health monitoring and smart living. Hence, new services evolve and their applications impose new demands on the automation technologies. These are considered as upcoming challenges in the automation field. Solutions that address these new requirements typically merge traditional sensor and automation approaches with modern networking, artificial intelligence and usability aspects adapted from domains like the Internet of Things, ambient intelligence, or ubiquitous and pervasive computing, to name but some of them.

Contributions to the session may address, but are not limited to:

- Energy efficiency, energy visualisation, energy management
- Fieldbus technologies
- Network, protocol and service integration
- Ubiquitous and pervasive computing, ambient intelligence
- High level network architectures, multimedia networks
- User interfaces and user interaction, Human building interaction
- Security, privacy, safety in building automation systems
- Wireless protocols and technologies, wireless sensor networks
- Autonomous systems, adaptive control, self-learning
- Semantic homes and environments, context awareness
- Operation and maintenance, commissioning, facility management integration
- Building information modelling (BIM)
- Web services, web based control and management, Internet of Things

SUBMISSION OF PAPERS

Papers should be submitted electronically. For further details, please refer to the conference web page.

AUTHOR'S SCHEDULE

Deadline for submission of papers: April 8, 2012 Notification of papers acceptance: May 30, 2012

Final manuscripts due: July 8, 2012

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