



**Journal of Ambient Intelligence and Smart Environments (I.F.  
2020: 2.105)**

**Call for Papers for a Thematic Issue on**

**“Current Trends in Energy Management, Sustainability and  
Security for Intelligent Environments”**

**Rationale**

Intelligent Environments refer to physical spaces in which Information Technologies and other pervasive computing technologies are used to achieve specific goals for the user, the environment, or both. Its main objective is to enrich user experiences, manage and increase user awareness of that environment. From a computer science point of view, Intelligent Environments exploit combinations of small sensing/computational nodes to identify and deliver personalized services to the user when they are interacting and exchanging information with the environment. This requires new ways of interacting with users, perceiving, and understanding the world, designing living spaces for coexistence, and living with agents. Intelligent Environments have a wide range of applications, including wellness, education, work environment, energy management, Ambient Assisted Living, among others.

The increasing need to use energy resources more efficiently and effectively led to the exponential growth of studies and development of solutions to manage energy and make it more sustainable. The adaptation of these solutions to different types of environments, as well as the need to manage different resources and integrate them into the context in which they operate are challenges that need to continue to be studied in order to make environments more intelligent. It is essential to study and develop solutions capable of dealing intelligently with energy management and sustainability, so that this technology can be used on different environments and ultimately to affect positively our daily life. The purpose of this thematic issue is to bring to light current and future trends that address new research challenges in energy management, sustainability, adaptation, sensing, human interaction, and security in Intelligent Environments.

**Topics**

We invite the submission of original technical papers on topics including but not limited to:

- Ambient intelligence

- Smart buildings
- Energy Management and Sustainability
- Ubiquitous/Pervasive computing
- IE for home, work and education
- Context awareness
- Sustainable design
- Smart cities
- HCI
- Robotics
- Sensors
- Wireless sensor networks
- Virtual/Mixed reality
- Mobile and wearable computing
- Architecture and interaction design
- Design and reliability of systems
- Security and privacy requirements engineering of IE
- Privacy protection of big data in IE
- Trustworthy computing model for IE
- Security and privacy vulnerability assessment in IE

**Important Dates**

Submission Deadline (Full-Paper): 15-09-2022

First Review Decision: 01-12-2022

Deadline for Reviewed Manuscripts: 01-02-2023

Final Decision: 01-03-2023

Publication: May 2023

**Notes for Authors**

Contributions must be at least 12 pages in length. Submitted manuscripts should not have been previously published nor be currently under consideration for publication elsewhere. Conference papers may be submitted if the paper has been rewritten and expanded to at least 30% (proofs to be included in the cover letter), and, if appropriate, written permissions must have been obtained from any copyright holders of the original paper. For preparation of your manuscript, you may follow the instructions at <https://www.iospress.com/catalog/journals/journal-of-ambient-intelligence-and-smart-environments> under section “Author Guidelines”. When submitting the manuscript, authors should indicate the title of the Thematic Issue in the cover letter.

**Guest Editors**

Prof. João Carneiro, Research Group on Intelligent Engineering and Computing for Advanced Innovation and Development, Institute of Engineering, Polytechnic of Porto, Portugal

Prof. Guillaume Lopez, Department of Integrated Information Technology, Aoyama Gakuin University, Japan

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