Springer

Quality and User Experience

Theme issue: Intelligent Environments and User Experience

Intelligent Environments (IE) refer to physical spaces in which Information Technologies (IT) are pervasively utilized for the benefits of the users when carring out their activities in these spaces, by enriching the resulting experience, better managing the environment assets and more easily achieving their goals. From a computing science perspective, IE must exploit rich combinations of small, distributed sensing/computational nodes to identify and deliver personalized services to the user when they are interacting and exchanging information with and through the environment. This calls for understanding what influences the experience of the involved users and designing new ways of interacting with them; this also requires the IE to be able to perceive and understand the physical and virtual worlds, design living spaces, and finally make easy the life of humans with with artificial agents. IE have a large area of applications including well-being, education, working environment, energy management, AAL, among others.

However, this spreading of IE in many areas, including the public space, must be accompanied by high human interface quality standards. Indeed, as good as such technology is, a poor interface design or bad user experience may result in not only users avoiding its usage but also bad or mistaken usages without explicit consent of the user. Worse, such mistakes may lead to personal data leakage or physical accidents. Solutions for improving the quality of user experience in intelligent environments are thus mandatory for full adoption of such technology in our daily life. The goal of this special issue is to highlight state-of-the-art research that addresses new research challenges on adaptation, sensing, human interaction, and user experience in intelligent environments.

Topics

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

* Human-centric Ambient intelligence
* Smart buildings for humans
* Personal Digital Assistants for IE
* Quality-aware resource management in IE
* Quality dimensions in IE
* IE for home, work and education
* Context awareness
* Experience sensing and design in IE
* HCI
* Robot-Human Interaction
* User experience
* Virtual/Augmented/Mixed reality
* Architecture and interaction design
* User experience in smart cities
* User experience in smart transportations
* Quality for IE
* Human experience in IE

Notes for Authors

Contributions must be at least 12 pages in length. Submitted papers 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% (justifications to be included in the cover letter), and, when appropriate, written permissions must have been obtained from any copyright holders of the original paper. For the preparation of your manuscript, please follow the instructions at https://www.springer.com/journal/41233/submission-guidelines.

Important Dates

Manuscript Submission due date: January 2023
Authors Notification date: March 2023
Revised Papers due date: May 2023
Final notification date: July 2023
Scheduled publication: September 2023

Guest Editors

Prof. Yuichi ITOH, Aoyama Gakuin University, Japan
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