

# Preface to JAISE 15(2)

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## 1. This issue

This regular issue of JAISE is composed of four articles:

**A systematic literature review of Smart Home Technology Acceptance**, by N. Daruwala and U. Oberst, applied the Technological Acceptance Model to analyse acceptance of Smart Home Technology (SHT). Perceived usefulness was the most prominent influencing factor on a positive view of SHT. Other subsidiary models also highlighted the influence of compatibility, attitude, and cost/price. The literature analysed in the article showed a predominance in the so-called “western” world; however, a recent increase and shift in publications has been observed from the Asia/Africa regions.

**A model-based simulator for smart homes: Enabling reproducibility and standardization**, by S. Veneruso et al., tackles the need for data in training certain algorithms by providing a model-based simulator capable of generating synthetic datasets that emulate the characteristics of the vast majority of real datasets, using the eXtensible Event Stream – XES international standard commonly used for representing events and validating the results with two real scenarios from the literature.

**Effects of environmental control before sleeping on autonomic nervous activity and sleep: A pilot study**, by Y. Matsuhisa et al., discusses the results of influencing the environment through temperature, light, air flow, music, and aroma, before sleeping, and assesses the data collected in an experiment involving sixteen participants. By measuring the level of sleep achieved in relation to the participant’s level of relaxation or stress before sleeping, the authors determined that the mentioned environmental improvements can offer beneficial effects in the depth of sleep.

**Computational methods for predicting human behaviour in smart environments**, by R. Dunne et al., provides a literature review focused on computational methods of human behaviour prediction. It covers a range of different modes to represent behaviour (e.g., time-series event tables, graph data structures, and probabilistic models), and notes the predominance of machine learning, probabilistic graphical models, and statistical and trend analysis in predicting events in a data sequence.

## 2. Upcoming issues

The following is a list of upcoming issues of JAISE:

- September 2023: Thematic Issue on “Applications in Integrated Intelligent Infrastructures”.
- December 2023: Regular Issue.
- March 2024: Thematic Issue on “Sensing, Decision-Making and Economic Impact for Next-Generation Technologies”.

– June 2024: Regular Issue.

More information on the call for papers to the future issues is available on the webpage of JAISE at: [iospress.com/journal-of-ambient-intelligence-and-smart-environments/](https://iospress.com/journal-of-ambient-intelligence-and-smart-environments/).