

Special Issue on
**Internet of Things and Smart
Environments Supporting Healthy Ageing
Services**

CALL FOR PAPERS

The Internet of Things (IoT) is playing a role more and more important in the daily life of everybody. The opportunity to have smart objects anywhere, as a network of billions or trillions of sensor nodes connected to the Internet, represents a fundamental feature of the digital world to create a better world for human beings, where objects around us know what we like, what we want, and what we need and act accordingly without explicit instructions. The opportunity to implement pervasive environments that are able to detect environmental human behaviour parameters is becoming more attractive for both the academic and the industrial world in many scenarios such as environmental monitoring, building automation, healthcare, smart cities, smart grid, and logistics. Among these, the healthcare sector focused on elderly people is certainly a very challenging topic taking into account the growing average age of the population and the rise of over 75-year-old people worldwide.

Innovative solutions able to support and improve the elderly people' quality of life exploiting emerging technologies enabling the IoT are fundamentals to create the new smart cities, thought also for people not so young. Furthermore, the behavioural analysis of elderly people is an important science aiming to prevent Mild Cognitive Impairment (MCI) and frailty problems. A fundamental aspect in this context is to explore the use of innovative technologies enabling the Internet of Things (IoT), above all sensors, to unobtrusively capture personal data for automatically recognizing behavioural changes in elderly people.

In this special issue, articles regarding the use of technologies, methodologies, and applications for elderly friendly cities and healthy ageing services are invited. Authors are encouraged to submit articles mainly describing original research, presenting results that advance the state of the art and fuel more efforts in the future. Review articles are also welcome.

Potential topics include but are not limited to the following:

- ▶ Ubiquitous sensing and actuation
- ▶ Mobile applications for monitoring and assisting the elderly
- ▶ IoT architectures, protocols, and algorithms in smart cities
- ▶ Innovative solutions for capturing elderly people's data
- ▶ Big Data for behaviour changes analysis
- ▶ RFID and WSN technologies for smart environments
- ▶ Innovative AAL systems
- ▶ Remote assistance services
- ▶ Smart solutions to reduce frailty and MCI risks
- ▶ Case studies, field trials, and research projects on elderly friendly smart cities
- ▶ Impact evaluation of IoT-aware technologies on elderly healthcare system
- ▶ Geriatric and medical evaluation of emerging IoT-aware technologies
- ▶ Trends and challenges in elderly friendly smart cities and healthy ageing services

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/wcmc/itse/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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