

**Special Session on**  
**Artificial Intelligence for Smart Cities and Urban Mobility (AI4SC&UM23)**  
**in conjunction with**  
**23rd International Conference on Hybrid Intelligence Systems (HIS)**  
**December 12-14, 2023**

**Website:** <http://www.mirlabs.org/his23/cfss.php>

**Hybrid Mode – Online & Offline**

**Onsite Venues:** <http://mirlabs.org/his23/venue2.php>

### **Objectives and Scope**

Smart urban solutions enabled by artificial intelligence (AI) have a number of advantages, including more effective energy, water, and waste management, as well as reduced pollution, noise, and traffic congestion. Local governments face relevant technological, social, and regulatory challenges undermining the digital transformation, including I technology and data availability and reliability, reliance on third parties, and a lack of skills; (ii) ethical challenges for the unbiased use of AI; and (iii) the difficulty of regulating interdependent infrastructures and data, respectively. By 2025, AI is predicted to power over 30% of smart city applications, including urban mobility solutions, contributing greatly to urban resilience, sustainability, social welfare, and vibrancy. Through this special session, the organizers intend to promote theoretical and empirical research and invite researchers to contribute with original research articles, surveys, and case study papers.

We invite high-quality contributions from all research areas that address the emerging data challenges in these streams under the following seven dimensions that can be used to categorize AI applications in smart cities.

### **Subtopics**

The topics include, but are not limited to:

- AI for governance, such as urban planning, personalized subsidy provision, and disaster prevention and management.
- AI for living and living ability, safety, security, and healthcare, such as smart police, customized healthcare, noise and nuisance management, and improved cyber security.
- AI for education and public participation, such as locally accurate, validated, and actionable knowledge to aid decision-making.
- AI for the economy, such as enhanced resource (cost and time) efficiency and competitiveness via sharing services, efficient supply chains, and customer-tailored solutions.
- AI for transportation and logistics (autonomous and sustainable mobility, smart routing, and parking, for example). assistance, supply chain resiliency, and traffic management are all issues that need to be addressed.

- AI for infrastructure, such as optimized infrastructure deployment, utilization, and maintenance, as well as Waste and water management, transportation, electricity networks, and urban lighting are all areas that need to be addressed.
- AI for environmental purposes, such as biodiversity preservation, urban farming, and air quality.

### **Paper publications**

- Proceedings will be published in Lecture Notes in Networks and Systems, Springer (<https://www.springer.com/series/15179>)
- Indexed by SCOPUS, INSPEC, WTI Frankfurt eG, zbMATH, SCImago
- Paper maximum length is 10 pages
- Papers must be formatted according to Springer format (Latex/word) available at: <https://www.springer.com/de/authors-editors/book-authors-editors/manuscript-preparation/5636#c3324>
- Submission Link: <https://cmt3.research.microsoft.com/ICHIS2023>

### **Important Dates**

Paper submission due: **September 30, 2023**

Notification of paper acceptance: **October 31, 2023**

Registration and Final manuscript due: **November 10, 2023**

Conference Date: **December 13-15, 2023**

### **Special Session Chairs**

- **João Carlos Ferreira** - ISCTE, Portugal
- **Ana Maria Madureira** - Interdisciplinary Studies Research Center (ISRC) - Institute of Engineering of Porto – Polytechnic of Porto (ISEP/P.PORTO)

**Information Contact:** Joao C. Ferreira <jcafa@iscte.pt>