

Introduction to the Proceedings of CCSCS'2022

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Smart Cities can be considered as a new paradigm or a concept that is emerging all over the world as a necessary and unavoidable response to the constant urban population growth and associated technical, material, social, and organizational problems, in order to improve the quality of life of their citizens, and to provide a more economic competitive, sustainable and livable city. The recent development of important technologies, such as low power miniature sensing devices, high-speed wireless and wired communication networks, and high-performance computing systems, enables the creation of new possibilities and capabilities, fostering the opportunities for smart city realizations.

Intelligent solutions to the referred problems, intended to control pervasive computing systems, such as citizen-aware intelligent environments, will help and contribute to the construction of a sustainable smart city, providing value-added, intelligent, adaptive, context-aware, user-centric and sustainability services, with realizations such as smart home/smart building, smart energy, smart mobility, smart parking, smart health or citizens well-being, that is, providing smart services intended to be more efficient, with reduced resource consumption and promoting the well-being and good quality of life of their citizens, without neglecting the benefits of a citizen sensor. With the citizen as an active and proactive actor of the Internet of Things, reliable and definitive solutions for problematics such as Road Safety and Vulnerable Road Users, among others, could finally emerge. However, the smart city realization means everything should be considered in large scale, in real-time, dynamically, with uncertainty with restrictions, and adapt to different objectives. Furthermore, the standard computational intelligence algorithms may be insufficient or not robust enough to deal with smart city big data analytics. Applications geared towards the citizen also implicate different techniques and objectives than normal computational platforms.

The purpose of this workshop is to gather and present new and original research towards citizen-centric solutions within the ambit of intelligent environments and smart cities, capable of active context awareness, automatically changing their functioning in response to discovered context, enabling that way the improvement not only of city efficiencies, but also citizens quality of life.

This fifth edition of the Workshop on Citizen Centric Smart Cities Solutions (CCSCS'22) presents articles centred around citizen centric services and their application inside smart cities, IoT platforms and intelligent services. The articles presented in this

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workshop addressed relevant topics such as: contextual information and their importance for decision making; comfort assessment using wearable sensors; waste management planning and algorithmic human mobility decision making explainability methods.