

Special Issue

IoT and Big Data Applications in Smart Cities: Recent Advances, Challenges, and Critical Issues

Message from the Guest Editors

The Special Issue (SI) titled "IoT and Big Data Applications in Smart Cities: Recent Advances, Challenges, and Critical Issues" aims to provide a comprehensive overview of the Internet of Things (IoT) and big data technologies shaping the future of smart cities. It gathers research and practical insights on how these technologies impact urban management, quality of life, and sustainable development. Key focus areas include real-time monitoring systems, energy-efficient solutions, traffic management, smart grids, and public safety. The SI highlights recent technological advancements integrating AI with IoT for analytics, data-driven decision-making, and automation. It also addresses critical challenges such as data privacy and security, heterogeneous systems integration, big data volume management, and scalability. The SI discusses the regulatory and ethical considerations surrounding data collection and usage in urban environments. It also examines the technical innovations and challenges of IoT and big data. Highlighting the gaps that must be addressed to fully harness their benefits offers insights into the potential for creating resilient, efficient, and citizen-centered cities.

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About the Journal

Message from the Editor-in-Chief

Data is an open access journal that publishes scientific data in a reliable, citable, and accountable manner. Data grants the opportunity to formally share valuable data, for academic credit. It covers a wide range of disciplines in which data is generated so that published data is discoverable and available for wider re-use. The journal has highly accomplished scientists from a variety of disciplines on the editorial board. The publication emphasizes clarity, honesty, quality, and novelty and has a rigorous peer-review process. We strongly encourage you to share your data vision in Data.

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