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Editorial: Digital resource vitalization and urban intelligent computing

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Editorial on the Research Topic
Digital resource vitalization and urban intelligent computing

The concept of building smart cities is gaining significant momentum worldwide. The advancement in new-generation information technology and the integration of digital resources with urban environments have opened up new avenues to improve the quality of living spaces. The idea of constructing livable, resilient, and green new smart cities has become a development trend.

The core objective of smart cities is to enhance the living standards of urban dwellers by providing more intelligent, accurate, and dynamic environmental management and decision support systems. The integration of Internet of Things (IoT), big data, spatial remote sensing, and geographic information has facilitated the creation of digital resources, which are vital for improving urban operations. The link between human beings and the urban environment is closely monitored, and public data sharing is the breakthrough to achieving digital resource vitalization.

Smart cities focus on building new infrastructure, digital government, and digital society. The open sharing of public data is an essential element to improve urban operational efficiency. Vitalizing urban public resources through scientific means improves the public service capacity and the level of municipal public facilities. The needs of people's lives are met better when urban functions are improved through the use of smart city services.

Smart cities also provide safeguard services for the normal operation of the city by focusing on major risk prevention and control. Improving the resilience of the city and the impact resistance of the urban environment is crucial to ensure the city's sustainability.

The use of intelligent services in smart cities promotes a green and low-carbon cycle, promoting the harmonious coexistence between people and the environment. This results in the construction of a green city, which ultimately leads to a better quality of living for urban dwellers.

In conclusion, building high-quality living spaces and promoting the construction of livable, resilient, and green new smart cities have become the development trend for improving urban living standards. The integration of new-generation information technology with urban environments has made it possible to provide more intelligent, accurate, and dynamic environmental management and decision support systems. The promotion of digital resource vitalization through public data sharing and the use of smart city services can significantly improve the public service capacity and level of municipal

public facilities. Smart cities are an essential step towards the harmonious coexistence between people and the environment and the ultimate realization of a green city.

This Research Topic a total of five articles, including top-level design of smart cities, multi-mode data processing, and urban Internet of Things communication, and achieved results such as ESI hot articles and ESI highly cited articles. We have gained a lot of enthusiastic discussions about smart cities and data vitalization. We sincerely thank the editors for their strong support and assistance.

Author contributions

HS contributed to the conception of the study. YZ performed the data analyses and wrote the manuscript.

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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