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Guest Editorial for the Special Issue "Soft Computing for Smart Cities"

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Smart cities have become the buzzword today, and it offers various smart services such as building automation systems, intelligent grids, smart transportation, and many more. With the advent of the Internet of Things (IoT), smart cities have become a reality in many parts of the world. The systems that operate and control smart cities typically function in an isolated manner with no connectivity to the others. At this point, there is a probability that one system's functionality can potentially impact the other. For instance, drainage and flood control systems can affect both traffic management and emergency management system functionalities. The use of soft computing assists in effectively dealing with real-world uncertainties associated with smart cities. It offers robust solutions to smart cities through the utilization of approximate, partial, and uncertain data. This editorial entitled "soft computing for smart city" is a collection of 14 research articles that represent the efficient use of soft computing solutions for smart city paradigms.

The first article of this special section deals with deep learning assisted vision-based solutions for smart education systems, which is also an integral part of smart city applications. The result indicates that this approach offers improved decision-making accuracy with better performance measures. Next, the authors present an AI-enabled multimedia educational system models for higher education systems. This work intends to offer multimedia assisted lecture notes, reviews, and various other study materials to the user in an efficient way. Here, the authors implement a genetic algorithm to perform multimedia data analytics. The third article presents Hybridized Computational Predictive Framework for E-business transformation. This approach digitalizes the entire supply chain in smart cities and predicts emerging business trends effectively. Next, the article entitled "Deep Learning Approach to Automated Data Collection and Processing of Video Surveil-

lance in Sport Activity Prediction" presents a deep learning assisted video surveillance approach to monitor sportsperson activities in smart cities. The deep learning model actively collects sports related data and presents the most optimized system models. The fifth article deals with smart education in smart cities. The authors present an interactive smart education system model that enhances the students' performance by overcoming E-learning difficulties. The authors utilize advanced soft computing approaches to achieve their intended objectives.

The sixth article presents an Improved Smart Learning Pedagogy Framework (ISLPF) for higher education systems. This approach promotes modern teaching and learning strategies, and it effectively overcomes the drawbacks associated with traditional educational systems. Next, the authors try to assess the impact of modern computing technologies on the present system of education. They present a framework called the Effective Integrated E-Learning Framework (EIELF) to enhance the features of the modern education system. The experiment shows better performance with improved accuracy measures. The eighth article presents advanced machine learning approaches for multimedia communication to support business marketing. They implement an enhanced support vector machine (SVM) algorithm for multimedia business data analytics and offer advanced strategical measures. Followed by this approach, deep learning assisted smart surveillance models for indoor stadium environment across smart cities is presented. The video monitoring module converts high-dimensional features into low-dimensional features to obtain timely frames and produces better performance measures. The tenth article provides an E-Business Cloud Computing Model (EBCCM) to assess emerging business strategies across smart city infrastructures. The results are satisfactory and comparatively better than the existing approaches.

The next article deals with real-time fraud detection across E-markets using machine learning and soft computing approaches. This work implements a support vector machine-based fraud detection framework (SVM-FDF) through which it easily identifies fraudulent and illegal activities. In the article "Hierarchical Advance Soft Computing Techniques for Analyzing the success drivers of E-business and its strategies," the authors present efficient techniques to analyses successful drivers for E-business applications. Consequently, the next work presents AI-based real-time communication paradigms for smart education systems. This approach effectively promoted real-time communication facilities. Finally, in the fifteenth article, soft computing assisted organizational management strategies to assess the impacts of the online market. The results indicate higher productivity and efficiency measures.

We wish to express our deep gratitude to the Editor-in-Chief Journal of Multiple-Valued Logic and Soft computing for his support and for offering us the privilege to edit a special issue in their reputed journal. We are certain that this special issue will contribute to the existing literature and the soft comput-

ing research community. We thank all the authors and the reviewers for making this special issue a grand success.

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