

Special Issue Proposal on

Big Data Analytics with IoT-oriented Infrastructures for Future Smart Cities

Overview of Special Issue:

A smart city refers to a city equipped with the basic infrastructure to provide a good quality of life and a clean & sustainable environment to its citizens using smart technology-based solutions. It is a smart way to provide best services to its residents, and develop the infrastructure. Smart city focuses on controlling available resources safely, sustainably, and efficiently to improve the economy and societal outcomes. People, systems, and things in the cities generate data. However, their heterogeneity makes it difficult to publish, organize, discover, interpret, combine, analyze, and consume them. The next generation of these technologies, including the 6G and Intelligent Internet of Things (6G/IIoT), have been recently proposed aiming to provide endless networking capabilities to the city users. General estimates revealed that the number of smart IoT devices would approach over fifty billion by 2022. With the proliferation of smart IoT devices, smart applications are expected to lead to further innovation in 6G/IIoT-oriented cities.

This special issue aims to stimulate discussion on the IoT and Big Data analytics for future smart cities with smart applications including smart health, smart governance, smart homes, and smart buildings, smart mobility and transportation, smart factories and smart data-driven decision making.

This Special Issue will:

1. Address novel big data analytics solutions and technologies for future smart cities,
2. Provide a state-of-the-art and comprehensive overview of the different Deep Learning Approaches for Future Smart Cities

3. Identify promising directions and future trends in the field of IoT and Big Data Analytics for smart cities.

Topics and Techniques

Submissions of papers describing original work in the following topics are encouraged.

- Smart devices, sensors, and actuators
- Novel sustainable architecture of a Smart City based on Big Data analytics
- Smart homes and smart buildings
- Citizen-to-citizen IoT powered botnets
- Cloud-based IoT infrastructure
- Automation and control system design based on Big Data analytics
- Resource allocation and security in 6G/IoT
- The integration of Web of Things (WoT) with Smart Cities
- Smart e-health services
- Big Data analytics in mitigating disasters, accidents, environmental pollution, etc. in Smart Cities
- Smart governance
- Smart mobility and transportation

Significance Justification

This is an important special issue encompassing the various new-generation technologies such as Machine Learning, Deep Learning, Quantum Computing, Quantum Communication, 5G Networks, 6G Networks, Big Data, IoT, Internet of Everything, and Industry 4.0. This special issue calls for high-quality unpublished research works on recent advances related to Big Data Analytics and Deep Learning Approaches for Smart cities. The aim of this special issue is to bring scholars, researchers, scientists, engineers, and administrators together to develop and design

new ideas and concepts to significantly improve the field of smart cities based on Big Data analytics and the Internet of Things (IoT).

Schedule:

Submission of manuscript:	July 25, 2021
First notification:	October 25, 2021
Submission of revised manuscript:	January 20, 2022
Final notification:	May 30, 2022

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Rohit Sharma

Rohit Sharma is an Assistant Professor in the Department of Electronics and Communication Engineering, SRM Institute of Science and Technology, Delhi NCR Campus Ghaziabad, India. He is an active member of ISTE, IEEE, ICS, IAENG, and IACSIT. He is an editorial board member and reviewer of more than 12 international journals and conferences, including the topmost journal IEEE Access and IEEE Internet of Things Journal. He serves as a Book Editor for 7 different titles to be published by CRC Press, Taylor & Francis Group, USA and Apple Academic Press, CRC Press, Taylor & Francis Group, USA, Springer, etc. He has received the Young Researcher Award in "2nd Global Outreach Research and Education Summit & Awards 2019" hosted by Global Outreach Research & Education Association (GOREA). **He is serving as Guest Editor in SCI journal of Elsevier.** He has actively been an organizing end of various reputed International conferences. He is serving as an Editor and Organizing Chair to 3rd Springer International Conference on Microelectronics and Telecommunication (2019), and have served as the Editor and Organizing Chair to 2nd IEEE International Conference on Microelectronics and Telecommunication (2018), Editor and Organizing Chair to IEEE International Conference on Microelectronics and Telecommunication (ICMETE-2016) held in India, Technical Committee member in "CSMA2017, Wuhan, Hubei, China", "EEWC 2017, Tianjin, China" IWMSE2017 "Guangzhou, Guangdong, China", "ICG2016, Guangzhou, Guangdong, China" "ICCEIS2016 Dalian Liaoning Province, China".

Deepak Gupta

Deepak Gupta is an eminent academician; plays versatile roles and responsibilities juggling between lectures, research, publications, consultancy, community service, Ph.D. and post-doctorate supervision, etc. With 13 years of rich expertise in teaching and two years in the industry; he focuses on rational and practical learning. He has contributed massive literature in the fields of Human-Computer Interaction, Intelligent Data Analysis, Nature-Inspired Computing, Machine Learning, and Soft Computing. He has served as Editor-in-Chief, Guest Editor, Associate Editor in SCI, and various other reputed journals (IEEE, Elsevier, Springer, Wiley & MDPI). He has actively been an organizing end of various reputed International conferences. He has completed his Post-Doc from Inatel, Brazil, and the University of Valladolid, Spain. He has authored/edited 43 books with National/International level publishers (IEEE, Elsevier, Springer, Wiley, Katson). He has published 138 scientific research publications in reputed International Journals and Conferences including 64 SCI Indexed Journals of IEEE, Elsevier, Springer, Wiley, and many more. He is also the

series editor of "Intelligent Systems for Telemedicine" (Elsevier), "Intelligent Biomedical Data Analysis" (De Gruyter, Germany).

Andino Maseleno

Andino Maseleno is a lecturer at STMIK Pringsewu, Lampung, Indonesia. He was a postdoctoral researcher at the Institute of Informatics and Computing Energy, University Tenaga Nasional, Malaysia, in 2018-2019. He was a visiting fellow in the Centre for lifelong learning, University Brunei Darussalam, Brunei Darussalam, in July 2016 till March 2017. He received the B.S. in Informatics Engineering from UPN "Veteran" Yogyakarta, Indonesia in 2005, M.Eng. in Electrical Engineering from Gadjah Mada University, Indonesia in 2009, and Ph.D. in Computer Science from University Brunei Darussalam, Brunei Darussalam in 2015. He has been served as an Editor & Guest Editor in many reputed journals and Indexed conferences.

Sheng-Lung Peng

Sheng-Lung Peng is a Professor of the Department of Creative Technologies and Product Design, National Taipei University of Business, *Taiwan*. He received a BS degree in Mathematics from National Tsing Hua University, and the MS and Ph.D. degrees in Computer Science from the National Chung Cheng University and National Tsing Hua University, Taiwan, respectively. He is an honorary Professor of Beijing Information Science and Technology University, China, and a visiting Professor of the Ningxia Institute of Science and Technology, China. He is also an adjunct Professor at Mandsaur University, India. He serves as the secretary-general of the ACM-ICPC Contest Council for Taiwan and the regional director of the ICPC AsiaTaipei-Hsinchu site. He is a director of the Institute of Information and Computing Machinery, of Information Service Association of Chinese Colleges and Taiwan Association of Cloud Computing. He is also a supervisor of the Chinese Information Literacy Association, of Association of Algorithms and Computation Theory. Dr. Peng has edited several special issues at journals, such as *Soft Computing*, *Journal of Internet Technology*, *Journal of Real-Time Image Processing*, *International Journal of Knowledge and System Science*, *MDPI Algorithms*, and so on. He is also a reviewer for more than 10 journals such as *IEEE Access* and *Transactions on Emerging Topics in Computing*, *IEEE/ACM Transactions on Networking*, *Theoretical Computer Science*, *Journal of Computer and System Sciences*, *Journal of Combinatorial Optimization*, *Journal of Modelling in Management*, *Soft Computing*, *Information Processing Letters*, *Discrete Mathematics*, *Discrete Applied Mathematics*, *Discussiones Mathematicae Graph Theory*, and so on. His research interests are in

designing and analyzing algorithms for Bioinformatics, Combinatorics, Data Mining, and Networks areas in which he has published over 100 research papers.