
Editorial

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Biographical notes: Gunasekaran Manogaran is currently working as a Big Data Scientist in University of California, Davis, USA. He is also an Adjunct Assistant Professor, Department of Computer Science & Information Engineering, Asia University, Taiwan and Adjunct Faculty, in School of Computing, SRM Institute of Science and Technology, Kattankulathur, India. He is a visiting researcher/scientist in University of La Frontera, Colombia and International University of La Rioja, Spain. He received his PhD from the Vellore Institute of Technology University, India. He is the author/co-author of more than 100 papers in conferences, book chapters and journals. He is currently serving as an Associate Editor in *Ambient Intelligence & Humanized Computing* (Springer), *International Journal of Automation and Computing* (Springer), *Data in Brief* (Elsevier) and *International Journal of Interactive Multimedia and Artificial Intelligence*. He is an Advisory Board Member of Information System (Elsevier) and an Editorial Board Member of International Journal of Computer Applications in Technology. He also appointed as Internet of Things Section Editor in Sensors (MDPI). He is Principal Investigator for the project entitled “Prognosis of Microaneurysm and Early Diagnosis System for Non-Proliferative Diabetic Retinopathy using Deep Convolutional Neural Network” funded by Scheme for Promotion of Academic and Research Collaborations (SPARC), Ministry of Human Resource Development, Government of India.

Hassan Qudrat-Ullah earned his PhD (Decision Sciences) in 2002 from NUS Business School, National University of Singapore. He held a post-doctoral fellowship at Carnegie Mellon University, USA, in 2002–2003 before joining York University in 2003. His research contributions from 2011 to 2014 include two books *Better Decision Making in Complex, Dynamics Tasks* (Springer, 2014), and an edited volume *Energy Policy Modeling in 21st Century* (Springer, 2013); he also contributed seven journal articles, two book chapters and he has also been invited to several conference proceedings and invited talks. His journal articles are published in such journals as *Decision Support Systems*, *Energy* (two articles), *Telecommunication Systems*, and *International Journal of Technology Management*. His research interests include dynamic decision making, system dynamics modelling, computer-simulated interactive learning environments, and energy planning models. His work has been published in *Energy*, *Energy Policy*, *Decision Support Systems*, *Computers & Education*, and *Simulation & Gaming*. He is the Editor-in-Chief of *International Journal of Complexity in Applied Science and Technology* and Associate Editor of *International Journal of Global Energy Issues*.

Qin Xin graduated with his PhD in Department of Computer Science at University of Liverpool, UK in December 2004. Currently, he is working as a Professor of Computer Science in the Faculty of Science and Technology at the University of the Faroe Islands (UoFI), Faroe Islands. Prior to joining UoFI, he had held various research positions in world-leading universities and research laboratories including Senior Research Fellowship at Universite Catholique de Louvain, Belgium, Research Scientist/Postdoctoral Research Fellowship at Simula Research Laboratory, Norway and Postdoctoral Research Fellowship at University of Bergen, Norway. His main research focus is on design and analysis of sequential, parallel and distributed algorithms for various communication and optimisation problems in wireless communication networks, as well as cryptography and digital currencies including quantum money. Currently, he is serving on Management Committee Board of Denmark for several EU ICT projects and has produced more than 70 peer-reviewed scientific papers.

In the present scenario, pollution has become more common in our day-to-day lives. In general, the term pollution is defined as the process of release of harmful substances into the environment that degrades the quality of air, water, land, and other natural resources. It is evident from the environmental researches that the rapid growth in modern industrial systems and urbanisation forms the most important cause of pollution. The harmful effects of air, water, and land pollution could be minimal in the short term but, if left unaddressed, may lead to irreversible consequences such as climate change in the long run. To effectively resolve these concerns and to prevent the harmful impacts of pollution from a future perspective, this special issue intends to bring out new trends in monitoring air, land, and water pollution. The response from the research community for this special issue is significant, and a total of 7 papers have been selected for

publication. All the papers published in this special issue have been selected after a careful peer-review process from the domain experts.

The first paper in this special issue presents a unified framework for environmental information disclosure to prevent the harmful effects of pollution and other environmental hazards. The authors provide a structural equation model based on information disclosure, environmental cost, and enterprise value. The conclusions derived from this research work indicate that information disclosure forms the most vital path to attain the unification of environmental and economic benefits from the enterprises.

The authors in the next work make a detailed study on karst rocky desertification and its impact on soil degradation and land pollution. The study is made from the perspective of ecological industrial market models. The ecological industrial products and their influence on soil degradation and pollution are clearly envisioned in this work.

The third paper makes an analysis of manufacturing industries in China from the viewpoint of the global value chain on carbon emissions. It is a well-known fact that carbon footprints form the basis of air pollution and several other environmental impacts. Everyday emissions from manufacturing industries release a huge amount of carbon sources into the air. In this work, the authors categorise the manufacturing industries into four sectors, such as low-tech, medium-low-tech, medium-high-tech, and high-tech. The industries are classified into one of these categories based on numerous factors. This work effectively identifies the impacts of carbon sources in the global value chain.

The fourth paper deals with the analysis of soil water movement in agriculture and the harmful effects of water pollution. The soil water nitrogen movements are found using two methods, namely method-combining experiment (field) and numerical simulation (HYDRUS-1D). They find the best water-saving strategy to protect the environment, and also this work suggests some interventions to prevent soil and water pollution for a sustainable future.

In the fifth paper, the authors present drone-assisted spraying models for precision agriculture. The major objective of this work is to prevent soil and air pollution through the deployment of precision agricultural practices.

The next work focuses on ecological red line zoning across Tibet autonomous regions. The analysis is made in terms of ecosystem services and ecological sensitivity. The assessments are made from a regional scale, and the results are convincing.

In the final paper, the authors make an attempt to reduce the impacts of water pollution across various climate regions in the USA. The experimental observations are made under various climate conditions, and the results are satisfactory.

This special issue brings together significant contributions on new trends in monitoring and measuring air, land, and water pollution. We wish to express our sincere

gratitude to the Editor-in-Chief of this journal for giving us the privilege to edit this special issue. We further thank all the authors and reviewers for their timely contributions.