EDITORIAL

Special Issue on "Cognitive Big Data Analytics for Intelligent Information Systems"

M. Elhoseny[1] · M. Kabir Hassan[2] · Mirjana Pejic-Bach[3]

This is a special issue of the Information Systems and e-Business Management journal, covering the recent big data analytics techniques in intelligent information systems. Moreover, it aims to analyze the behavioral decisions of customers, people, and organizations that lead to changes in the way people use information in modern and smart environments, i.e., Smart Cities and IoT applications.

With new digital transformation and data collection technologies, such as smart sensors, and mobile technologies, organizations generate a huge volume of data which changed the landscape of information systems, from governments, organizations, communities to individual decision making. Due to the increase in data size, complexity, and formats, it is no longer practical to anticipate and model all possible interactions and data processing in cognitive big data-based applications using the traditional data processing models. Accordingly, modern information systems need new techniques and algorithms for handling these amounts of data. Using these algorithms for integrating big data analytics with intelligent information systems is an essential step toward gaining the full return for the institutions in modern environments such as smart cities.

The accepted papers explore diverse modelling approaches and a number of novel methods and approaches which are proposed and applied to a wide range of business and industrial problems such as A New Method for Evaluating Information System Growth of SMEs Based on Improved BP Neural Network. Another paper proposes a

---

This special issue was externally managed and not handled by Professor Becker or Professor Shaw.

✉ M. Elhoseny
   Melhoseny@ieee.org

   M. Kabir Hassan
   mhassan@uno.edu

   Mirjana Pejic-Bach
   mpejic@efzg.hr

[1] Computer Science Department, American University in the Emirates, Dubai, UAE

[2] College of Business Administration, University of New Orleans, New Orleans, USA

[3] Faculty of Economics and Business, University of Zagreb, Zagreb, Croatia

new model for Supply Chain Optimization Based on Chain Management and Mass Customization. Additionally, a set of intelligent algorithms for real-life applications have been proposed such as Intelligent Hybrid Model for Financial Crisis Prediction using Machine Learning Techniques.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.