Guest Editorial Preface

Special Issue on Soft Computing Applications in Supply Chain Management

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This special issue has been brought out from the selected papers presented in the International Conference on Mechatronics and Intelligent Robotics (ICMIR2017) which was held in Kunming, China, during May 20-21, 2017. There are six papers included in this issue. In this special issue various supply chain problems are discussed utilising soft computing techniques.

The first paper entitled "An Empirical Analysis of Shandong Power Grid Operational Efficiency Based on DEA-Malmquist" by Liqing Zhu and Xueli Zhan presented the operation efficiency of Shandong Electric Power Group Corporation and empirically analyzed various input and output adjustment by Differential Equation Algorithm (DEA). Zhu and Zhan further discussed the changing trends of factor of productivity and higher efficiency with specific background through the empirical analysis.

The second paper entitled "Construction of a Relational Leadership Model Based on a two-stage Least Square Method and an Investigation on the Interaction Among the Factors in the Model" by Shubing Guo and et. al. They used a two stage least square method (TSLS) for studying the complex relationship among five elements i.e. leadership, followership, leader-member exchange, leadership situation, and leadership performance. Guo et. al. constructed a SLRFP (Situation, Leadership, Relationship, Followership, Performance) model which is a five-force relational leadership model to reveal the core contents and establishes a unified theory and claims it to be of higher academic value.

The next paper entitled "Operation Refinement in Trusted Component Based on OR-transition Colored Petri Net" by Na Zhao and et. al. presented the various components which are important elements of software architecture. They have proposed the refinement of trusted component using OR-transition colored Petri net, extending a previous model.

The fourth paper entitled "Research on Application of Wireless Bridge Technology in the Smart Grid", by Zou Ying and et. al. presents the technical study of the smart grid communication network from three different aspects: wireless bridge design, management platform design and security protection design, along with the identification of various problems which degrades the performance of smart grid networks

Guiqing Zhao in his paper entitled "Research on Inspection Method of Dynamic Load of Truck by Using EWT" addresses the dynamic vehicle load monitoring problem and proposes an EWT-based load detection system. The effectiveness of the new model is validated using a FAW heavy truck for high accuracy of the detection system under various speed conditions.

Last but not the least, paper entitled "Study on the Influence Factors of Tobacco Market Demand and Efficiency Evaluation", by Lei Li, and et. al. studies the influence of various factors on the market demand of tobacco by evaluating efficiency of these factors and validates the findings.

I am thankful to all the authors for contributing their research outputs to this issue. I am also thankful to all the reviewers and lastly but not the least to the Editor-in-Chief of the International Journal of Information Systems and Supply Chain Management Prof. John Wang, without whom this was never possible.

I am sure the readers will be immensely benefited from this special issue which covers new dimensions of various supply chain problems utilising soft computing tools.

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Srikanta Patnaik is a Professor in the Department of Computer Science and Engineering, SOA University, Bhubaneswar, India. He has received his Ph. D. (Engineering) on Computational Intelligence from Jadavpur University, India in 1999 and supervised 12 Ph. D. theses and more than 30 M. Tech theses in the area of Machine Intelligence, Soft Computing Applications and Re-Engineering. Dr. Patnaik has published more than 60 research papers in international journals and conference proceedings. He is author of 2 text books and edited 12 books and few invited book chapters, published by leading international publisher like Springer-Verlag, Kluwer Academic, etc. Dr. Patnaik was the Principal Investigator of TAPTEC project "Building Cognition for Intelligent Robot" sponsored by All India Council for Technical Education, New Delhi and Major Research Project "Machine Learning and Perception using Cognition Methods" sponsored by University Grant Commission. He is the Editors-in-Chief of International Journal of Information and Communication Technology and International Journal of Computational Vision and Robotics published from Inderscience Publishing House, England and also Editors-in-chief of Book Series on "Modeling and Optimization in Science and Technology" published from Springer, Germany.

Xilong Qu is the dean of School of Information Technology and Management, Hunan University of Finance and Economics, he is also the master degree student advisor for both Xiangtan University and Hunan Institute of Engineering. Prof. Xilong Qu received his Ph.D on Southwest Jiaotong University, he finished his post-doctor study in Post-doctoral Research Center of Computer Science and Technology, South China University of Technology. Prof.Xilong Qu joined 4 projects from the National High Technology Research and Development Program of China (863 Program) and the National Natural Science Foundation of China, also he led the National Natural Science Foundation of Hunan, the Research Foundation of Education Bureau of Hunan Province, China and the National Science Foundation for Post-doctoral Scientists of China for 3, 1 and 1 times respectively. Prof. Xilong Qu published 4 books 35 articles (5 articles are indexed by SCI and the rest are indexed by EI). Prof. Xilong Qu is also invited for chairs and keynote speakers of numerous conferences and forums in China.

Bin Hu is a manager in China Mobile Communications Corporation, Xiangtan Branch now, he is in charge of the business development and technical support in the CMCC's marketing, he received his master degree in Changsha University of Science and Technology. He is the co-organizer of several international conference and the contacting chair of IRNet, his interests include internet of things, automatics and communication system.