

## Guest Editorial Preface

# Special Issue on Emerging Trends On Computational Intelligence Approach

Vijender Kumar Solanki, CMR institute of Technology (Autonomous), Hyderabad, India

Sandhya Makkar, Lal Bahadur Shastri Institute of Management, Delhi, India

Duc-Tan Tran, Phenikaa University, Hanoi, Vietnam

In the past decade, two developments have brought decision sciences and business intelligence, and the interactions, linkages, and applications of knowledge-based business with information systems to the fore. There is increase in the usage for not only key operational purposes of an organization but also for gaining strategic advantage. Second, abetted by information and communication technologies, the whole business model for many organizations has been transformed. Whereas in the past companies could rely on confining themselves to a particular geographical area to conduct their business. Today companies are increasingly becoming location independent and are finding themselves to be strategically disadvantaged if they are confined to a particular place. The consequence of advances in information technologies and the changing boundaries of the firm have brought the importance of data and information to the fore. This is because it is information that helps companies realize their objectives and helps managers to take adequate decisions. This has motivated editors to investigate opportunities to introduce new technology in organizations through the research work by practitioners and innovators.

For the same purpose, editors circulated the call for paper to the researchers and academicians and received number of quality papers. However due to scope of special issue and review reports, we were able to add five research papers in this issue. We are thankful to the author's for supporting a long wait and finally it's before you.

The first article titled “Evaluating the **Observability** in the **Combination Process** of the **Height Measurement Signals**” is contributed by Nguyen Vinh in which the author has evaluated the modern navigation system and discussed gave a logical insight that the height channel is always the most unstable channel. He also recommended that combination processing the height measurement signals by using the Kalman filter algorithm can improve the precision of the high measurement. However, in the process of performing the signal processing algorithm by using the Kalman filter the transition time to obtain the set status is long. Moreover, within different flight conditions the inertia height meter will be combined with the supporting height meter to get the structure of the combination height meter in order to process the height measurement signals more precisely. In this article we proposed using the criterion for evaluating the observable level to improve the quality of height measurement signal processing. The research results were simulated on three combined high measurements, in which the inertia height meter (IHM) (the basic meter) was combined with one or two supporting height meters (the radio height meter (RHM) and the Barometer (AHM)) to show the correctness of the proposed algorithm.

The second article “Examining Consumer Loyalty, Internet of Things (IoT), and Theme Restaurants in Delhi Region: An Empirical Study” is contributed by Pooja Ahuja as the research is conducted keeping in view the new trend of Theme Restaurants in India. The theme industry is not dominated by any major players but there are some players like Pind Baluchi, Haveli that are doing good. Theme Restaurants target different age groups. There are 4 types of loyalty: True Loyalty, Spurious Loyalty, Latent Loyalty and No Loyalty. It is based on behavioral and attitudinal aspects of customers. Out of 4 types of loyalty, the type of loyalty for theme restaurants in Delhi/NCR is determined in this study. This can be helpful for existing players as well as for new entrants. They can understand the current scenario or level of loyalty in theme restaurant business. The study has determined the factors that can impact customer loyalty in theme restaurants in Delhi/NCR. If any new entrant comes, they can design their offerings based on the factors. This in turn can help them in bring customer loyalty. For existing players, they can revise their services and offerings based on the determined factors.

In the third article Shivani Agarwal, submitted her article on “Influence of Gender Differences on Quality of Work Life in Indian IT Sector” in which authors state that the purpose of this research is to study the gender differences in the level of the quality of work life between male and female employees in IT industries. The sample consists of 150 people, out of which 90 were males and 60 were females from IT industries. Quality of Work Life was evaluated by the scale which was developed by Angus S. McDonald (2001) consists of seven dimensions. After data collection, significant differences regarding quality of work life were evaluated by applying t-test. The result reported significant difference in the exhibition of most of the dimensions of quality of work life between the two groups. These insights can be used for the improved level of quality of work life between male employees and female employees in IT industries. This paper presents data and provides an accurate and deep understanding into the factors of quality of work life of the employees.

In the fourth article, Tuyen Phong Truong submitted work on article “Optimizing Radio Coverage Based on Cellular Automata”. **In this article, a new approach is proposed, adopting cellular automata and massively parallel processing on GPUs.** This work relates to the development of parallel algorithms and CAD tools to optimize coverage oriented to efficient deployment of wide-range wireless networks for various purposes such as environmental surveillance, early warning systems for natural hazards and risks, taking into account turbulence in topology. Some experiments on radio coverage were done in different complex terrain areas given positive results in terms of performance and functional requirements.

In the fifth article, Vinit Gunjan submitted work on “Predictive Analytics for OSA Detection Using Non-Conventional Metrics”. In this article, Early diagnosis in the case of the sleep apnea factors has its own set of benefits for treating the cases. However, there are many challenges and limitations that impact the current conditions for testing the conditions. In this manuscript, the model is proposed for early diagnosis of OSA, using the non-conventional metrics. Profoundly the metrics used are combination of symptoms, causes and effects of the problem. Using a machine learning model, and two set of classifiers, the inputs collected as part of the training datasets are used for analysis. The data classifiers used for the model tests are NB and SVM. In a comparative analysis of the results, it is imperative that SVM classifier-based training of the proposed algorithm is giving more effective performance.

We place our sincere thanks to reviewers from country as well as from abroad, who have given their valuable time to provide critical review for the assigned paper. We are sincerely thankful to EiC for providing opportunity to us to edit their journal special issue. I am sure that this special issue will be beneficial to the industry, academicians and researchers, who are working in the domain of human resource, organizational behaviour, artificial intelligence, analytics etc.

We are also thankful to our respective Institution’s Principal/Director of CMRIT (Autonomous), Hyderabad & IIIT-Dharwad, Lal Bahadur Shastri Institute of Management, Delhi and Phenikaa

University, Vietnam who provided us ample open platform to serve as the guest editor duties honestly. I am sure this learning will be helpful for us in research and academia exploration.

Though utmost care has been done by us in preparing this special issue, but still your critical feedback and suggestion will help us to get better inputs in future works.

*Vijender Kumar Solanki*

*Sandhya Makkar*

*Duc-Tan Tran*

*Guest Editors*

*IJKBO*