Editorial

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Biographical notes: Himansu Sekhar Behera is working as an Associate Professor and Head of the Department of Information Technology, Veer Surendra Sai University of Technology (VSSUT), Burla, Odisha. He received his MTech from the NIT, Rourkela (formerly REC) and PhD in Engineering from the Biju Pattnaik University of Technology (BPUT), Odisha respectively. He has published more than 80 research papers in international journals and conferences, edited 11 books and is acting as a member of the editorial/reviewer board of various international journals. He is proficient in the field of computer science engineering and served the capacity of program chair, tutorial chair and act as advisory member of committees of many national and international conferences. His research of interest includes data mining, soft computing, machine intelligence, evolutionary computation and distributed systems.

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The use of nature inspired optimisation algorithms have been a recent interest among the researchers of various research community. The main reason behind the success rate of nature inspired and swarm-based algorithms are having the capability to solve the NP-hard problems. These techniques are being increasingly widely applied to a variety of problems, ranging from practical applications in industry and commerce to leading-edge scientific research. Starting from the genetic algorithm to the trends of the present day development, nature inspired algorithms has been a keen interest among all the wide variety of researchers. The technique indicates to the computational processes observed in nature, and human-designed computing inspired by nature. When complex natural phenomena are analysed in terms of computational processes, our understanding of both nature and the essence of computation is enhanced. It is an emerging interdisciplinary area in which a range of techniques and methods are studied for dealing with large, complex, and dynamic problems. The main intent of this special issue is to cover both the theory and applications of various nature inspired algorithms embedded to the diversified spanning fields of neural networks, connectionist system, artificial intelligence, fuzzy systems, etc. It aims to provide an intellectual forum for researchers in Academia, Scientists and Engineers from a wide range of application areas to present their latest research findings in nature inspired algorithms to identify future challenges in this novel combination of research areas.

This special issue comprises of some latest findings in diversified applications such as: a nonlinear time series forecasting model using TLBO-based MFLANN model, analysing the impact of C-factor on PSO for solar PV-based BLDC motor drive, use of modified PSO algorithm in estimating IIR's system parameter, hybridising GSA and PSO algorithm for designing the fractional PID controller, realising the importance of deep learning in text categorisation, scalable keyword-based search and data manipulation on encrypted data, analysing and improving bug report quality by predicting correct component in bug reports, the connectivity and the static-cost-effective analysis of a shifted completely connected network. The articles are some of the exemplary collections

of recent development and findings of nature inspired optimisations as well machine learning techniques.

Use of latest techniques, hybridising two efficient methods and analysing the performance in real time scenario gives boost to refer these articles for further use. As guest editors, we expect for the wider use of these research works covered under this special issue will be of value for whole host of readers/researchers working in the domain of nature inspired optimisations and related areas. We are thankful to our authors who have responded to our CFP and contributed their valued research to this special issue and always being supportive to us during different phases of the reviewing of the articles. The technical standards and quality of published articles in this special issue is based on the strength and expertise of the reviewer board members who have been grossly involved in providing high quality reviews for the submitted papers. Our special thanks go to the Editor-in-Chief of the *International Journal of Computational Intelligence Studies* (*IJCIStudies*), Professor George A. Tsihrintzis for all continued support and input on the policies of the journal as well as for his volunteered significant time despite of his busy schedules. Also, we are thankful to the editorial support members for their constant effort for successful publication of the issue.