

---

## Editorial

---

### Himansu Sekhar Behera\*

Department of IT,  
Veer Surendra Sai University of Technology (VSSUT),  
Burla, Sambalpur, Odisha, 768018, India  
Email: hsbehera\_india@yahoo.com

\*Corresponding author

### Durga Prasad Mohapatra

Department of Computer Sc. Engineering,  
National Institute of Technology, Rourkela,  
Rourkela, 769008, India  
Email: durga@nitrrkl.ac.in

**Biographical notes:** Himansu Sekhar Behera is working as an Associate Professor in the Department of Information Technology, Veer Surendra Sai University of Technology (VSSUT), Burla, Odisha. He received his MTech from the N.I.T, Rourkela (formerly R.E.C) 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 acts as advisory member of committees of many national and international conferences. His research interest includes data mining, soft computing, machine intelligence, evolutionary computation and distributed systems.

Durga Prasad Mohapatra received his PhD from the Indian Institute of Technology Kharagpur and he is presently serving as an Associate Professor in NIT Rourkela, Odisha. His research interests include software engineering, real-time systems, discrete mathematics, and distributed computing. He has published more than 30 research papers in these fields in various international journals and conferences. He received several project grants from DST and UGC, Govt. of India. He received the Young Scientist Award for the year 2006, by Orissa Bigyan Academy. He has also received the Prof. K. Arumugam National Award and the Maharashtra State National Award for outstanding research work in Software Engineering for the years 2009 and 2010, respectively from the Indian Society for Technical Education (ISTE), New Delhi. He is going to receive the Bharat Sikshya Ratan Award for significant contribution in academics awarded by the Global Society for Health and Educational Growth, Delhi.

---

In the last decade, intelligent computing has experienced an incredible growth in both theoretical analyses and industrial applications. Many organisations are using different intelligent computing techniques, such as neural networks, fuzzy logic, genetic algorithms, and intelligent agents, to expand their knowledge base. These computing techniques are able to work with problems and information which are too large or complicated for humans to handle, especially in a timely fashion. 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 intelligent computing techniques embedded to the diversified spanning fields of neural networks, connectionist system, artificial intelligence, fuzzy systems, etc. The issue will be helpful to promote original research articles on theoretical, experimental and practical aspects of various advance computing approaches.

This special issue comprises of some interesting and important articles such as: dynamic priority based packet handling protocol for healthcare wireless body area network system, developing software effort estimation using a non fuzzy model, computing hit ratio for SOA based applications through tcases, an effective topic-based ranking technique for categorised research articles, exception discovery using ant colony optimisation, reduction of computation time in differential evolution based quantisation table optimisation for the jpeg baseline algorithm, a graph based approach for feature selection from higher order correlations. The articles are well described and are the real reflections of some recent advances of advance intelligent computing. This special issue covers both the theory and applications of the above mentioned techniques embedded to the diversified spanning fields of all areas of intelligent computing. The wider use and successful applications in various diversified problem

domains discussed in this special issue show the efficiency of these methods. As guest editors, we hope that spectrum of research works covered under this special issue will be of value for whole host of readers/researchers working in the domain of evolutionary and natural computing and related areas. It is important to have a good balance of different article type within the special issue. We are grateful to our authors who have contributed their valued research to this special issue and always supported us during 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 System Engineering (IJCSysE)*, Prof. Valentina E. Balas for all her continued guidance and input on the policies of the journal as well as for her volunteered significant time despite of his busy schedules. Also, we are thankful to the editorial support members and teams for their constant effort for successful publication of the issue.