
Introduction

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The *International Journal of Intelligent System Design and Computing (IJISDC)* has been introduced with the objective to facilitate discussion and dissemination of knowledge in the area of intelligent systems design in the changing scenario of technology development. It is intended to highlight research contributions and catalyse documentation of know-how and knowledge related to ongoing and upcoming research domains in knowledge aided and intelligent system design in electrical, electronics and computational sciences and engineering. This has driven the effort leading to the compilation of the first two issues of the journal which required a considerable period of time due to the tedious processes of multiple rounds of review, type casting, proof reading, editing and production.

The work titled 'Design and development of web enabled fuzzy expert system using rule advancement strategy' by Arun Solanki and Ela Kumar report a new approach for providing intelligence in the expert system for diagnosis of diseases for rose flower. It describes the development of a web-based intelligent disease diagnosis system. Smail Tigani, Mouhamed Ouzzif and Abderrahim Hasbi in the work 'Markov chains and linear model-based hybrid prediction algorithm for cognitive agents' focussed on improvement of cognitive agent's performance. Babita Pandey and Depika Kundra focus on the development of a medical diagnosis system (MDS) for the diagnosis of electroencephalography (EEG)-based diseases, integrating J48 (data mining) and case-based reasoning (CBR).

Robots are highly nonlinear and chaotic in position control. The present paper mainly presents the position control of PUMA-560 robot manipulator. Ch Ravi Kumar, K.R. Sudha and D.V. Pushpalatha in the work 'Design of prisoner's dilemma-based fuzzy C-means computed torque controller for PUMA-560 robot manipulator' present the position control of PUMA-560 robot manipulator. Of late deep neural networks (DNN) have been accepted to be an important tool in speech processing applications. This has been highlighted in the paper 'Speech recognition using deep neural network – recent trends' by Mousmita Sarma. The work 'A new look at compactly supported biorthogonal Riesz bases of wavelets' by Mahendra Kumar Jena and Manas Ranjan Mishra highlight new additions to wavelets and their application.

Dhiraj Pandey and Uma Shankar Rawat in the work 'Identity verification system: a visual cryptography-based approach to prevent fraudulent in admission process' describe the design of a verification system for examination applications. 'An improved extreme learning machine to classify multinomial datasets using particle swarm optimisation' by Nilamadhab Dash, Rojalina Priyadarshini and Rachita Misra propose a particle swarm-based extreme learning machine (ELM) to classify datasets with varying number

of classes. The work 'Cluster labelling using chi-square-based keyword ranking and mutual information score: a hybrid approach' by Rajendra Kumar Roul and Sanjay Kumar Sahay propose a method of labelling clusters.

Some emerging issues related to palmprint technology is covered in 'Intramodal palmprint recognition using texture feature' by Y.L. Malathi Latha and Munaga V.N.K. Prasad. Medical devices which are developed for human application can be used for diagnostic and/or treatment purposes. Those devices may be instrument; materials, etc. and this can be used for patients care or for some other medical purposes. These issues have been highlighted in 'Medical device design – an introduction to systems risk' by Kaustav Jyoti Borah. In statistical analysis, smoothing is used to remove noise like aberrations and present the data as a meaningful one. Such an aspect has been covered in the work 'Application of Epanechnikov kernel smoothing technique in disability data' by Jumi Kalita and Pranita Sarmah.

A special issue 'Recent advances in fuzzy logic, machine learning and data mining' by Dr. Himansu Sekhar Behera (Veer Surendra Sai University of Technology, India), Dr. Amit Saxena (Central University, India), Dr. Gunamani Jena (Roland Institute of Technology, India) and Professor B.B. Mishra (Silicon Institute of Technology, India) took care of certain important review. As part of the special issue a work by Bighnaraj Naik, Janmenjoy Nayak, Himansu Sekhar Behera and Ajith Abraham titled 'An improved harmony search-based functional link higher order ANN for nonlinear data classification' highlighted the importance of an improved variant of harmony search (HS), called improved harmony search (IHS) along with gradient descent learning (GDL) is used with functional link artificial neural network (FLANN) for the task of classification in data mining. 'Periodic pattern mining in weighted dynamic networks' by Anand Gupta, Hardeo Kumar Thakur and Anshul Garg described an efficient framework based on available algorithms to mine periodic patterns both on structure and weight in a weighted dynamic network.

Hopefully, authors shall make more submissions and more request for special issues will facilitated. Many such requests could not materialise due to multiple reasons. But Dr. Himansu Sekhar Behera and his team completed the work diligently.

Overall, it has been a commendable work by everyone associated with the first two issues. Special thanks and gratitude goes to the authors, reviewers, editorial board members and the production team of Inderscience. All have made significant contributions and have ensured that the present stage is reached.