Editorial

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Biographical notes: Deepshikha Bhargava is currently working as the Director and Head of Amity Institute of Information Technology, Amity University Rajasthan, Jaipur. He published 15 books and 40+ research papers in journals and conference proceedings of international and national repute. He is a member of IACSIT, Singapore; CSTA, ACM-USA; Computer Society of India (CSI); ISLE; and Project Management Institute (PMI). He is also a member of reviewer and editorial board of 10+ international and national journals. He is supervising six international and national PhD scholars. His key research interests include software agents, data mining and knowledge management.

Ramesh C. Poonia has rich experience of 14+ years as an academician. At present, he is an Associate Professor of Computer Science at the Amity Institute of Information Technology, Amity University Rajasthan, India. He has received his PhD in Computer Science from the Banasthali University, India. His current research interests are sustainable computing, mobile communication, vehicular networks and wireless sensor networks, network protocol evaluation, network simulation and modelling with their applications in optimisation, data traffic control and IoT with agriculture.

Swapnesh Taterh is an Associate Professor in Amity Institute of Information Technology at Amity University, Jaipur. He has more than 13 years of academic and teaching experience. During his academic career, he has held various positions such as member of board of studies, centre superintendent for conducting major examination etc and currently as a program coordinator in the Department of AIIT. He has provided the guidance to the research scholar and taking the classes in PhD course work.

1 Introduction

A recent booming development of web-based technologies and mobile applications has facilitated a dramatical growth of new techniques implementations. Enabling a smart life has become a popular research topic with an urgent demand. Therefore, the special issue

on 'Smart converging technology' focuses on different innovations and interdisciplinary research work in the area of smart converging technologies.

The lead article in this special issue is titled as 'Development of an adaptive non-parametric model for estimating maximum efficiency of disc membrane', by Anirban Banik et al. It is based on non-parametric model and calculates the performance of the prepared GMDH model that is evaluated by using model evaluation technique like NSE, PBIAS, slope and Y-intercept, RSR. It has been found that software predicted data can be used for trouble shooting and optimal design of the membrane bed.

The second article based on case study titled as 'Designing and modelling of grid connected photovoltaic system (case study: EEU Building at Hawassa City)', by Yishak Kifle et al. The study uses different metrological data and simulates the grid connected PV technologies to end users, for decision making in PV energy investment. Performance ratio and specific energy is calculated as indicator for the plant feasibility in the area.

In the paper entitled 'Wheat yield forecasting using fuzzy logic', by Bindu Garg et al. In this paper, the neural network has been used for training and defuzzification of the forecasted values. To attests the efficacy and the performance of the proposed method, it has been tested against the wheat production dataset.

A new variant of 'A novel method for reduction of leakage current in MOSFET', by Debasis Mukherjee and B.V. Ramana Reddy. This paper proposes a structure named as defensive MOSFET as it looks like a defensive shield. Structural dimensions of 20 nm MOSFET generations have been taken from the 2011 edition of international technology roadmap for semiconductors or ITRS. All simulation processes have been executed by Sentaurus G-2012.06 technology computer aided design or TCAD software.

The last article is titled as 'Development of real time monitoring system for intake water of surface water treatment plant with the help of segmented polynomial neural network', by Paulami De and Mrinmoy Majumder. This paper aims to propose for prediction of the temporal patterns of various chemical parameters by adopting a new type of artificial neural network model.

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