
Editorial

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Biographical notes: Debashis De is a Professor at the Department of Computer Science and Engineering and Director of School of Computational Science of the Maulna Abul Kalam Azad University of Technology, West Bengal, India, and Adjunct Research Fellow at the University of Western Australia, Australia. He was awarded the prestigious Boys cast Fellowship by the Department of Science and Technology, Government of India, to work at the Herriot-Watt University, Scotland, UK. His research interests include mobile edge computing and IoT. He published in more than 300 peer-reviewed journals and 100 conference papers, 9 filed patents. His h index is 33, citation 4500.

Sankar Prasad Mondal is an Assistant Professor in the Department of Applied Science in Maulana Abul Kalam Azad University of Technology, West Bengal, India. Previously, he was working as an Assistant Professor in the Department of Mathematics in Midnapore College (Autonomous) and National Institute of Technology, Agartala. He is having six years of teaching and nine years of research experience in the field of operations research, differential equation, fuzzy sets, mathematical biology, fuzzy differential equation, soft computing, artificial indigence, and optimization theory. He already published 100 research papers in reputed journals, books chapter and conference.

Ali Ahmadian is a Senior Lecturer at the Institute of IR 4.0, The National University of Malaysia, an affiliated researcher at the Kean University, USA and Visiting Professor at the Mediterranean University of Reggio Calabria, Italy. He is a member of editorial board in *Progress in Fractional Differentiation and Applications* (Natural Sciences Publishing) and *Mathematical Problems in Engineering*, Hindawi. He is lead guest editor in *International Journal of*

Fuzzy Systems (Springer), *Mathematical Methods in Applied Sciences* (Wiley), *Advances in Mechanical Engineering* (SAGE), *Symmetry* (MDPI), *Nanomaterials* (MDPI), *Software Engineering for Parallel Programming* (Springer), *Journal of Applied Remote Sensing*, *International Journal of Hybrid Intelligence* (Inderscience Publishers), etc. He is an author of more than 130 research papers published in the high Prestigious journals.

Mehdi Salimi is an Assistant Professor in department of Mathematics and Statistics at McMaster University, Canada. He obtained his PhD in applied mathematics (Game Theory) in 2011 from UPM, Malaysia. In 2006, he acquired a Master's degree in Pure Mathematics in Tehran, Iran. He was also a Postdoctoral Fellow in the Center for Dynamics (CfD), Dresden University of Technology, Germany, and finished the position in January 2015. Then he moved to the MEDALics – Research Centre of the University Dante Alighieri in Reggio Calabria, Italy, for another postdoctoral and he finished the position in August 2015.

This special issue of the journal, *International Journal of Hybrid Intelligence* contains six papers. The theme of the special issue is ‘Soft computational intelligence in understanding crisp and uncertainty hybrid modelling’. Hybrid modelling with uncertainty receives a lot of attention today. In the sciences and engineering research domains, modelling and interpretation of solutions to some problems is a challenging task. However, the solution via numerical schemes is a way to solve the many cases of non-linear complex problems. Soft computing techniques are one of the computational methods used most and developed for unexplored problem-solving issues. In this special issue, we will focus on solving different areas of engineering and science problems in crisp and uncertain environments.

Thus, this special issue aims to convey collectively various research and advance achievements in exploring techniques, different applications, and challenges that face the advancement of hybrid modelling in the context of crisp and uncertain environment. A brief overview of the papers is presented and discussed as follows.

In the paper titled ‘Determination of approximate fuzzy membership function using linguistic input – an approach based on interpolation’, authors use the uncertainty as fuzzy setting and applied it to the determination of approximate fuzzy membership function by using the interpolation strategy.

In the paper titled ‘Tumour model with different imprecise coefficients’, the authors take tumour model associated with a differential equation with interval and fuzzy data. Due to present, the uncertain variable the solutions strategy and analysis become tough and they handle it.

In the paper titled ‘The behaviour of logistic equation in fuzzy environment: fuzzy differential equation approach’, the authors find the solution and stability analysis of well-known logistic population model with fuzzy type data. They use the fuzzy differential equation approach in it.

In the paper titled ‘Comparison between pre-diabetes and diabetes model in fuzzy and crisp environment: fuzzy differential equation approach’, authors take a diabetes model under imprecise data and find the necessary solutions and stability criteria.

In the paper titled ‘A job-sequencing problem using modified score function in PNN environment’, author use the pentagonal fuzzy number concept in job sequencing problem. The use of uncertainty is nicely applied in real-life modelling.

In the paper titled ‘Quantitative prognostic factor extraction of epidemic thrombosis using machine learning strategy’, authors find the factor extraction of epidemic thrombosis using machine learning strategy.

We hope the special issue helps the research community to modelled different real life problem in an elegant manner and the solution strategies for adopting in their future research theme.

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