



## IJCIS: Call for Papers Special Issue “Deep Computational Intelligence Systems”



### Guest Editors:

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### Aims and Scope

Real-world problems often involve complexity, noisy environment, imprecision and vagueness. It is usually difficult to solve such problems by the traditional analytical and numerical paradigms. In recent years, Computational Intelligence has started to attract attention in the field as an effective methodology and analysis tool for complex problem solving. Latest research in Computational Intelligence, Real-Time Computing and Control Engineering have shown quite promising results in industry, business and other areas. Computational Intelligence is an integral part of artificial intelligence that implements different aspects of human and natural intelligence by means of computer algorithms and programs. In this way, Computational Intelligence can solve some real-world problems better than traditional techniques because of the high level of complexity and the inherent uncertainty of these problems.

Artificial intelligence and Deep Learning are arguably the most transformative technological achievements of the current century. Deep learning as a key component of artificial intelligence has made a significant breakthrough in the field of artificial intelligence recently. It has led to the solution of challenging problems in many fields and is expected to be even more widely used in the near future.

This special issue aims to highlight recent research and developments, trends, solutions and applications of computational intelligence systems with deep structure with effective utilisation of fuzzy systems, neural networks, genetic algorithms, swarm intelligence, machine learning and other relevant techniques. It will present recent advances in the fields of engineering, data analysis and other areas using deep learning techniques such as convolutional neural networks, auto encoders, generative adversarial networks, capsule networks, deep belief networks, recurrent neural networks and multi-layer perceptrons as well as deep computational techniques such as hierarchical fuzzy systems, fuzzy networks and neural networks. It will be soliciting original research and survey articles addressing mainly but not only the topics listed below:



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- Hierarchical fuzzy systems
- Fuzzy trees
- Fuzzy networks
- Deep neural networks
- Deep learning
- Deep models
- Machine learning
- Computational Intelligence
- Natural language processing
- Reinforcement learning
- Neuro fuzzy systems
- Fuzzy neural networks
- Fuzzy control systems
- Neural control systems

### Keywords

Fuzzy systems; neural networks; intelligent systems, computational intelligence; artificial intelligence; machine learning, deep learning.

### Important Dates

<b>Submission of papers:</b>	<b>January 31, 2021</b>
Notification of review results:	March 31, 2021
Submission of revised papers:	May 31, 2021
Notification of final review results:	July 31, 2021

### Submit your paper

All papers have to be submitted via the Editorial Manager online submission and peer review system. Instructions will be provided on screen and you will be stepwise guided through the process of uploading all the relevant article details and files associated with your submission. All manuscripts must be in the English language.

To access the online submission site for the journal, please visit <https://www.editorialmanager.com/ij-cis/default.aspx>. Note that if this is the first time that you submit to the International Journal of Computational Intelligence Systems, you need to register as a user of the system first.

NOTE : Before submitting your paper, please make sure to review the journal's [Author Guidelines](#) first.

### Introduction of the guest editor(s)

**Alexander Gegov** is currently Reader in Computational Intelligence in the School of Computing at the University of Portsmouth, United Kingdom. He has a PhD in Control Systems and a DSc in Intelligent Systems - both from the Bulgarian Academy of Sciences. He has been a recipient of a national award for the best young researcher from the Bulgarian Union of Scientists. He has been Humboldt Guest Researcher at the Universities of Duisburg and Wuppertal in Germany as well as EU Visiting Researcher at the Delft University of Technology in the Netherlands. His main research interests include complex systems and networks, fuzzy systems and networks, machine and deep learning, computational intelligence and artificial intelligence. He has authored several research monographs published by Springer. He is also Editorial Board Member for the IEEE Transactions on Fuzzy Systems, Fuzzy Sets and Systems, Intelligent and Fuzzy Systems, Intelligent Systems, and Computational Intelligence Systems.

**Raheleh Jafari** has been a University Academic Fellow in Artificial Intelligence Technology in Fashion Design since October 2019. She obtained her BSc in Pure Mathematics from Islamic Azad University in Shabestar, Iran in 2008, her MSc in Applied Mathematics from Islamic Azad University in Arak, in 2010, and her PhD in Automatic Control from National Polytechnic Institute (CINVESTAV-IPN), Mexico City, Mexico, in 2017. Her research expertise is in the areas of artificial intelligence, fuzzy logic, robotics and automation, and fashion technology. She has published over 70 peer-reviewed papers and a book in the areas of artificial intelligence, fuzzy logic, robotics, and automation. In 2019 she won Travel Awards from Electronics-MDPI Journal at Intelligent Systems Conference (IntelliSys), London, United Kingdom. She is an Editorial Board Member for the Journal of Intelligent and Fuzzy Systems, and has been a reviewer for a large number of journals as well as a conference chair and programme committee member for several conferences.

**Sina Razvarz** received the B.S. degree in Mechanical Engineering, Heat and Fluids from Islamic Azad in Bonab, Iran in 2009 and the M.S. degree in Mechanical Engineering from Islamic Azad University, Science and Research Branch, Tehran, in 2010. He studied at the Departamento de Control Automatico, CINVESTAV-IPN (National Polytechnic Institute) for his Ph.D. degree. He has served as a reviewer in various journals and conferences. His research interests include heat transfer, fluid dynamic, artificial intelligence, fuzzy logic, robotics, and automation.