

INTELLIGENT DECISION TECHNOLOGIES –AN INTERNATIONAL JOURNAL

Special Issue on

“Soft Computing approaches for image analysis in practical scenario: Challenges, Solutions and Applications”

Guest Editors:

Dr. D. Jude Hemanth, Karunya University, Coimbatore, India

Prof. Jacek Zurada, University of Louisville, Kentucky, USA

Dr. Hemant Kasturiwale, Thakur College of Engineering and Technology, Mumbai, India

Objective:

The necessity for image processing is exponentially increasing in almost all practical applications. Image processing includes lower-level processing like image enhancement, segmentation, etc. and higher-level processing like image understanding. One of the critical aspects in image analysis is the selection of computational/mathematical model for processing these images. Conventionally, Artificial Intelligence (AI) techniques such as Artificial Neural Networks (ANN), fuzzy logic theory, etc. are widely preferred for these applications. The success rate of these methodologies is validated theoretically for many applications. However, in case of practical applications, the success rate declined significantly due to many critical issues.

To overcome these drawbacks, a new branch of computational techniques called as deep learning is introduced for practical applications. Numerous changes have been introduced in deep neural networks which has improved their performance in comparison with the conventional ANN. However, there are few open issues such as computational complexity, memory requirement, etc which need to be resolved at the earliest. This special section is specifically focussed on the various critical issues of deep learning approaches for image processing applications. New solutions for challenging problems with deep neural networks are welcome in this special section. Being an interdisciplinary section, the manuscripts shall include topics from deep neural networks and image analysis.

Scope:

The scope of this issue includes, but not limited to,

a) Methodologies

- Artificial neural networks
- Deep feedforward neural networks
- Convolutional neural networks
- Deep belief networks
- Deep Recurrent neural networks
- Deep recursive neural networks
- Hybrid neural networks
- Cellular automata

- Artificial life
- Fuzzy logic theory
- Clustering approaches

b) Applications

- Medical image analysis
- Satellite image analysis
- Gait and Gesture recognition
- Biometrics
- Document identification
- Speech signal analysis
- Surveillance applications

Important Dates:

Deadline for submission: May 1, 2019
First Notification of results: August 1, 2019
Revision Due: October 1, 2019
Final notification: November 1, 2019
Tentative Publication : First quarter of 2020.

Submission Procedure:

Kindly follow the guidelines given in the journal website for submission and manuscript preparation. Note that the publisher will typeset the final article, but will not format references. For any queries, contact the guest editors.

Important Instruction:

To be appropriately identified, submissions for this special issue must include **“Special Issue: SCIA”** in the title of the submission. This identifier can be removed before final publication.

Contact details:

- 1) E-mail :jude_hemanth@rediffmail.com
Mobile : +91-9443001874