

## Guest Editorial

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# Special issue: Applications of intelligent & fuzzy theory in engineering technologies and applied science

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**Abstract.** This special issue of the *Journal of Intelligent & Fuzzy Systems* contains selected articles of WorldCist 2018, the 6th World Conference on Information Systems and Technologies held in Naples, Italy, 27–29 March 2018.

### 1. Introduction

The field “Intelligent & Fuzzy Theory” has been expanding its topic and boundary in the past decades in order to reflect the complex requirements of the information society. Consequently, many academic studies have tried to address the complex information science and technology issues in wider perspectives.

Thus, it is our pleasure to release this issue of *Journal of Intelligent & Fuzzy Systems*, which represents a cross-section of research in information technologies and artificial intelligence areas that touch both social sciences and engineering technologies. The key areas and topics of selected papers include:

Scalability and performance of fuzzy algorithms; Fuzzy Logic Module of Convolutional Neural Network; Fuzzy mathematical programming and possibilist optimization; Asymmetric Equivalences in Fuzzy Logic; Novel fuzzy techniques to fuzzy logic in calculus of variations and fuzzy mathematics, finance, healthcare, optimization of fuzzy

logic controllers, bioinformatics, linear and nonlinear programming problem using fuzzy mathematics; Collaborative approaches where human and machine expertise are used in a complementary manner and inventory and transportation problems in fuzzy environments; Chain Router; Fuzzy regression analyses; Credibility measures with calculus of variations and fuzzy mathematics; Data mining and fuzzy systems; Decision making using fuzzy systems; Linear and nonlinear programming problem using metaheuristics for optimization of fuzzy system; Information retrieval and systems optimization using fuzzy mathematics; Hypothesis testing and identifiability fuzzy problems; Generative adversarial networks; and Monitoring of SOCs and SICs in IT.

This edition is the continuation of our publishing activities. All the included contents were anonymously reviewed by experts to maintain academic excellence and integrity. We wish to thank all, including also authors and others, who directly and indirectly have been contributing to the release of this issue by their engagement.

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