



## CALL FOR PAPERS

### Journal of Intelligent & Fuzzy Systems

URL: <https://www.iospress.nl/journal/journal-of-intelligent-fuzzy-systems/>

#### SPECIAL ISSUE ON

### “Recent trends, Challenges and Applications in Cognitive Computing for Intelligent Systems”

#### AIMS & SCOPE:

Cognitive computing simulates the human thought processes in a computerized model to solve the research problems in an efficient manner. Cognitive computing involves self-learning systems which uses data mining, pattern recognition and natural language processing to replicate the way the human brain work process. The goal of cognitive computing approach is to create intelligent systems that are capable of solving problems without requiring human assistance. The advanced popularity and scope of intelligent systems is obvious, covering not only large-scale applications, but also medium and small-scale practices. Cognitive computing and intelligence envelops basic, tedious undertakings, as well as advanced functionalities for the real-time challenges. As cognitive computing systems become “smarter” and more ubiquitous, it is important that the human interactions with these systems should be safe and efficient.

The research on cognitive computing investigates the development of self-learning systems that naturally interact with humans in complex environments. Cognitive computing systems are capable of adapting the context and changes in target environment. These systems are proven to be intelligent through better simulation of human mind processes, elaborating huge amounts of data, estimating correlations, testing hypotheses, making predictions and inferences, drawing conclusions, and so on. This is an extremely interdisciplinary emerging research area, at the core of Artificial Intelligence, combining and complementing the scientific results from various disciplines, such as Natural Language Processing, Knowledge Representation and Reasoning, Audio and Video Analysis, Computer-Human Interaction, Neuroscience, and so on.

#### Topics

The theme of the special issue is to provide a detailed analysis of recent trends, challenges, and applications in cognitive computing systems. This special issue is to bring together state-of-the-art research contributions that address these key aspects of cognitive computing and applications. Unpublished innovative papers which are not currently under review to another journal or conference are solicited in the following relevant areas, but are not limited to:

- Personalized feedback and intervention for human centred smart systems
- Artificial intelligent systems for human centred systems
- Adaptive computer vision for human centred systems

- Intelligent interfaces for artificial systems
- Cognitive computing in rehabilitation robot systems
- Cognitive computing in medical healthcare robot
- Cognitive computing in wearable robot systems for personal cooperative assistance
- Hybrid cognitive centred systems
- Augmented cognitive and mechanical systems for human centred systems
- Cognitive computing fundamentals
- Cognitive computing for big data applications
- Cognitive computing and intelligent human-computer interaction
- AI-assisted cognitive computing approaches for smart systems
- Brain analysis for cognitive-inspired computing
- Internet of cognitive Things
- Cognitive environment, sensing and data
- Cognitive robots and agents
- Security issues in cognitive computing
- Intelligent and secure authentication systems
- Context-aware dynamic decision making with cognitive computing
- Decision support systems with cognitive-inspired computing
- Real-world applications and case studies in cognitive computing
- Aggregation of fuzzy preferences
- Missing preferences in the fuzzy decision making
- Consensus and fuzzy ontologies for different intelligent decision-making models
- Social Intelligence and Agent-based Computing
- Intelligent Social Networking
- Applications of the intelligent decision approaches
- Intelligent decision making in complex and dynamic contexts
- Fuzzy preference modeling in intelligent decision support systems
- Intelligent negotiation systems

### **Important Dates:**

- Submission deadline : **March 15, 2020**
- Acceptance/Rejection Notification : June 15, 2020
- Final papers due : July 15, 2020

### **Notes for Prospective Authors:**

All papers are refereed through a peer review process. Submitted papers should present original, unpublished work, relevant to one of the topics of the Special Issue. All submitted papers will be evaluated on the basis of relevance, the significance of contribution, technical quality, scholarship, and quality of presentation, by at least three independent reviewers following the JIFS reviewing procedures. It is the policy of the journal that no submission, or substantially overlapping submission, be published or be under review at another journal or conference at any time during the review process.

## Submission guidelines:

The authors should prepare their manuscript following the formatting guidelines set out by Journal of Intelligent and Fuzzy Systems and Journal style templates are available at:

<http://www.iospress.nl/wp-content/uploads/2015/05/JIFS-Submission-Templates-LaTeX.zip>

<http://www.iospress.nl/wp-content/uploads/2015/05/JIFS-Submission-Templates-MsWord.zip>

The author can choose to use either the LaTeX (preferred) or the MS Word template.

Papers page limits: 12 pages

## Submission link:

All manuscripts should be submitted online at

<https://easychair.org/conferences/?conf=rtcacci2020>

For further query or inquiries, please contact the Corresponding Guest Editor Dr. Vijayakumar V. (see contact details below).

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