



Expert Systems Journal- Special Issue Call for Papers

Special issue on “**Intelligent Visual Systems for the Cyber-Physical World**”

Aim and Scope

The concept of the cyber-physical world has created a growing collaboration based on large amounts of data/information, networks, computational hardware and software. Intelligent visual systems (IVS) is a growing cross-disciplinary research area and has become an important way to connect to the surrounding cyber-physical world. IVS features a combination of artificial intelligence, human interaction, visual computing and other elements, all of which can interact and influence each other to better understand and interact with the cyber-physical world.

Despite the immense growth of intelligent visual systems, there are still many challenges which limit the performance of these systems. And with the rapid development of computing and sensing technologies, the amount of data available has increased tremendously. Most intelligent visual systems can only maintain good performance in a laboratory environment and conventional algorithms are not effective in the wild for many applications. This poses challenges for IVS, but at the same time creates new research opportunities.

The main purpose of this special issue is better to understand and interact with the cyber-physical world through intelligent visual systems. It will identify new directions and define the future agenda for intelligent visual systems to recognize and address current needs and problems for the cyber-physical world. We welcome original contributions that propose innovative and efficient solutions including techniques, methods and algorithms to the challenges of the cyber-physical world.

Topics to be discussed in this issue include but not limited to the follows:

Artificial Intelligence

- Deep Learning and Neural Networks
- Fuzzy Logic
- Expert Systems
- Computational Intelligence
- Sentiment and Affective Analysis
- Biometrics
- Neuromorphic Systems
- Intelligent Applications in Biomedical Engineering
- Human Computer Interaction

Machine Vision

- Pattern Recognition
- Image/Video Processing
- Segmentation Techniques
- Augmented/Virtual Reality
- Computer Graphics and Visualization
- Multimedia Systems and Applications
- Human-Robot Interaction

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- Intelligent Approaches in Robotic and Automation
 - Robot Localization and Map Building

Ambient Intelligence

- Smart Cities and Smart World
- Internet of Things
- Intelligent Life
- Environment monitoring
- Smart Healthcare
- Intelligent Transportation
- Sensing and Sensor Networks
- Hardware Implementations for Intelligent Systems
- Intelligent Control Systems
- Smart Sensors and Materials
- Cyber Physical Systems

Paper Selection

All original manuscripts to the Expert Systems: The Journal of Knowledge Engineering must be submitted electronically through Manuscript Central, <http://mc.manuscriptcentral.com/exsy>. Submissions to this Special Issue must represent original material that has been neither submitted to, nor published in, any other journal.

Guest Editors

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Important Dates

Submissions Deadline: December 1, 2019

First Reviews Due: 1st February 1, 2020

Revision Due: 1st March, 2020

Second Reviews Due/Notification: April 1, 2020

Final Manuscript Due: May 1, 2020

Publication Date: 2020