

# Concurrency and Computation: Practice and Experience

Special Issue on Cognitive Computing for Intelligence Web Systems

This Special Issue is dedicated on Cognitive Computing for Intelligence Web Systems. The key target audience will be the best papers accepted for the Third International Symposium on Artificial Intelligence and Robotics, ISAIR2018 (Nanjing(China), November 17-19, 2018). An open call for papers in this area is also included.

It is expected that submissions will address the topic of the conference ([see call](#)) and contain at least 50% new content regarding any previously published paper. Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other journals.

## GUEST EDITORS

**Huimin Lu**, Kyushu Institute of Technology, Japan. [dr.huimin.lu@ieee.org](mailto:dr.huimin.lu@ieee.org)

**Dong Wang**, Dalian University of Technology, China. [wdice@dlut.edu.cn](mailto:wdice@dlut.edu.cn)

## SUBMISSIONS GUIDELINES

Manuscripts should not exceed 12 pages in length

Submit at Manuscript central as ISAIR2018 special issue

Submission must be prepared for publication according to the journal submission guidelines

## SCOPE:

Cognitive Computing breaks the boundary between two separate fields, neuroscience and computer science. It paves the way for machines to have reasoning abilities which is analogous to human. The research field of cognitive computing is interdisciplinary, and uses knowledge and methods from many areas such as psychology, biology, signal processing, physics, information theory, mathematics, and statistics. The development of cognitive computing will keep cross-fertilizing these research areas. However, in web applications there still remain many open problems for cognitive computing. Technologies like cloud computing and big data are essential to upgrade the web systems with near human intelligence by using new capabilities such as machine learning, cognitive sensing, data mining, pattern recognition and natural language processing.

The journal invites submissions for a special issue on “Cognitive Computing for Intelligence Web Systems” that aims to attract high-quality papers that describe state-of-the-art

technologies and new findings. Some of the most important areas include, but are not limited to:

- Cognitive support and cognitive automation for human sense-making and decision making processes
- Linguistic intelligence - computational linguistics, spoken language recognition and synthesis, etc.
- Spatial intelligence – AI, computer vision, spatial and imagery reasoning
- Interpersonal intelligence - AI agents that interact to each other, self-awareness and emotion in AI
- Formal conceptual models of human brain data, architectures and machine intelligence.
- Novel feature representation via deep learning, biometric modalities to enhance cognitive computing environments
- Machine learning techniques (e.g., deep learning) with cognitive knowledge acquisition frameworks
- Cognitive computing approaches, reactive and proactive systems particular to engineering psychology

#### **IMPORTANT DATES:**

Paper Submission: November 30, 2018.

First Round of Reviews: January 30, 2019.

Submission of Revision: March 30, 2019.

Decision of Acceptance: April 30, 2019.

#### **Guest Editor Bios:**

**Huimin Lu** received M.S. degrees in Electrical Engineering from Kyushu Institute of Technology and Yangzhou University in 2011. He received a Ph.D. degree in Electrical Engineering from Kyushu Institute of Technology in 2014. From 2013 to 2016, he was a JSPS research fellow at Kyushu Institute of Technology. Currently, he is an assistant professor in Kyushu Institute of Technology and an Excellent Young Researcher of Ministry of Education, Culture, Sports, Science and Technology-Japan.

**Dong Wang** received the B.E. degree in electronic information engineering and the Ph.D. degree in signal and information processing from the Dalian University of Technology, China, in 2008 and 2013, respectively. Now, he is an associate professor with the School of Information and Communication Engineering, Dalian University of Technology. His current research interests include object tracking, person re-identification and face recognition.