Neural Computing and Applications
Special Issue on Cognitive Computing for Intelligent Application and Service

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 information applications and services there still remain many open problems for cognitive computing. Technologies like cloud computing and big data are essential to upgrade the existing 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 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

**SUBMISSION GUIDELINES:**
Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other journals.

All papers will be reviewed following standard reviewing procedures for the Journal.

Prospective authors must prepare their submissions in accordance with the guidelines specified in...
the “Instructions for Authors” of the journal.

IMPORTANT DATES:
First Round of Reviews: November 30, 2018.
Submission of Revision: December 30, 2018.
Publication Date: 2019.

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