CALL FOR PAPERS – ICCI*CC 2014
13th IEEE International Conference on Cognitive Informatics & Cognitive Computing
Aug. 18-20, 2014, London South Bank University, London, UK

THEME
From Information Revolution to Intelligence Revolution

Cognitive Informatics (CI) is a cutting-edge and multidisciplinary research field that tackles the fundamental problems shared by modern informatics, computing, AI, cybernetics, computational intelligence, cognitive science, intelligence science, neuropsychology, brain science, systems science, software engineering, knowledge engineering, cognitive robots, scientific philosophy, cognitive linguistics, and life sciences. Cognitive Computing (CC) is a maturing paradigm of intelligent computing methodologies and systems based on cognitive informatics that implements computational intelligence by autonomous inferences and perceptions mimicking the mechanisms of the brain. CI and CC are a transdisciplinary enquiry on the internal information processing mechanisms and processes of the brain and their engineering applications in cognitive computers, computational intelligence, cognitive robots, cognitive systems, and in the AI, IT, and software industries.

The development and the cross fertilizerization between these science and engineering disciplines have led to a whole range of extremely interesting new research areas known as CI and CC. Following the first twelve successful conferences on Cognitive Informatics and Cognitive Computing (ICCI’02 through ICCI*CC’13), the 13th IEEE Int’l Conference on Cognitive Informatics and Cognitive Computing (ICCI*CC’14) focuses on the theme of From Information Revolution to Intelligence Revolution. ICCI*CC’14 welcomes researchers, practitioners, and graduate students to join the international initiative on cognitive informatics and cognitive computing toward the investigation of cognitive mechanisms and processes of human information processing, and the development of the next generation of computers that learn and think.

SCOPE
Original papers are invited from multidisciplinary perspectives on subject areas including, but not limited to, the following:

Cognitive Informatics (CI)
- Informatics models of the brain
- Cognitive processes of the brain
- Internal information processing Mechanisms
- Machine consciousness
- Neuroscience foundations of information processing
- Denotational mathematics
- Knowledge representation
- Autonomous machine learning
- Neural models of memory
- DNA and genome modelling
- Brain information processing
- Cognitive linguistics
- Cognitive complexity and metrics
- Bioinformatics
- Neural signal modelling
- Emotions/motivations/attitudes
- Cognitive sensors and networks
- Cognitive information fusion

Cognitive Computing (CC)
- Cognitive computers
- Cog. reasoning and inferences
- Computing beyond imperative mechanisms
- Cognitive behavior modeling
- Software simulations of the brain
- Mathematical means for CC
- Knowledge manipulation
- Pattern and object recognition
- Cognitive agent technologies
- Dynamic concept networks
- Computing with words (CWW)
- Cognitive decision theories
- Concept algebra
- Cognitive learn engines
- Cognitive inference engines
- Fuzzy/rough sets/logic
- Semantic computing
- Big data cognition

Abstract Intelligence (AI)
- Abstract intelligence (al) and AI
- Cognitive models of intelligence
- Theories of natural intelligence
- Neuroinformatics
- Neurocomputing
- Mathematical forms of al
- Natural language cognition
- Computational psychology
- Distributed intelligence
- Cognitive robots
- Brain informatics
- e-Brain
- Neurocontrol mechanisms
- Hybrid intelligence
- Visual semantics
- Novel machine intelligence
- Business intelligence
- Cognitive systems

PAPER SUBMISSION
An electronic copy of papers in PDF format in English should be submitted via https://www.easychair.org/conferences/?conf=iccicc2014 by March 1, 2014 with detailed information of author(s). Full papers should be around 6-8 pages in length in IEEE double column format as posted in the web site. Short papers (4-5 pages) that report industrial experience, case studies, work in progress, or graduate students’ research may also be considered. The proceedings of ICCI*CC’14 will be published by IEEE CS Press and indexed by EI, DBLP and Google Scholar. Selected papers will be published in International Journal of Cognitive Informatics and Natural Intelligence (IJCIIN), International Journal of Software Science and Computational Intelligence (IJSSCI), and others.

IMPORTANT DATES
Full paper submission due: March 1, 2014
Notification of acceptance: April 1, 2014
Camera-ready paper due: May 1, 2014
Conference presentation: Aug. 18-20, 2014

CONTACT
iccicc2014@easychair.org