ICCCI 2010

CALL FOR PAPERS

The 2nd International Conference on Computational Collective Intelligence

----- Technology and Applications

http://bit.kuas.edu.tw/~iccci10/

10-12 November, 2010 Taiwan

Organized by National Kaohsiung University of Applied Sciences (Taiwan), Wroclaw University of Technology (Poland), and Taiwanese Association for Consumer Electronics(TACE)

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Lecture Notes in

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Computational Collective Intelligence (CCI) is most often understood as an AI sub-field dealing with soft computing methods which enable making group decisions or processing knowledge among autonomous units acting in distributed environments. Web-based systems, social networks and multi-agent systems very often need these tools for working out consistent knowledge states, resolving conflicts and making decisions. The aim of this conference is to provide an internationally respected forum for scientific research in the computer-based methods of collective intelligence and their

Scope of ICCCI 2010: Methodological, theoretical and practical aspects of *computational collective intelligence* such as group decision making, collective action coordination, knowledge integration, understood as the form of intelligence that emerges from the collaboration and competition of many individuals (artificial and/or natural). The application of multiple computational intelligence technologies such as fuzzy systems, evolutionary computation, neural systems, consensus theory, etc., to support human and other collective intelligence and creation of new forms of CCI in natural and/or artificial systems. Three subfields of application of computational intelligence technologies to support various forms of collective intelligence are of special attention but are not the only ones: semantic web (as an advanced tool increasing collective intelligence), social network analysis (as the field targeted to the emergence of new forms of CCI), and multiagent systems (as a computational and modeling paradigm especially tailored to capture the nature of CCI emergence in populations of autonomous individuals).

applications in (but not limited to) such fields as semantic web, social networks and multi-agent systems.

Topics of interest:

We welcome all submissions in the subjects of CCI related (but not limited) to the following topics.

- Agent Theory and Application
- Automated Reasoning
- Cognitive Modeling of Agent Systems
- Collective Intelligence
- Computational Biology
- Computer Vision
- Computational Intelligence
- Computational Security
- Cooperative Systems and Control
- Cybernetics for Informatics
- Data Mining for Social Networks
- > Distributed Intelligence
- Evolutionary computing
- Fuzzy Systems
- ➢ Grey Theory

- Hybrid Systems
- Information Retrieval and
- Integration
- Information Hiding
- Intelligent Architectures
 Intelligent Applications Intelligent Building
- Intelligent Control
- Intelligent e-learning/tutoring
- Intelligent Image Processing
- Intelligent Networks
- Intelligent Transportation Systems
- Knowledge Representation

Submission information

Knowledge-Based Systems

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Logic in Intelligence

- Machine LearningMobile Intelligence
- Natural Language Processing
- Optimization and Swarm
- Intelligence ➤ Pattern Recognition
- Probabilistic and Uncertain Reasoning Semantic Web
- Smart Living Technology
- Smart Erving Teenhology
 Smart Sensor Networks
- Soft computing
- > Social Networks
- Ubiquitous computing and its applications
- ➢ Web Intelligence and Interaction

Contribution papers from prospective authors with interest to the related topics are invited to submit to ICCCI2010 for oral or poster presentations. All submissions should follow the LNCS/AI (Springer) format with titles, author names, affiliation, email addresses, an up to 150-words abstract, and a single-column and single-spaced body. The manuscript should be written in English with contexts of font size at 10 pts and no more than 10 pages. All papers must be submitted electronically in PDF format to http://bit.kuas.edu.tw/~iccci10. The submission should present the results of original research or innovative practical applications relevant to topics. Practical experiences with state-of-the-art in CCI methodologies are also acceptable to reflect lessons of unique value for the conference attendees. Paper submission is due on *June 20, 2010*. All papers must provide at most five key words including one or more of the topics as listed above. All papers will be reviewed by peers. Notifications of the review results will be issued by *July 15, 2010*. Final camera-ready manuscripts with revisions will be uploaded by *July 31, 2010*. The conference proceedings will be published in *Lecture Notes in Computer Science/Artificial Intelligence* series by Springer-Verlag and indexed by EI. Referees will be asked to nominate papers for a Best Paper competition will be automatically considered for publication in the extended versions in several special issues for ISI, SCI journals.