

CALL FOR PAPERS

SPECIAL ISSUE ON

"Modelling and Simulation of Intelligent Large-scale Systems"

LNCS Transactions on Computational Collective Intelligence

<http://www.springer.com/computer/lncs/transactions+cci?SGWID=0-173802-0-0-0>

Guest Editors:

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Focus of the Special Issue:

Intelligent computing is usually defined as advanced computing methods and techniques based on classical computational intelligence, artificial intelligence, and intelligent agents.

On the other hand, large-scale distributed systems—such as grids, peer-to-peer and ad-hoc networks, constellations, and clouds—enable the aggregation and sharing of geographically-distributed resources from different organisations with distinct owners, administrators, and policies. With the advent of such systems, where efficient inter-domain operation is one of the most important features, it is arguably required to investigate novel methods and techniques to enable secure access to data and resources, efficient scheduling, self-adaptation, decentralisation, and self-organisation.

The concept of intelligent large-scale systems brings together results from both areas, making a positive impact on the development of new efficient models and systems simulators.

To be published in LNCS Transactions on Computational Collective Intelligence (TCCI), this special issue shall concentrate high-quality research papers reporting the recent developments of models, solutions, simulations, and techniques related to all aspects of intelligent large-scale distributed systems, ranging from conceptual and theoretical developments to advanced technologies and innovative applications and tools.

The suggested topics include but are not limited to:

- Parallel/Distributed Meta- and Hyper-Heuristics
- Intelligent Services and Web Intelligence in Parallel/Distributed Environments
- Intelligent Multi-Agent Systems
- Data and Computing Intensive Applications
- Intelligent Mechanisms/Heuristics/Rules for Scheduling, Resource Allocation and Management in P2P, Grid, Cluster, and Cloud Computing
- Autonomic, Adaptive, and Self-organising Distributed Computing and Systems
- Large-scale Collaborative Problem Solving Environments
- Large/Complex Machine Learning and Data Mining Environments
- Machine Learning for Self-Tuning and Adaptation of Large-scale Systems
- Learning and Inference in Large-scale Networked Systems
- Distributed Bio-inspired Computing
- Trust, Integration, and Security in Large-scale Distributed Systems
- Intelligent Integration of Complex Data and Processes
- Intelligent Methods for Large Social Networks and Virtual Enterprises
- Nature-inspired Methods/Heuristics for Large Problem Solving Environments.
- Decision Making in Large-Scale Distributed Computing

The TCCI special issue will be mainly based on invitations sent to the authors of the best papers presented at the ECMS Conference to be held in Cracow on June 7-10, 2011 and distinguished researchers in the field. The authors should prepare an extended manuscript along the following guidelines:

- Each journal submission should represent an extended version of the conference contribution or a survey of the recent research results in the field.
- It should take into account comments and suggestions arisen during the presentation at the conference.
- It ought to expand and update the related work and, possibly, be reformed as a survey on the area.
- It must expand the discussion of experimental results and, whenever possible, include new ones.
- It must update the list of references, especially to include the most recent versions of any cited papers.

All submissions will be reviewed by at least three independent reviewers. Final decisions on accepted papers will be approved by the editors.

Manuscripts should not exceed 15 pages in length and must be prepared for publication using the LNCS LaTeX style

(<http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0>)

Authors should submit their papers electronically as PDF files to Dr Joanna Kołodziej (Special Issue Corresponding Guest Editor) via email: jkolodziej@ath.bielsko.pl by September 20th, 2011.

The tentative schedule for this TCCI special issue is:

Invitations to authors:	June 30th, 2011
Authors confirmation deadline:	July 15th, 2011
Submissions to guest editors:	September 2011
Review reports and feedback:	October 2011
Revised versions of accepted papers to guest- editors:	November 2011
Final notification to authors:	December 2011
Camera ready	January 2012
Publication:	2012/2013

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