

CALL FOR PAPERS

The International Conference on Advanced Computing for Innovation AComIn 2015

Sofia, Bulgaria, 10-11th November, 2015

****** Submission deadline: July 13, 2015 ******

The International Conference “Advanced Computing for Innovation – 2015” aims at providing a forum for international scientific exchange between Central/Eastern Europe and the rest of the world in several fundamental for computational intelligence topics enabling radical progress and development of novel applications. The conference is composed of four tracks, a number of special sessions and demonstrations.

TOPICS

The conference welcomes submissions of original, high quality papers in such areas of advanced information and communication technologies as:

- **Advanced Computing:**
 - efficient methods and tools for analysis of reliability of large-scale models
 - high-performance computing in engineering and environmental problems
 - robust methods and algorithms for microstructure analysis of materials and tissues based on high resolution 3D images;
 - multiscale and multiphysics simulations of strongly heterogeneous media with strongly nonlinear and/or anisotropic behaviour
 - advanced applications of Monte Carlo simulations in computational physics and environmental sciences
 - patient specific biomedical applications;
 - large-scale environmental models for reliable control of the pollutions/remediation within the frame of given critical levels.
- **Language and Semantic Technologies:**
 - advanced methods and tools for processing of textual and semantic data
 - large-scale approaches to multilingual terminology
 - machine learning and data mining methods for analysing Big Data
 - neural networks and deep learning
 - advanced eLearning technologies
 - digital preservation of cultural heritage for research and education
- **Signal and Image Processing:**
 - speech analysis and synthesis;
 - efficient methods for image retrieval;
 - smart multi-sensor signal and image processing
 - advance methods for biometric analysis
 - video-analytic technologies for multi-object identification, recognition, tracking, behaviour estimation and event prediction
 - fusion of uncertain, highly conflicting attributes data.
- **Optimisation and Intelligent Control:**

- real time decision making;
- multivariable and distributed control systems,
- advanced methods for studying dynamical behaviour of complex industrial systems and processes
- hierarchical optimization in real time applications
- on-line resource allocation in communication and transportation networks
- intelligent diagnostics and predictive maintenance of facilities operating under high risk of incidents

All submissions will be subject to academic peer review by at least two members of the Programme committee. Selection criteria include accuracy and originality of ideas, clarity and significance of results, and quality of presentation.

IMPORTANT DATES

Extended abstract submission deadline: July 13, 2015
Notification of acceptance: August 1, 2015
Deadline for camera-ready abstracts: October 12, 2015
Conference: November 10-11, 2015

SUBMISSION DETAILS

Extended abstracts of papers have to be submitted electronically (in PDF format) to acom@bas.bg with indication of the name of the conference track.

The abstracts should be written in English and should have a length of 4 pages.

Submissions should describe original research. Papers accepted for presentation at AComIn 2015 cannot be presented or have been presented at another meeting with publicly available published proceedings. Papers that are being submitted to other conferences must indicate this on the title page, as must papers that contain significant overlap with previously published work.

PROCEEDINGS

Proceedings of refereed and presented papers is planned to be published as a special volume of Springer Studies in Computational Intelligence after the Conference

LANGUAGE

The official language of the conference is English.

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