evo* > evoapplications

evocomnet 2011

8th european event
on the application of nature-inspired techniques
for telecommunication networks and other parallel and distributed systems

27-29 april 2011
torino – italy
www.evostar.org

submission deadline
* 22 november 2010
notification to authors
* 7 january 2011
camera-ready deadline
* 1 february 2011

Many biological systems and processes are characterized by a parallel and distributed architecture in which a large number of autonomous and minimalist units synergistically generate global-level behaviors through local interactions, communications, and the use of relatively simple stochastic action policies. The resulting global-level behaviors usually show a number of properties essential for success in natural environments such as: adaptivity to environmental variations, robustness to internal changes and failures, and scalability of performance.

Because of these architectural and performance characteristics of natural systems, in recent years, Nature has provided basic inspiration for the definition of a number of novel algorithms and computational frameworks in the domains of parallel, distributed, and networked systems. Nature-inspired solutions, that are intrinsically distributed, adaptive, robust, and scalable, have proven to be particularly effective to deal with the challenges posed by these systems.

The aim of the event is to provide a forum to present cutting edge research on Nature-inspired approaches to problems arising in the design, control, protection, and management of network systems, and to outline new trends in parallel and distributed nature-inspired computation for the efficient solution of complex problems.

areas of interest and contributions

evocomnet 2011 solicits contributions dealing with the application of ideas from natural processes and systems to the definition, analysis and development of novel parallel and distributed algorithms, and to the solution of problems of practical and theoretical interest in all domains related to network systems. The scope of the event emphasizes contributions of novel Nature-inspired approaches to the following application domains:

* network analysis and design
* routing protocols
* transport protocols
* network protection systems
* load balancing
* quality-of-service provisioning
* mobile ad hoc networks
* sensor networks
* robotic networks
* distributed inference
* distributed search in P2P networks
* parallel and distributed optimization
* grid computing
* distributed data mining

Particularly welcome are submissions contributing with:

* applications of nature-inspired techniques to novel problems
* definition of techniques and frameworks based on natural processes that have not been considered so far in the literature
* comparative studies of nature-inspired solutions vs. more established techniques
* theoretical studies
* real-world implementations
* studies based on real-world data sets
* live demonstrations.

publication details

Accepted papers will appear in the proceedings of **evo***, published in a volume of the Springer Lecture Notes in Computer Science, which will be available at the Conference.

submission details

Submissions must be original and not published elsewhere. The submissions will be peer reviewed by at least three members of the program committee. The authors of accepted papers will have to improve their paper on the basis of the reviewers' comments and will be asked to send a camera ready version of their manuscripts. At least one author of each accepted work has to register for the conference and attend the conference and present the work.

The reviewing process will be double-blind, please omit information about the authors in the submitted paper. Submit your manuscript in Springer LNCS format.

* Submission link:
  http://myreview.csregistry.org/evoapps11/
* Page limit: 10 pages.

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