evo* > evoapplications

evonum 2011

4th european event on bio-inspired algorithms for continuous parameter optimisation

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

The main application areas of EC techniques (in industry) are multi-objective optimization, classification, data mining and numerical optimization.[1]

Many engineering problems of both theoretical and practical interest involve choosing the best configuration of a set of parameters to achieve a specified objective. Numerical optimisation refers to the case when these parameters take continuous real values, as opposed to combinatorial optimisation, which deals with discrete values. Examples include designing production processes for maximum efficiency, optimal parameter adjustment for controllers and many others. **evonum** focuses on such problems.

We seek high quality papers involving the application of bio-inspired algorithms (genetic algorithms, genetic programming, evolution strategies, differential evolution, particle swarm optimization, evolutionary programming, simulated annealing... and their hybrids) to continuous optimisation problems in engineering. We also welcome cross-fertilisation between Nature-inspired algorithms and more classical numerical optimisation algorithms.

areas of interest and contributions

evonum deals with engineering applications where continuous parameters or functions have to be optimised, in fields such as control, chemistry, agriculture, electricity, building and construction, energy, aerospace engineering, design optimisation, etc.

evonum aims to cover areas that include but are not limited to:
* Local learning of parameters;
* Mechanisms to incorporate constraints;
* Theoretical developments;
* Performance measures and performance analysis;
* Benchmark problems.

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.

evonum chairs

* Anna I Esparcia-Alcázar
Instituto Tecnológico
de Informática > Spain
anna@iti.upv.es

* Anikó Ekárt
Aston University > United Kingdom
ekarta@aston.ac.uk

evoapplications coordinator

* Cecilia Di Chio
cdichio@gmail.com

evo* coordinator

* Jennifer Willies
Napier University > United Kingdom
j.willies@napier.ac.uk

local chair

* Mario Giacobini
University of Torino > Italy
mario.giacobini@unito.it

evo* publicity chair

* Penousal Machado
University of Coimbra > Portugal
machado@dei.uc.pt

---

[1] GS Hornby & T Yu, "EC Practitioners: Results of the First Survey", SIGEVOlution, Newsletter of the ACM Special Interest Group on Genetic and Evolutionary Computation, Vol. 2(1), Spring 2007 www.sigevolution.org