Call for Papers

Special Session on Linkage in Evolutionary Computation (LEC 2007)

http://lec2007.nclab.tw

2007 IEEE Congress on Evolutionary Computation

September 25—28, 2007, Singapore

http://www.cec2007.org

Overview

Genetic and evolutionary algorithms (GEAs) are powerful search methods based on the paradigm of evolution and widely applied to solve problems in many disciplines. In order to improve the performance and applicability, numerous sophisticated mechanisms have been introduced and integrated into GEAs in the past decades. One major category of these enhancing mechanisms is the concept of linkage, which models the relation between the decision variables with the genetic linkage observed in biological systems, and linkage learning techniques. Linkage learning connects the computational optimization methodologies and the natural evolution mechanisms. Not only can learning and adapting natural mechanisms enable us to design better computational methodologies, but also the insight gained by observing and analyzing the algorithmic behavior permits us to further understand biological systems, based on which GEAs are developed.

Scope

This special session aims at providing a forum for reviewing of current state-of-art linkage learning techniques, exchanging of ideas and viewpoints on linkage, as well as discussing the future directions. We invite researchers to submit their original and unpublished work related to, but not limited to, the following topics:

- Linkage in biological systems and computational algorithms
- Linkage for discrete/continuous variables
- Linkage processing, handling, and learning techniques
- Identification and utilization of linkage
- Adaptation of representation and/or operators for linkage
- Theoretical aspects of linkage
- Applications of the linkage concept
- Position papers
- Real-world applications

Submission Guidelines

Manuscripts should be prepared according to the standard format of regular papers specified in CEC 2007 and be restricted to a maximum of 8 pages. Paper submission is online through the CEC 2007 submission website with selecting **SS24. Linkage in Evolutionary Computation** for the research topic. Special session papers will be treated in the same way as regular papers and included in the conference proceedings.

New!! Authors of accepted papers will be invited to submit an extended version of their papers for publication consideration in a special volume in the series of Studies in Computational Intelligence to be published by Springer.

Important Dates

Paper Submission: March 15, 2007 extended to March 31, 2007

Decision Notification: May 15, 2007

Camera-Ready Submission: June 15, 2007

Session Organizers

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