IEEE Transactions on Evolutionary Computation Special Issue on Ant Algorithms and Swarm Intelligence

Scope

The behavior of social insects in general, and of ants living in colonies in particular, has fascinated researchers in ethology and animal behavior for a long time. Many models have been proposed to explain their capabilities.

Recently, ant algorithms and swarm intelligence systems have been offered as a novel computational approach that replaces the traditional emphasis on control, preprogramming, and centralization with designs featuring autonomy, emergence, and distributed functioning. These designs are proving flexible and robust, able to adapt quickly to changing environments and to continue functioning even when individual elements fail.

The special issue will be dedicated to the publication of original research results on ant algorithms and, more generally, on swarm intelligence. Papers that prove new theoretical results on ant algorithms and swarm intelligence systems behavior, or that describe their successful applications to real-world problems are particularly welcome.

Submission

All researchers are invited to submit their work for consideration. Selected researchers taking part in "ANTS'2000 - From Ant Colonies to Artificial Ants: Second International Workshop on Ant Colony Optimization" (http://iridia.ulb.ac.be/~ants/ants2000/) will be invited to submit a significantly extended version of their workshop contribution for consideration in the special issue.
The deadline for submissions to the special issue is **December 31, 2000**.
Electronic submission (in pdf or postscript format) is strongly encouraged. Only when electronic submision is not possible papers can be submitted by regular mail. Submitted papers should be in the IEEE TEC submission format and must be emailed to ants@iridia.ulb.ac.be, or, in case of submission by regular mail, one copy should be sent to Marco Dorigo, IRIDIA CP194/6, Avenue F. Roosevelt 50, B-1050 Brussels, Belgium and six copies to Luca Gambardella, IDSIA, Galleria 2, CH-6928 Manno-Lugano, Switzerland.
A page with up-to-date information regarding the special issue is maintained at http://iridia.ulb.ac.be/~ants/IEEE-TEC-SI-Ants.html.

Guest editors

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