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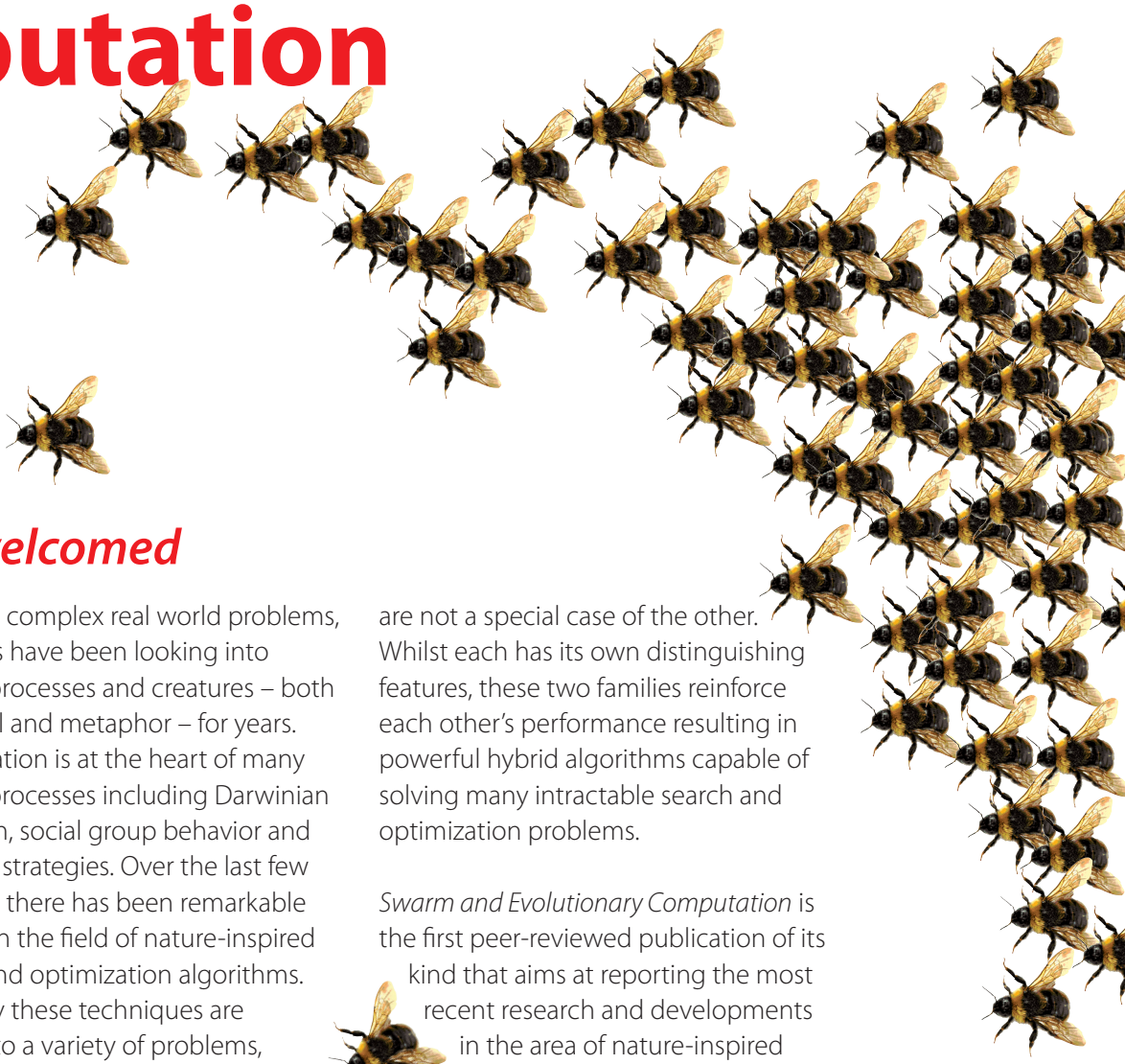
New Journal arriving in 2011:

Swarm and Evolutionary Computation



Papers now welcomed

To tackle complex real world problems, scientists have been looking into natural processes and creatures – both as model and metaphor – for years. Optimization is at the heart of many natural processes including Darwinian evolution, social group behavior and foraging strategies. Over the last few decades, there has been remarkable growth in the field of nature-inspired search and optimization algorithms. Currently these techniques are applied to a variety of problems, ranging from scientific research to industry and commerce.

Two main families of algorithms that primarily constitute this field today are the evolutionary computing methods and the swarm intelligence algorithms. Although both families of algorithms are generally dedicated towards solving search and optimization problems, they are certainly not equivalent, and very often are not a special case of the other. Whilst each has its own distinguishing features, these two families reinforce each other's performance resulting in powerful hybrid algorithms capable of solving many intractable search and optimization problems.

Swarm and Evolutionary Computation is the first peer-reviewed publication of its kind that aims at reporting the most recent research and developments in the area of nature-inspired intelligent computation based on the principles of swarm and evolutionary algorithms. It will publish advanced, innovative, and interdisciplinary research involving the theoretical, experimental, and practical aspects of the two paradigms and their hybridizations.

1st issue of the journal is expected in early 2011.

For more information and to submit a paper visit: www.elsevier.com/locate/swevo

Topics of interest for Swarm and Evolutionary Computation

Swarm and Evolutionary Computing will be committed to timely publication of very high-quality, peer-reviewed, original articles that advance the state-of-the art of all aspects of evolutionary computation and swarm intelligence. Survey papers reviewing the state-of-the-art of timely topics will also be welcomed as well as novel and interesting applications.

Topics of interest include but not limited to:
Genetic Algorithms, Genetic Programming, Evolution Strategies, Evolutionary Programming, Differential Evolution, Artificial Immune Systems, Particle Swarm, Ant Colony, Bacterial Foraging, Artificial Bees, Fireflies Algorithm, Harmony Search, Artificial Life, Digital Organisms, Estimation of Distribution Algorithms, Stochastic Diffusion Search, Quantum Computing, Nano Computing, Membrane Computing, Human-centric Computing, Hybridization of Algorithms, Memetic Computing, Autonomic Computing, Combinatorial, Discrete, Binary, Constrained, Multi-objective, Multi-modal, Dynamic, and Large-scale Optimization.

Furthermore, the journal would like to foster industrial uptake by publishing interesting and novel applications in fields and industries dealing with challenging search and optimization problems such as:
Aerospace, Systems and Control, Robotics, Power Systems, Operations Research and Decision Sciences, Financial services and Engineering, (Management) Information Systems, Business Intelligence, The WWW and Search, Image Processing, Computational Science, Chemistry, Structural and Mechanical Designs, Bioinformatics, Mathematical Biosciences, Mathematical and Computational Psychology, Cognitive Neuroscience, Nonlinear Statistical and Applied Physics, and Environmental Modeling and Software.

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