



Journal of *Memetic Computing*

Call For Papers Thematic Issue on 'Novel Swarm Intelligence Algorithms'

Paper submission: September 1, 2016

Notification of acceptance/rejection: December 1, 2016

Final decision: January 15, 2017

In memetic computation, a meme within a problem-solving framework refers to a unit of information or knowledge that contributes to the general problem-solving capability of the algorithm. Swarm Intelligence (SI) is defined as the collective behaviour of decentralized, self-organized systems, natural or artificial. In SI, each individual has only a simple structure and function, which is synonymous to a meme. However, such systems composed by many individuals can demonstrate the phenomenon of emergence, and can address difficult real-world problems, which are impossible to solve by individuals. During the recent decades, the SI methods have been successfully applied to cope with complex and time-consuming problems. SI is indeed a topic of interest amongst researchers in various fields of science and engineering. The most popular SI paradigms are the ant colony optimization and particle swarm optimization. In general, the SI has been theoretically and experimentally proved to have numerous significant properties.

The aim of this special issue is to compile the latest theory and applications in the field of SI. Submissions should be original and unpublished. In general, we are soliciting contributions on (but are not only limited to) the following topics:

- Improvements of traditional SI methods (e.g., ant colony optimization and particle swarm optimization)
- Recent development of novel SI methods (e.g., bird swarm algorithm, chicken swarm optimization, monarch butterfly optimization, earthworm optimization algorithm, elephant herding optimization, krill herd, fireworks algorithm, and brain storm optimization)
- Theoretical study on new SI algorithms (e.g., Markov, dynamic/complex system/networks, and Martingale)
- Applications of novel SI algorithms (e.g., scheduling, data mining, machine learning, reliability, planning, task assignment problem, knapsack problem, economic dispatch problem, IIR filter design, fuzzy, granular computing, computing with words, optimization under dynamic and uncertain environments)

Any manuscript must be prepared according to the journal guidelines and should conform to the standard format of the Memetic Computing journal. All submissions will undergo a blind peer-review process subject to the standards of the journal. The submissions must be done via the journal automatic system.

Guest Editors:

Xiao-Zhi Gao, Aalto University, Finland - xiao.z.gao@gmail.com

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Amir H. Gandomi, Michigan State University, USA - a.h.gandomi@gmail.com

Amir H. Alavi, Michigan State University, USA - ah_alavi@hotmail.com

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Managing Editor: Lim, M.-H. - Co-Editors-in-Chief: Ong,
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