6th International Workshop on Memetic Algorithms (WOMA 2009)

The next International Workshop on Memetic Algorithms (WOMA 2009), will be the sixth in a series of workshops dedicated exclusively to Memetic Algorithms. WOMA 2009 will be held as part of the IEEE Symposium Series on Computational Intelligence, Nashville Tennessee. The WOMA series is a forum where the international community of researchers, practitioners and vendors, that work on aspects related to Memetic algorithms, can engage in fruitful discussions, learning and contribute to the advancement of this field. Extended versions of selected papers appearing in previous meetings of WOMA have been published in edited volumes and in a special issue of *Evolutionary Computation*.

Memetic algorithms (MAs) are evolutionary algorithms that apply a separate local search process to refine individuals (e.g. improve their fitness by hill-climbing). These methods are inspired by models of adaptation in natural systems that combine evolutionary adaptation of populations of individuals with individual learning within a lifetime. Combining global and local search is a strategy used by many successful optimization approaches, and MAs have in fact been recognized as a powerful algorithmic paradigm for evolutionary computing. From a more general perspective, MAs have been seen as a useful tool for investigating a range of social and biological phenomena. It is the goal of this workshop to push forward our understanding of both the theory and the deployment of MA. Papers are invited covering areas such as (but not limited to):   -   designing novel competitive, collaborative and cooperative frameworks of MAs,   -   analytical and/or theoretical studies that enhance our understanding on the behaviours of MAs,
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asymptotic global convergence analyses and/or complexity analyses of MAs,
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understanding what characterizes fit memes,
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evolution of memes/co-evolution of genes and memes,
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modelling the replication, spread and evolution of memes,
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using multiple memes or local searchers or exact methods,
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adapting the control parameters of MAs, i.e., adaptive MAs,
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Memetic computing for discrete, continuous and uncertain optimization problems,

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Memetic computing for computationally expensive optimization problems,
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Memetic computing for multi-objective optimization,
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knowledge incorporation in Memetic computing,
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modelling/simulation of Memetic system,
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real-world applications of Memetic computing.

Authors of selected papers will be invited to submit extended versions of their papers to a special issue of the Journal of Memetic Computing.

Submission is on-line. Guidelines and information can be found at
 http://www.ieee-ssci.org/index.php?q=node/36

Relevant dates:

      - Submission Due: October 31

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      - Notification to Authors: November 30

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2008

      - Camera-Ready Papers due: January 15

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2009

      - Conference: March 30 – April 2, 2009

       Sheraton Music City Hotel, Nashville, TN, USA

More details about the workshop and organisers can be found at:

http://www.ieee-ssci.org/index.php?q=node/19

More details about the IEEE Symposium Series on Computational Intelligence can be found at:

 http://www.ieee-ssci.org/

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