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    • The Fourth International Conference on the Networked Digital Technologies (NDT 2012)

    • The Fifth International Conference on the Applications of Digital Information and Web Technologies
    (ICADIWT 2012)

    • Seventh International Conference on Digital Information Management (ICDIM 2012)

Editorial

Journal of Intelligent Computing (JIC)
Special Issue "Evolutionary Algorithms: A Tool for System Design"

Since decades, human beings explored many ways to solve real world problems by means of computers. Much effort has been made and lots of successes achieved but still many disappointments were there. Scientists had to notice that in spite of all progress of hardware and software, some problems have been harder than they have seemed to be at first glance. On the other hand, new methods to address these problems are now available. Since the introduction of Evolutionary Computation, a new question has arisen: Can Evolutionary Computation be used to solve real life optimization problems and provide better solutions compared to traditional techniques?

To answer this difficult question, we offer this special issue of the **Journal of Intelligent Computing (JIC)**. The theme of the special issue, "Evolutionary Algorithms: A Tool for System Design" discusses new solutions to real world problems.

This issue attracts papers which cover a wide scope of applications ranging from "Intrusion Detection Systems", "CASE Tool Design for Graph Semantic Based Aspect Oriented Mode" to "Satellite Image Registration Using Nature Inspired Techniques". Additionally, the "Combination of an Evolutionary Algorithm with the Multilevel Paradigm for Solving the Satisfiability Problem", a "Fusion Algorithm for Target Detection in Hyper-spectral Imagery" and the "Gender Face Classification using Continous Wavelet Transform and Linear Discriminant Analysis" are discussed. The papers presented in this issue describe theoretical aspects of each area of application as well as practical solutions. The readers will get an excellent overview on how Evolutionary Computation is applied successfully to these problems. We would be very pleased, if this issue helps the readers to get a hand on how to convert real world problems to the EA world and get better results compared to traditional optimization techniques.

We hope that the readers will enjoy this special issue.

Alaa Sheta
Peter Rausch
Special Issue Editors