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Evolutionary and Bio-Inspired Computation: Theory and Applications II

Misty Blowers
Alex F. Sisti
Editors

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Introduction

The conference on Evolutionary and Bio-Inspired Computation: Theory and Applications was back by popular demand, settling into its second year at the Defense, Security and Sensing 2008 symposium. Several interesting presentations were made by some of the brightest luminaries in the computational intelligence and defense communities, covering such topics as:

- data modeling enabled dynamical analysis for blogger state-of-mind modeling and prediction
- developing an intelligence analysis process through social network analysis
- bio-inspired computational techniques for fusion of data from multiple sources
- secure wireless knowledge management for intelligence analysis
- cognitive algorithms for engineering
- modeling of language and cultural evolution
- bio-inspiration in computers
- performance prediction using environmental and cultural factors

In addition, this year’s conference included a spirited panel discussion titled “Bio-Inspired Computing for Homeland Security: Issues and Answers,” and an engaging keynote presentation by Dr. Leonid Perlovsky, titled “The Knowledge Instinct: cognitive algorithms for engineering, and modeling of language and cultural evolution.”

As always, any conference is only as good as the efforts of its planners, authors, presenters, and attendees. In that respect, we have yet to see a better mix of all the ingredients. For those of you who attended, we hope you came away a little more enlightened than when you arrived. We sincerely hope you appreciate the papers that follow, and that they serve to foster further research into, and application of, evolutionary and bio-inspired computation. We look forward to seeing you next year at Evolutionary and Bio-Inspired Computation: Theory and Applications III, to be held at the SPIE Defense, Security and Sensing Symposium, 13–17 April 2009, in the Orlando World Center Marriott Resort & Convention Center, Orlando (Kissimmee), Florida.

Misty Blowers
Alex F. Sisti