

PROCEEDINGS OF SPIE

***Evolutionary and Bio-Inspired
Computation: Theory and
Applications II***

**Misty Blowers
Alex F. Sisti**
Editors

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Contents

- v *Conference Committee*
- vii *Introduction*

SESSION 1 COGNITIVE/HUMAN BEHAVIOR MODELING

- 6964 02 **The knowledge instinct, cognitive algorithms, modeling of language and cultural evolution (Invited Paper)** [6964-01]
L. I. Perlovsky, Harvard Univ. (USA) and Air Force Research Lab. (USA)
- 6964 03 **Bio-inspiration not bio-imitation** [6964-02]
J. Brander, Interactive Engineering (Australia)
- 6964 04 **Grid-Group Cm- α : performance prediction using environmental and cultural factors** [6964-03]
R. Woodley, W. Noll, 21st Century Systems, Inc. (USA); K. Grantham Lough, D. Krus, Univ. of Missouri-Rolla (USA)

SESSION 2 EVOLVABLE MULTIAGENT SYSTEMS

- 6964 05 **A biologically inspired approach to modeling unmanned vehicle teams** [6964-04]
R. S. Cortesi, K. S. Galloway, E. W. Justh, Naval Research Lab. (USA)
- 6964 06 **A bio-inspired swarm robot coordination algorithm for multiple target searching** [6964-05]
Y. Meng, J. Gan, Stevens Institute of Technology (USA); S. Desai, U.S. Army RDECON-ARDEC (USA)

SESSION 3 PLANNING AND RESOURCE ALLOCATION

- 6964 07 **An evolutionary algorithm technique for intelligence, surveillance, and reconnaissance plan optimization** [6964-06]
J. T. Langton, Charles River Analytics, Inc. (USA); J. A. Caroli, Air Force Research Lab. (USA); B. Rosenberg, Charles River Analytics, Inc. (USA)
- 6964 08 **Using a multi-objective genetic algorithm for developing aerial sensor team search strategies** [6964-07]
J. P. Ridder, Innovating Systems, Inc. (USA); J. A. Herweg, Air Force Research Lab. (USA); J. C. Sciortino, Jr., Naval Research Lab. (USA)
- 6964 09 **Team-based resource allocation using a decentralized social decision-making paradigm** [6964-08]
J. P. Hecker, A. S. Wu, Univ. of Central Florida (USA); J. A. Herweg, Air Force Research Lab. (USA); J. C. Sciortino, Jr., Naval Research Lab. (USA)

SESSION 4 KNOWLEDGE DISCOVERY AND EXPLOITATION

- 6964 0A **Data modeling enabled dynamical analysis for blogger state-of-mind modeling and prediction** [6964-09]
H. M. Jaenisch, Alabama A&M Univ. (USA) and Licht Strahl Engineering Inc. (USA);
M. J. Coombs, Diplomacy Media Research (USA); J. W. Handley, Licht Strahl Engineering
Inc. (USA) and Amtec Corp. (USA); N. G. Albritton, Amtec Corp. (USA); M. E. Edwards,
Alabama A&M Univ. (USA)
- 6964 0B **Developing an intelligence analysis process through social network analysis** [6964-10]
T. Waskiewicz, P. LaMonica, Air Force Research Lab. (USA)
- 6964 0C **A qualia representation of cyberspace** [6964-11]
T. H. Lacey, R. F. Mills, R. A. Raines, M. E. Oxley, K. W. Bauer, Air Force Institute of Technology
(USA); S. K. Rogers, Air Force Research Lab. (USA)
- 6964 0F **Secure wireless knowledge management for intelligence analysis** [6964-19]
C. H. Clark, Vision Systems & Technology, Inc. (USA); J. Spina, M. Corey, Air Force Research
Lab. (USA)

SESSION 5 SYSTEM/COMPONENT DESIGN AND OPTIMIZATION

- 6964 0G **IR wireless cluster synapses of HYDRA very large neural networks** [6964-17]
T. Jansson, T. Forrester, Physical Optics Corp. (USA)
- 6964 0H **Fitness landscape analysis of evolved image transforms for defense applications** [6964-14]
M. R. Peterson, Wright State Univ. (USA); G. B. Lamont, Air Force Institute of Technology
(USA)
- 6964 0I **A genetic algorithm approach to optimal spatial sampling of hyperspectral data for target tracking** [6964-15]
B. R. Secrest, Air Force Institute of Technology (USA); J. R. Vasquez, Numerica Corp. (USA)
- 6964 0J **Efficient global optimization of a limited parameter antenna design** [6964-16]
T. H. O'Donnell, Air Force Research Lab. (USA) and ARCON Corp. (USA); H. L. Southall, Air
Force Research Lab. (USA) and Vistronix, Inc. (USA); B. Kaanta, Air Force Research Lab.
(USA)

Author Index

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- 2 Evolvable Multiagent Systems
Barry R. Secrest, Air Force Institute of Technology (USA)
- 3 Planning and Resource Allocation
John C. Sciortino, Jr., Naval Research Laboratory (USA)
- 4 Knowledge Discovery and Exploitation
Peter M. LaMonica, Air Force Research Laboratory (USA)
- 5 System/Component Design and Optimization
Teresa H. O'Donnell, Air Force Research Laboratory (USA)

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

