

2013 IEEE Symposium on Computational Intelligence for Security and Defense Applications

(CISDA 2013)

**Singapore
16 – 19 April 2013**



IEEE Catalog Number: CFP13SDA-POD
ISBN: 978-1-4673-5910-8

TABLE OF CONTENTS

Evolving Team Tactics using Potential Fields	1
<i>M. Oberberger, S. Louis, M. Nicolescu</i>	
Positioning of Military Combat Units through Weight-based Terrain Analysis using NASA World Wind	9
<i>S. Shridharan, R. Kumar, S. Pundir</i>	
Comparing Heuristic Search Methods for Finding Effective Real-Time Strategy Game Plans	16
<i>C. Ballinger, S. Louis</i>	
Testing A Distributed Denial of Service Defence Mechanism Using Red Teaming	23
<i>S. Rastegari, P. Hingston, C. Lam, M. Brand</i>	
Multiple UAV Area Decomposition and Coverage	30
<i>J. Araujo, P. Sujit, J. Sousa</i>	
Cooperative Path Planning for UAVs with UAV Loss Considerations	38
<i>M. Gao, J. Jiang, K. Ming, T. Meng, K. Poh</i>	
Cooperative Communication of UAV to Perform Multi-task Using Nature Inspired Techniques	45
<i>J. Senthilnath, S. Omkar, V. Mani, A. Katti</i>	
Neural Adaptive Flight Controller for Ducted-Fan UAV Performing Nonlinear Maneuver	51
<i>R. Aruneshwaran, S. Suresh, J. Wang, T. Venugopalan</i>	
A Novel Obstacle Avoidance Control Algorithm in a Dynamic Environment.....	57
<i>G. Mallik, A. Sinha</i>	
Design of a Nonlinear Dynamic Inversion Controller for Trajectory Following and Maneuvering for Fixed Wing Aircraft	64
<i>A. Pashikar, S. Ismail, N. Sundarajan, R. Ayyagari</i>	
Investigating Application Behavior in Network Traffic Traces.....	72
<i>V. Foroushani, A. Zincir-Heywood</i>	
BSB Training Scheme Implementation on Memristor-Based Circuit	80
<i>M. Hu, H. Li, L. Chen, Q. Wu, G. Rose</i>	
A Comparison of Artificial Neural Network Performance: The Case of Neutron/Gamma Pulse Shape Discrimination.....	88
<i>T. Tambouratzis, D. Chernikova, I. Pazsit</i>	
Improved Autoland Controller for Aircraft Encountering Unknown Actuator Failures	96
<i>S. Ismail, A. Pashikar, N. Sundararajan, R. Ayyagari</i>	
A Patrol Problem in a Building by Search Theory	104
<i>R. Hohzaki, S. Morita, Y. Terashima</i>	
Author Index	