2013 IEEE International Conference on Computational Intelligence and Cybernetics

(CYBERNETICSCOM 2013)

Yogyakarta, Indonesia 3-4 December 2013



IEEE Catalog Number: ISBN:

CFP1330S-POD 978-1-4673-6052-4

TABLE OF CONTENT

Foreword General Chair	i
Foreword Program Chair	ii
Committee	iii
Schedule Conference Program	iv
Keynote : Parallel Decomposition: A Critical Look <i>Prof. Benjamin W. Wah</i>	vi
Reviewer	vii
Table of Content	viii
A Distance-Based Feature-Encoding Technique for Protein Sequence Classification in Bioinformatics Muhammad Javed Iqbal, Ibrahima Faye, Abas Md Said, Brahim Belhaouari Samir	1
Application and Comparision of Neural Networks and Optimization Algorithms as a Virtual Angle of Attack Sensor Karl Kufieta, Kamsan Sivamoorthy, Voersmann Peter	6
Automatic Nipple Detection based on Face Detection and Ideal Proportion Female using Random Forest Verapluth Thaweekote	11
Improved Parallel Text Alignment Based on Impossible Pair Limitation Aji Prasetya Wibawa, Andrew Nafalski, Wayan F Mahmudy	16
Schematic Representation for Storytelling Sabah Saleh Al-Fedaghi	P 1C
Indonesian Dialogue Management System using Information State for Independent Closed Domain Maresha Caroline Wijanto, Ayu Purwarianti	26
Evaluating Resilience Strategies Based on an Evolutionary Multi-agent System Kazuhiro Minami, Tomoya Tanjo, Hiroshi Maruyama	31
Interpretation of Urine Dipstick Results Based On Color Similarity Using Linear Interpolation Curve Fitting Ratna Nur Tiara Shanty, R V Hari Ginardi, Riyanarto Sarno	36
Performance Evaluation of Swarm Intelligence on Model-based PID Tuning Dwi Ana Ratna Wati	40
Performance of a Hierarchical Temporal Memory Network in Noisy Sequence Learning Daniel Eduardo Padilla-Baez, Mark D McDonnell, Russell Brinkworth	45
Rule Based Knowledge Representation for Intelligent Query Applier Poonam Tanwar, T.V Prasad, Kamlesh Dutta	P 1C

Towards Building Indonesian Viseme: A Clustering-Based Approach Arifin, Muljono, Surya Sumpeno, Mochamad Hariadi	57
A Novel Wireless Lighting Control Strategy Using RBF Neural Networks and Genetic Algorithm Yuan Gao, Yaojie Sun, Yandan Lin	62
Fuzzy Controller Tuning of a Mobile Robot for Exploration and Safe Navigation in Constrained Environment Edwin Raj Vans, Gancho Vachkov	67
High Capacity Digital Audio Reversible Watermarking Chi-Man Pun, Ka-Cheng Choi	72
Toward Accountable Internet: Multi-level Accountability Enhancement of HIP for Ease of Deployment Alfan Presekal, Katsuyoshi Iida	76
Experiments on Indonesian-Japanese Statistical Machine Translation Simon Simbolon, Ayu Purwarianti	80
A Cybernetics Paradigms Framework for CyberSpace: Key lens to CyberSecurity T Vinnakota	85
A Feasibility Study as A Starting Point to Build The Ocean Information System in Bangka Belitung Irwan	92
Robot Arm without Using Robot Language and Its Application to Machining Process Fusaomi Nagata, Kosuke Nakamura, Akimasa Otsuka, Keigo Watanabe	97
Swarm Fuzzy Inference System and R wave features for Ventricular Premature Beat Detection Nuryani, Iwan Yahya, Anik Lestari	102
Understanding of CyberSpace Using Cybernetics : An Imperative need for CyberSecurity of Enterprises T Vinnakota	107
An Agent Framework in Service Oriented Environment Zhiqi Shen	112
Web Crawler Utilization for Resource Search on Indonesian Anti-Plagiarism Detection Agung Toto Wibowo, Ari Moesriami Barmawi, Anditya Arifianto, Adeva Oktoveri	117
Compressive Sensing-Based Image Encryption With Optimized Sensing Matrix Endra Oey, Rudy Susanto	122
Hybrid Genetic Algorithms for Multi-Period Part Type Selection and Machine Loading Problems in Flexible Manufacturing System Wayan Firdaus Mahmudy Romeo M Marian Lee HS Luong	126

Big Data approach to a novel nutrition-based vegetable production and distribution system	131
Alireza Ahrary, Dennis Ludena	
Discrete Belief Propagation Network Using Population Coding and Factor Graph for Kinematic Control of a Mobile Robot Indar Sugiarto, Jörg Conradt	136
An Improved Quad and RDE-based Medical Data Hiding Method Tohari Ahmad, Muhammad Holil, Waskitho Wibisono, Royyana Muslim Ijtihadie	141
Comparison Between Colour Models in Automatic Identification of Cane Sugar Alfiah Rizky Diana Putri, Adhi Susanto, Litasari	146
Low Cost Vision-Based Real-Time Lane Recognition and Lateral Pose Estimation Sofyan Tan, Agnes, Johannes Mae	151
Visual-Based Fire Detection Using Local Binary Pattern-Three Orthogonal Planes Febryanti Sthevanie, Hertog Nugroho, Fazmah Arif Yulianto	155
A Robust Image Watermarking using DWT, SVD and Torus Automorphism Krishna Rao Kakkirala, Srinivasa Rao Chalamala, Jyoti Dhillon	160
Author Index	164