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(CyberneticsCom 2012)

**Bali, Indonesia
12-14 July 2012**



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TECHNICAL PROGRAM

July 12, 2012

KEYNOTE SPEECH

Machine Learning for Assistive Technology

Prof. Michael Lightner

July 12, 2012

PLENARY SPEECH

Digital Image Restoration Operators Based on Neuro-Fuzzy Techniques

Prof. Mehmet Emin Yuksel

Room A

July 12, 2012
14:30-16:00

CC1.1: Artificial Intelligence

CC1.1.1 A Rule-Based Classification Algorithm: A Rough Set Approach

Chia-Chi Liao, Kuo-Wei Hsu
National Chengchi University

CC1.1.2 Implementation of Semantic Analyzer in Indonesian Text-Understanding Evaluation System

Filman Ferdian, Ayu Purwarianti
Bandung Institute of Technology

CC1.1.3 Self-organizing System for Deriving Diverse Solutions Based on Concept of Emergence

Koichiro Sato, Yoshiyuki Matsuoka
Keio University

CC1.1.4 Cancer Disease Prediction with Support Vector Machine and Random Forest Classification Techniques

Ashfaq Ahmed Kiranam, Sultan Aljahdali, Nisar Hundewale, Ishthaq Ahmed K
College of Computers and Information Technology

CC1.1.5 Issues in Parsing and POS Tagging of Hybrid Language

Shree Harsh Atrey, T.V Prasad, G. Rama Krishna
Echelon Institute of Technology

Room C

**July 13, 2012
09:00-10:30**

CC1.2: Artificial Intelligence

CC1.2.1 Hybrid Ensembles of Decision Trees and Artificial Neural Networks

Kuo-Wei Hsu
National Chengchi University

CC1.2.2 Optical Character Recognition Using Modified Direction Feature and Nested Multi Layer Perceptrons Network

Mahmud Dwi Sulistiyo, Deni Saepudin, Adiwijaya
IT Telkom

CC1.2.3 Developing Discrete Density Hidden Markov Models for Arabic Printed Text Recognition

Sameh M Awaida, Mohammad S. Khorsheed
Qassim University

CC1.2.4 Network Grafting: Transferring Learned Features from Trained Neural Networks

Yang Li, Xiaoming Tao, Jianhua Lu
TsingHua University

Room C

**July 13, 2012
09:00-10:30**

CC2.1: Cybernetics

CC2.1.1 Joint Decisions for a Dual-Channel Supply Chain with General Discrete Asymmetric Information

Bin Liu, Rong Zhang, Shuai Liu, Xindi Ma

Henan Agricultural University

CC2.1.2 Bio-inspired Sound Source Localization Compensated for Sound Diffraction by Binaural Head and Torso 姚江

Ryuichi Shimoyama
Nihon University

CC2.1.3 The Cybernetics of Enabling Competence in People. Competence Building to Ensure Quality and Productivity in People in Software Industries 姚洪

Ravi Pillutla
Tata Consultancy Services Limited

CC2.1.4 Prototyping Capacitive-Micro-Ultrasonic Transducers 姚洪

Fu-Shin Lee, Shao-Chin Tseng
Huafan University

Room C

July 13, 2012
10:45-12:00

CC2.2: Cybernetics

CC2.2.1 Optimal Policies in Name-Your-Own-Price Auction Mechanism with Multi-Attribute Decision 姚洪

Bin Liu, Rong Zhang, Shuai Liu, Xindi Ma
Henan Agricultural University

CC2.2.2 Organization-wide Innovation Management, a Cybernetics Approach 姚洪

Narayana G.P.L. Mandaleeka
Tata Consultancy Services Ltd

CC2.2.3 Cybernetics Framework for Addressing the People Related Challenges in an IT Services Organization 姚洪

Supriya Kummamuru
Tata Consultancy Services

Room B

**July 13, 2012
10:45-12:00**

CC3.1: Soft Computing

CC3.1.1 The Similarity Measure between Interval Type-2 Fuzzy Sets based on the Intersection of their FOU's

Babak Rezae
Bojnord University

CC3.1.2 A Metaheuristic Optimization Algorithm for Unsupervised Robotic Learning

Jiann-Horng Lin, Yu-Lin Li
I-Shou University

CC3.1.3 Determining the Semantic Similarities of GO Terms based on their Existence Dependencies

kamal taha
Khalifa University of Science, Technology, & Research

CC3.1.4 A Performance Comparison of Using Principal Component Analysis and Ant Clustering with Fuzzy c-means and k-harmonic means

phichete julrode, Siriporn Supratid, Ureerat Suksawatchon
Rangsit University

Room D

**July 13, 2012
13:30-15:00**

CC3.2: Soft Computing

CC3.2.1 Priority Based Computation: A Study on Paradigm Shift on Real Time Computation

Sukemi, Harry Sudibyo, Anak Agung Putri Ratna, -
university of indonesia

CC3.2.2 A Hybrid Niching-based Evolutionary PSO for Numerical Optimization Problems

Tsung-Jung Hsieh, Chin-Li Cheng, Wei-Chang Yeh
National Tsing Hua University

CC3.2.3 Provision of Load-balanced Linux Packages Mirror Service in Private Cloud ~~ACFI~~
Yseng-Chang Yen, Pei-Yuan Tang
Dept. of Applied Math., National Ching-Hsing Univ.

CC3.2.4 Neuron Machine: Parallel and Pipelined Digital Neurocomputing Architecture ~~ACFI~~
Jerry Byungik Ahn
Central R&D Labs, KT

Room C

**July 13, 2012
13:30-15:00**

**CC4.1: Data Mining & Software
Development**

**CC4.1.1 Translating Software Requirements from Natural Language to Formal
Specification** ~~ACFI~~
Agung Fatwanto
UIN Sunan Kalijaga Yogyakarta

**CC4.1.2 Exploration of Cardiac Valvular Hemodynamics by Heart Sound Analysis of
Hypertensive Cardiac Disease Background Patients** ~~ACFI~~
Rimuljo Hendradi, Achmad Arifin, Mauridhi Hery Purnomo, Suhendar Gunawan
Institut Teknologi Sepuluh Nopember

**CC4.1.3 Indonesian Speech Recognition System using Discriminant Feature
Extraction - Neural Predictive Coding (DFE-NPC) and Probabilistic Neural Network** ~~ACFI~~
Untari Nova Wisesty, Houw Liong Thee, Adiwijaya
Institut Teknologi Telkom Bandung

Room C

**July 14, 2012
10:45-12:00**

CC1.3: Artificial Intelligence

**CC1.3.1 Learning to Rank for Information Retrieval Using Layered Multi-Population
Genetic Programming** ~~ACFI~~
Jung Yi Lin, Jen-Yuan Yeh, Chao Chung Liu
Department of Computer Science and Information Engineering, Ching-Yun University

[CC1.3.2](#) Towards the Design of a Virtual Sociologist on Aborigines Substance Abuse: A coping-theory perspective ㄟ

Manolya Kavakli, Manning Li, Rudra Tarashankar
Macquarie University, Australia and Northeastern University, China

[CC1.3.3](#) A Comparison of Consensus- and Critical Point-Based Classification Strategies ㄟ

Weichao Xu, Rubao Ma, Qinruo Wang
Faculty of Automation, Guangdong University of Technology

[CC1.3.4](#) A Real-time Therapy Course Tracking System for Rehabilitants ㄟ

Ching-Sheng Wang, Lun-Ping Hung, Wen-Bin Yu
Dept. of Computer Science and Information Engineering, Aletheia University

[CC1.3.5](#) 3D Augmented Reality Mobile Navigation System Supporting Indoor Positioning Function ㄟ

Ching-Sheng Wang, Ding-Jung Chiang, Yi-Yun Ho
Dept. of Computer Science and Information Engineering, Aletheia University

[CC1.3.6](#) Detecting Eye Movements in EEG for Controlling Devices ㄟ

Soumya Sen Gupta, Sumit Soman, P Govind Raj, Rishi Prakash, Sailaja S, Rupam Borgohain
Center for Development of Advanced Computing

Room D

**July 14, 2012
10:45-12:00**

CC5.1: Machine Vision

[CC5.1.1](#) Automated Cervical Cell Nuclei Segmentation using Morphological Operation and Watershed Transformation ㄟ

Izzati Muhimmah, Rahadian Kurniawan, Indrayanti
Universitas Islam Indonesia

[CC5.1.2](#) Speckle Noise Filtering Based on Signal Subspace Technique ㄟ

Norashikin Yahya, Nidal S Kamel, Aamir S Malik
Universiti Teknologi Petronas

[CC5.1.3](#) Content Based Image Retrieval Using Multiple Instance Decision Based Neural Networks ㄟ

Yeong-Yuh Xu, Chi-Huang Shih
Hungkuang University

[CC5.1.4](#) Video Condensation for Video Forensics

Yu-Ming Liang

Department of Computer Science and Information Engineering, Aletheia University

[CC5.1.5](#) Facial Expressions Reconstruction of 3D Faces based on Real Human Data

Jacey-Lynn Minoi, Duncan Fyfe Gillies, Sylvester Arnab, Amelia Jati Robert Jupit

Universiti Malaysia Sarawak