

ISCIII'07

3rd International Symposium
on
Computational Intelligence and Intelligent Informatics

PROGRAM

March 28–30, 2007
Agadir, Morocco

Technical Co-Sponsors:

Budapest Tech, Hungary
IEEE Industrial Electronics Society
John von Neumann Society, Hungary

Co-Sponsors:

Hungarian Fuzzy Association
IEEE CI Chapter, Hungary
IEEE Joint Chapter of IES and RAS, Hungary
IEEE SMC Chapter, Hungary
Japan Society for Fuzzy Theory and Intelligent Informatics (SOFT)
National Engineering School of Applied Sciences, Agadir, Morocco
Scientific Society for Management and Organization, Hungary
Systems and Signals Laboratory, Tunisia
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University of Tunis El Manar, Tunisia

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GENERAL INFORMATION

Venue:

Hotel Beach Club, Agadir, Secteur Balneaire

Phone: +212 28 84 43 43

Fax: +212 28 84 08 63

Language:

The symposium language is English, no translation is provided.

Presentations:

Presentations can be made by using either OHP or data projector. All authors are kindly asked to upload their presentation from a CD or USB to the computer in the conference room during the breaks. For presenting a paper it is advisable not to use own computer.

Registration Desk:

The registration desk will be open during the whole event.

IEEE Membership desk:

An IEEE membership desk is set up in the registration area for promoting IEEE membership among the attendance and in order to get new memberships.

Social Events:

- Cocktail Party – Hotel Beach Club
March 28 evening
- Symposium Dinner – „Jardin Le Festival” Restaurant
March 29 evening.

For symposium participants the cost of social events is included in the registration fee, accompanying persons have to pay a fee of 150 EUR if they wish to participate.

Weather:

During the day temperatures between 20 – 23 °C, during the nights between 7 – 11 °C

PROGRAM

March 28, Wednesday

8:00 – 9:00 Registration

ROOM **A**

9:00 – 9:30 Opening

9:30 – 10:30 PLENARY – Chair: I. J. Rudas

Controllability of Quantum Bits – from the von Neumann
Architecture to Quantum Computing

J. Bokor, L. Nádai and I. J. Rudas, (Hungary)

10:30 – 11:00 Coffee break

11:00 – 12:00 PARALLEL SESSION – Chair: A. R. Várkonyi-Kóczy

Signal Processing and Pattern Recognition I

Information Enhancement Method for Image Retrieval and
Object Recognition

A. Rövid (Hungary), T. Hashimoto (Japan),

A. R. Várkonyi-Kóczy (Hungary) and Y. Shimodaira (Japan)

Estimation of Motion Parameters Using 2-D Lines without
Correspondences Based on Virtual Electric Potential Model

*B. Bouda, Lh. Masmoudi, B. Chaouki and D. Aboutajdine,
(Morocco)*

Gray-level Corner Detection by Virtual Electric Field Model

*B. Bouda, Lh. Masmoudi, B. Chaouki and D. Aboutajdine,
(Morocco)*

ROOM **B**

11:00 – 12:00 PARALLEL SESSION – Chair: J. Fodor

Soft Computing and its Applications I

Some Observations on Stability of the Switching Adaptive Rule
Bases of the Fuzzy Self-Adapted Interpolative Controllers

M. M. Balas and V. E. Balas, (Romania)

Switching Adaptive Correctors for Fuzzy Fusion Self-Adapted Interpolative Controllers

V. E. Balas and M. M. Balas, (Romania)

Toward an Integration of the Fuzzy Logic and MCDA to GIS: Application to the Project of the Localization of a Site for the Implantation of Chemical Products Factory

T. Agouti, A. Tikniouine, M. Eladnani and A. Elfazziki, (Morocco)

12:00 – 14:00 Lunch Break

ROOM **A**

14:00 – 15:00 PLENARY – Chair: J. Ezzine

Context Dependent Reconstructive Communication

L. T. Kóczy (Hungary) and T. D. Gedeon (Australia)

15:00 – 16:00 PARALLEL SESSION – Chair: V. E. Balas

Signal Processing and Pattern Recognition II

Feature Selection on Supervised Classification Using Wilk's Lambda Statistic

A. El Ouardighi, A. El Akadi and D. Aboutajdine, (Morocco)

Combining Information Extratction for Text Mining by Using Morphological Platterns and Knowledge Discovery Using Inductive Logic Programming

A. Christy and P. Thambidurai, (India)

Arabic Speech Recognition System Based on CMUSphinx

H. Satori, M. Harti and N. Chenfour, (Morocco)

16:00 – 16:20 Coffee break

16:20 – 17:20 PARALLEL SESSION – Chair: Z. Petres

Sensing and Signal Processing

Prediction of the Acoustic Pressure Backscattered by a Steel Tube Using Neural Networks Approach

A. Dariouchy (Morocco), E. Aassif (Morocco), G. Maze (France), R. Latif (Morocco), D. Decultot (France) and M. Laaboubi (Morocco)

Adaptive Beamformer-Rake Receiver for Space-Time Coded DS-CDMA Systems

M. Hefnawi (Canada) and J. Gai (Morocco)

Recognition System Using Video and Infrared Information Fusion

B. Cornel (Romania)

ROOM **B**

15:00 – 16:00 PARALLEL SESSION – Chair: L. Toth

Soft Computing and its Applications II

On Aggregation of Fuzzy Preference Structures

J. Fodor and I. J. Rudas, (Hungary)

On the Use of Fuzzy Logic for Inherently Parallel Computations

M. S. Hannachi, F. Dong, Y. Hatekayama and K. Hirota, (Japan)

Fuzzy Logic Based Gradient Descent Method with Application to a PI-type Fuzzy Controller Tuning: New Results

Ah. Habbi and M. Zemat, (Algeria)

16:00 – 16:20 Coffee break

16:20 – 17:20 PARALLEL SESSION – Chair: M. Kadjoudj

Non-linear Control

Output Feedback Nonlinear GPC Using High Gain Observer

S. H. Said and F. M' Sahli, (Tunisia)

Analysis of the Discontinuous PWM Strategies Applied to the VSI

S. Belbaz, M. Kadjoudj and N. Golea, (Algeria)

Speed Sliding Control of PMSM Drives

M. Kadjoudj (Algeria), A. Golea (Algeria), N. Golea (Algeria), and M. E. Benbouzid (France)

19:00 – 21:00 Cocktail Party – Hotel Beach Club

March 29, Thursday

ROOM **A**

9:30 – 10:30 PLENARY – Chair: L.T. Kóczy

Computational Intelligence Based Intelligence Control for Stepping Motors and a Mobile Robot is ‘Mascot Robot’ Project
K. Hirota (Japan)

10:30 – 11:00 Coffee break

11:00 – 12:00 PARALLEL SESSION – Chair: H. Bouzahir

Modelling and Simulation

Computational Relaxed TP Model Transformation by Restriction of the Computation to Subspaces of the Dynamic Model
Sz. Nagy (Hungary), Z. Petres (Hungary), P. Baranyi (Hungary), and H. Hashimoto (Japan)

Modeling and Simulation in Scicos: A Case Study
F. El Guezar (France/Morocco), H. Bouzahir (Morocco), P. Acco (France), K. Afdel (Morocco) and D. Fournier-Prunaret (France)

Numerical Reconstruction of the HOSVD Based Canonical Form of Polytopic Dynamic Models
L. Szeidl, P. Baranyi, Z. Petres and P. Várlaki (Hungary)

ROOM **B**

11:00 – 12:20 PARALLEL SESSION – Chair F. Dong

Networks and Communication

Off-line Power Settings in Wireless Networks
C. Tadonki (France)

Analysis of RFID Application Through an Automotive Supplier’s Production Processes
D. Mánik, L. Tóth and P. Döbrössy, (Hungary)

Secure Communication Using IFS: Almost Sure and Mean Square Stability Approaches
S. B. Abdelbari and J. Ezzine, (Tunisia)

Fuzzy Neighborhood Based Approach for Practical Delivery Problem
F. Dong, K. Chen and K. Hirota, (Japan)

12:20 – 14:00 Lunch break

14:00 – 15:00 PLENARY – Chair: H. Bouzahir

Dense Optical Flow Computation for 2D and 3D Images Via Multigrid on a Parallel Machine

El Mostafa Kalmoun (Morocco)

15:00 – 16:00 PARALLEL SESSION – Chair: R. Neji**Genetic and Evolutionary Computation**

Study of the Chaotic Behaviour of R.A NMJ Via Sensitivity Under Initial Conditions

A. Sabour, A. Asimi and A. Lbakkouri, (Morocco)

Fuzzy Extension for Kano's Model Using Bacterial Evolutionary Algorithm

P. Földesi, L. T. Kóczy and J. Botzheim, (Hungary)

Real Coded Genetic Algorithm for Permanent Magnet Motor Mass Minimization for Electric Vehicle Application

N. Ben Hadj, S. Tounsi, R. Neji and F. Sellami, (Tunisia)

16:00 – 16:20 Coffee break**16:20 – 18:00** PARALLEL SESSION – Chair: M. Kalmoun**Complex Problems I**

Likelihood-based Clustering of Directed Graphs

T. Nepusz and F. Bazso, (Hungary)

Spatiotemporal Human Brain Activities by Visual Stimulus of Directional Characters and Symbols

T. Yamanoi, H. Toyoshima, Sh-I. Ohnishi, T. Yamazaki and M. Sugeno, (Japan)

Compilation Formulation for Asynchronous Backtracking with Complex Local Problems

R. Ezzahir (Morocco), Ch. Bessiere (France), M. Belaisaoui (Morocco) and E. H. Bouyakhf (Morocco)

Takagi-Sugeno Fuzzy Control Models for Large Scale Logistics Systems

I. Harmati, G. Orbán and P. Várlaki, (Hungary)

Class D Audio Amplifier Design Theory and Design Implementation for Portable Applications

S. Krit, H. Amrani, H. Qjidaa, H. Cordonnier (Morocco)

15:00 – 16:00 PARALLEL SESSION – Chair: T. Fülep

Application in Decision Making

On a Representation for Weights of Alternatives by Use of Sensitivity Analysis in AHP

Sh-I. Imai, T. Yamanoi and H. Imai, (Japan)

Reconstruction Decision Model for Transportation Infrastructure Systems

P. Várlaki, I. Pályi, L. Tóth, I. Gombaszögi (Hungary)

Applicability of Qualitative Reliability Analysis for Redundant Systems

T. Fülep, P. Michelberger and L. Nádai, (Hungary)

16:00 – 16:20 Coffee break

16:20 – 18:00 PARALLEL SESSION – Chair: Gy. Kártyás

Diverse Aspects of Computational Intelligence and Intelligent Informatics

Real Case Study of a Neuro-Fuzzy Intelligent Car

V. Lupu and C. Lupu, (Romania)

Interrelated Components of Virtual Classroom to Achieve Model for Teaching Practice

Gy. Kártyás and J. Gáti, (Hungary)

Multimodal Biometrics for Access Control in an Intelligent Car

C. Lupu and V. Lupu, (Romania)

Towards Intelligent Change Management in Product Modeling

L. Horváth and I. J. Rudas, (Hungary)

GIS Intelligent Solution

V. Lupu and C. Lupu, (Romania)

19:30 – SYMPOSIUM DINNER – “Jardin le Festival” – Restaurant

Meeting in the hotel lobby at 19:00.

The place is at walking distance.

March 30, Friday

ROOM A

9:30 – 11:10 SESSION – Chair: P. Várlaki

Complex Problems II

Estimation of Energy Distribution for Car-body Deformation

I. Harmati and P. Várlaki (Hungary)

Re-Use of Resources for Adapted Formation to the Learner

S. Azough and M. Bellaflkih, (Morocco)

Software Architecture in Model Driven Architecture

N. Elleuch, A. Khalfallah and S. Ben Ahmed, (Tunisia)

An Hybrid Approach of Mathematical Programming and

MCDA for the GISMR: The Industrial Localization

*T. Agouti, Md. El Adnani, A. Tikniouine and A. Aitouahman,
(Morocco)*

Lexical Units in Ontological Semantics

A. S. H. Al-Hashimy (Oman)

11:10 – 11:30 CLOSING

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