"Politehnica" University of Bucharest, Romania, June 7 - 9, 2001

PROGRAMME AT A GLANCE

Thursday, 7 June 2001, room AN010

8:00	Registration			
9:00	Opening Session			
9:30	Plenary Session P1			
10:30	Coffee Break			
11:00	Special Session S1: The role of wavelets in modern multimedia standards			
	Organized in collaboration with the Flemish FWO Image Processing Systems (IPS) Research Community and the AWI			
	Bilateral Technological & Scientific Collaboration Programme.			
12:30	Lunch			
14:00	Plenary Session P2			
	Organized in collaboration with the University of Zagreb, HR			
15:00	Session S2			
16:00	Coffee Break			
16:30	Session S3			
17:30	Session S4			
18:30				
19:30	Conference Dinner			

Friday, 8 June 2001, rooms AN010 & AN034

		8:00	raterial in Standard and Subjective image	
9:00	Session S5		Quality Control of Subband Coded Images using Fuzzy Logic and Neural Networks	
10:00	Coffee Break			
10:30	Plenary Session P3			
11:30	Session S6		Session S7	
12:30	Lunch			
14:00	Session S8		Tutorial T2: Voice Portals: The next generation Speech Recognition Application	
15:00	Session S9			
16:00	Coffee Break			
16:30	Session S10		Tutorial T3: Modern Asynchronous Circuits: Applications, Design and Analysis	
17:30	Session S11			
18:30				

Saturday, 9 June 2001

7:00 One-day trip to "Pestera" cave in the Carpathian mountains.

"Get-together" Lunch & Dinner and night accommodation at "Pestera" hotel.

Celebration of the "Politehnica" University of Bucharest Day -- 10 June

"Politehnica" University of Bucharest, Romania, June 7 - 9, 2001

Thursday, 7 June 2001, room AN010

8:00 | Registration

9:00 **Opening Session**

9:30 Plenary Session P1

Chairs: Branka Zovko-Cihlar, *University of Zagreb, HR*, Andrei Tugulea, "Politehnica" University of Bucharest, RO

P. Cristea, "Politehnica" University of Bucharest, RO,

Genetic Signals: An Emerging Concept

J. Turán, K. Fazekas*, P. Farkaš and D. Šiškovičová, *University of Technology Košice, SK,* (*) *University of Technology Budapest, HU,*

Invariant Feature Extraction Based on Hough Transform

10:30 | Coffee Break

11:00

Special Session S1: The role of wavelets in modern multimedia standards Chairs: Jan Cornelis, *Vrije Universiteit Brussel,BE*, Ion Bănică, "Politehnica" University of Bucharest, RO

• P. Schelkens and J. Cornelis, Vrije Universiteit Brussel, BE,

Wavelets and Standards: An Overview

• Y. Andreopoulos, P. Schelkens, T. Stouraitis* and J. Cornelis, *Vrije Universiteit Brussel, BE,* (*) *University of Patras, GR,*

Efficient Implementation of Wavelet Transforms - A Roadmap

- G. Lafruit and B. Vanhoof, *Inter-university Micro Electronic Centre, Leuven, BE*, MPEG-4 Visual Texture Coding: Variform, Yet Temperately Complex
- A. Chirila-Rus and B. Vanhoof, Inter-university Micro Electronic Centre, Leuven, BE, Implementation of a Scalable Wavelet MPEG-4 Compression System

Organized in collaboration with the Flemish FWO Image Processing Systems (IPS) Research Community and the AWI Bilateral Technological & Scientific Collaboration Programme.

12:30 | *Lunch*

14:00 | Plenary Session P2

Chairs: Kalman Fazekas, *University of Technology Budapest, HU*, Ioan Constantin, "Politehnica" University of Bucharest, RO

- B. Zovko-Cihlar, M. Suknaic*, M. Grgic, University of Zagreb, (*) Croatian Telecom, HR,
 Implication of Broadband Radio Access to UMTS
- M. Grgic, S. Grgic, M. Ghanbari*, *University of Zagreb, HR*, (*) *University of Essex, UK*, Application of Gabor Filters for Efficient Image Representation

15:00 **Session S2**

Chair: Peter Schelkens, Vrije Universiteit Brussel, BE, Rodica Strungaru, "Politehnica" University of Bucharest, RO

A. Gavrilescu, R. Deklerck, A. Salomie and P. Dendale*, J. Cornelis, Vrije Universiteit Brussel,
 (*) University Hospital Antwerp, BE,

Segmentation of the Left Ventricle of the Heart in Volumetric Cardiac MR Images: Evaluation Study of Classical and GVF- Snakes.

 C. Vertan, V. Buzuloiu and N. Boujemaa*, "Politehnica" University of Bucharest, RO, (*) IMEDIA Group, INRIA Rocquencourt, F,

Automatic Hybrid Segmentation Scheme for the Extraction of Visual Dominant Components

C. Amza, De Montfort University, Leicester, UK,

Segmentation of Dual-Band Images of X-ray Chicken Breast using a Competitive Hopfield Neural Network

16:00 Coffee Break

Thursday, 7 June 2001, room AN010

16:30 **Session S3**

Chair: Radu Negulescu, McGill University, Montreal, CA,

• L. Mandic, S. Grgic and M. Grgic, University of Zagreb, HR,

Monitor Calibration and Colour Management

• I. Kuzmanić and I. Vujović, Split, HR, College of Maritime Studies,

Performance Measure of Optical Communication System based on Lasers in Image Transmission

R. Dobrescu and M. Dobrescu, "Politehnica" University of Bucharest, RO, Reactive Flow Control for Multipoint Video Services

17:30 **Session S4**

Chairs: Marek Domański, *Poznan University of Technology, PO, Nicolae Olariu, University "Valachia" of Targoviste, RO*

• V. Ila, P. Ridao and J. Batlle, University of Girona, S,

A New Parallel Architecture To Deal With Real-Time Computer Image Processing

• C. Vertan, V. Buzuloiu and C. Fernandez-Maloigne*, "Politehnica" University of Bucharest, RO, (*) University of Poitiers, F,

On The Introduction of a Multiresolution Fuzzy Runlength Image Description Scheme

• R. Lukáč and S. Marchevský, *University of Technology, Košice, SK,*

Three-Dimensional Vector Lum Smoothers

18:30

19:30 | Conference Dinner

Friday, 8 June 2001, rooms AN010 & AN034

8:00

Tutorial T1:

9:00 | **Session S5**

Chair: Panos Liatsis, UMIST, Manchester, UK

 J. Ochodnicky, J. Tkáč and Š. Špirko, *Military Academy, L. Mikuláš, SK*,

Radar Target Tracking by Neural Kalman Filter

- J. Tkáč, Military Academy, L. Mikuláš, SK, Radar Object Recognition by Wavelet Transform
- Y. Boutalis, B. Mertzios, and A. Moise*,
 Democritus University of Thrace, GR,
 (*) Oil and Gas University of Ploiesti, RO,
 Morphological Associators for Pattern
 Recognition

Tutoriai i i.

Standard and Subjective Image Quality Control of Subband Coded Images using Fuzzy Logic and Neural Networks

Peter Planinšič

University of Maribor, Fac. of EE&CS, Maribor, Slovenia

10:00 Coffee Break

10:30 Plenary Session P3

Chair: Daniel Bunea, "Politehnica" University of Bucharest, RO

- M. Kessler and M. Boehnert, *University of Erlangen-Nuremberg, D*,
 Significance of back-scattered light intensity for quantitative optical measurements in tissue
- A. Hussain and P. Liatsis*, De Montfort University, Leicester, (*) UMIST, Manchester, UK, Financial Time-Series Prediction using Second-Order Pipelined Recurrent Neural Networks

Friday, 8 June 2001, rooms AN010 & AN034

11:30 **Session S6**

Chair: Manfred Kessler, University of Erlangen-Nuremberg, D,

- A.O.A. Salam, Y. AL-Assaf, American University of Sharjah, United Arab Emirates, Classifying Myoelectric Signals by using Correlation Method
- M. Ungureanu, W. Wolf*, R. Strungaru, "Politehnica" University of Bucharest, RO,
- (*) Universität der Bundeswehr München, D, Diafragmatic EMG Signal Analysis and **Simulation**
- A. D. Ionita, "Politehnica" University of Bucharest, RO.
 - **Electroneurogram Signal Detection** with Third Order Statistics

Session S7

Chair: Radu Dobrescu, "Politehnica" University of Bucharest, RO

- F. Beritelli, G. Di Marco, L. Fortuna, M. Francese*, Univ. of Catania, (*) Multimedia Technologies Institute -Catania. Italv.
 - Synchronization of CNN-based Chua **Circuits for Secure Communications in** R.F. Channels
- I. Nastac, "Politehnica" University of Bucharest, RO,
 - A New Way for Neural Networks **Training**
- V. Trifa, V.T. Dădârlat, A. Peculea, Technical University of Cluj-Napoca, RO, **Evaluation of Switched Reluctance Motor Magnetization Surface by Backpropagation Neural Network**

12:30 Lunch

14:00 **Session S8**

Chair: F. Beritelli, *University of Catania, Italy*

F. Beritelli, S. Serrano*, DIIT - University of Catania, (*) MTI, Catania, Italy,

A Robust and Simple Isolated Word **Recognition Algorithm Implemented on** "Active Template Library" Technology

I. Gavat, Z. Valsan, G.Ovidiu, B. Sabac and M. Zira, "Politehnica" University of Bucharest, RO.

Fuzzy Variants for Speech Recognition Algorithms

S. Stanković, D. Milovanović, U. Batričević, and R. Maksimović*, Fac. of EE, University of Belgrade, (*) School of Medicine, University of Belgrade, YU,

Wavelets in Biomedical Signal Processing

15:00 **Session S9**

Chair: Vasile Buzuloiu, "Politehnica" University of Bucharest, RO

R.Iordache and A.Beghdadi*, Tampere University of Technology, SF, (*) Université Paris XIII. F.

Single-Quadrant Analytic Images for

- Zilina, SK, (*) University of East London, UK A Newton-Raphson Iteration Algorithm
- R. Ghozi, Ecole Superieure de Communications de Tunis, Tunis

Fractal Characerisation of **Non-Gaussian Critical Markov Random Fields**

Tutorial T2:

Voice Portals: The next generation Speech **Recognition Application**

Cristina Dobrin

IP Mobility Networks, Network Platforms Nokia Networks, Helsinki, Finland

2-D Discrete Wigner-Ville Distribution M. Breznan and M. Smith*, University of

For 3-D Image Reconstruction

16:00 Coffee Break

Friday, 8 June 2001, rooms AN010 & AN034

16:30 | Session S10

Chair: Cristian Negrescu, "Politehnica" University of Bucharest, RO

 C-M. Yang, Y-S. Ho, Kwangju Institute of Science and Technology, Korea,

A Quadtree-based Embedded Block Coder for Scalable Image Compression

I. Milak, B. Zovko-Cihlar*, S. Grgic*, R&D
 Department Hirschmann Austria GmbH, AU,
 (*) University of Zagreb, Fac. of EE & C,
 Zagreb, HR,

Output Filter Unit in Digital Video Broadcasting Transmitter's Chain

 D. Z. Lenardić, B. Zovko-Cihlar*, KPMG Consulting, Zagreb, (*)University of Zagreb, HR,

Modeling and Simulation of Modern Computer Network

17:30 | **Session S11**

Chair: Florea Hantila, "Politehnica" University of Buchares. RO

• S. D. Grigorescu, V. Trusca, "Politehnica" University of Bucharest, RO,

LabVIEW Software for a Partial Discharge Test Equipment

• D. E. Tiliute, *Technical University "Stefan cel Mare" Suceava, RO.*

State Variabile Active Filter using Current Conveyors

• M. Iordache, L. Dumitriu, "Politehnica" University of Bucharest, RO,

> A Diakoptic Technique for setting up the Symbolic State Equations of Large-Scale Analog Circuits

Tutorial T3:

Modern Asynchronous Circuits: Applications, Design and Analysis

Radu Negulescu

ECE Department, McGill University Montreal, Quebec, Canada

18:30

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