



14th International Conference on Systems, Signals and Image Processing,
IWSSIP 2007
 and
 6th EURASIP Conference Focused on Speech and Image Processing,
 Multimedia Communications and Services
EC-SIPMCS 2007

IWSSIP 2007 and EC-SIPMCS 2007 conferences program

Wednesday, 27 June 2007

8:00-18:00	Registration		
9:00-9:30	Opening Ceremony		
9:30-10:15	Session KL1: Keynote Lecture 1		
	KL1-1 Digital video Image Quality and Perceptual Coding		
	Prof. Dr. K. R. Rao, IEEE Fellow, University of Texas Arlington, USA.		
10:15-10:30	Coffee Break		
10:30-11:15	Session KL2: Keynote Lecture 2		
	KL1-2 Error Resilient Transmission of Video over Mobile Networks		
	Prof. Dr. M. Rupp, Vienna University of Technology, Austria.		
11:15-11:30	Coffee Break		
11:30-12:30	Presentation of industry R&D achievements.		
12:30-13:30	Lunch Break		
13:30-15:30	Session S1: Signal Processing and Systems I	Session S2: Signal Processing and Systems II	Session S3: Image and Video Processing I
15:30-15:45	Coffee Break		
15:45-16:45	Round Table		

Thursday, 28 June 2007

8:00-18:00	Registration		
9:00-11:00	Session S4: Image and Video coding I	Session S5: Image and Video Processing II	Session S6: ICT and E-Learning
11:00-11:15	Coffee Break		
11:15-12:00	Session KL2: Keynote Lecture 2		
	KL2-1 Three-Dimensional Television (3-D TV)		
	Prof. Dr. L. Onural, Bilkent University, Ankara, Turkey.		
12:00-12:15	Break		
12:15-13:00	Session KL2: Keynote Lecture 2		
	KL2-2 Robust Recognition - by Parts Using Transduction and Boosting with Application to Biometrics		
	Prof. Dr. Harry Wechsler, George Mason University, USA.		
13:00-14:00	Lunch Break		
14:00-15:45	Session S7: Artificial Intelligence and Technologies	Session S8: Watermarking and Encryption	IEEE Education Section meeting.
16:00	Social event: Short trip in the authentic surrounding with gala dinner.		

Friday, 29 June 2007

9:00-11:00	Session S9: Signal Processing and Systems III	Session S10: Speech and Audio Processing	Session S11: Video Streaming, Conferencing and Broadcasting
11:00-11:15	Coffee Break		
11:15-12:00	Session TL1: Tutorial Lecture 1 TL1-1 Overview of Multi-view Video Coding Yo-Sung Ho, Kwan-Jung Oh, Gwangju Institute of Science and Technology, Korea		
12:00-12:15	Break		
12:15-13:00	Session TL1: Tutorial Lecture 1 TL1-2 Data Protection Technics, Cryptographic Protocols and PKI Systems in Modern Computer Networks M. Marković, Security Department, Banca Intesa ad Beograd, Belgrade, Serbia		
13:00-14:00	Lunch Break		
14:00-14:45	Session TL2: Tutorial Lecture 2 TL2-1 Voice Quality Measurement in Modern Telecommunications Networks A. E. Mahdi, University of Limerick, Limerick, Ireland		
14:45-15:00	Break		
15:00-15:45	Session TL2: Tutorial Lecture 2 TL2-2 Analysis of Fused Ophthalmologic Image Data <i>J. Jan, L. Kubečka, R. Kolář and R. Chrastek1, Brno University of Technology, Czech Republic</i>		
15:45-16:00	Coffee Break		
16:00-18:00	Session S12: Multimedia Communications, Networking and Services	Session S13: Multimedia and Multimedia Signal Processing	Session S14: Image and Video Processing III

Saturday, 30 June 2007

9:00-11:00	Session S15: Implementations and Applications	Session S16: Image scanning, Displaying and Printing and Applications	Session S17: Miscellaneous
11:00-11:15	Coffee Break		
11:15-12:15	Presentation of R&D achievements of the Faculty of Electrical Engineering and Computer Science.		
12:15-12:45	Official closing of the conference scientific program and best student paper announcement.		
12:45-13:45	Lunch Break		
afternoon	Meeting of the conference international program committee. Social event: Guided town Maribor tour and visiting of the Festival Lent 2007		

Session KL1: Keynote Lecture 1

KL1-1 Digital Video Image Quality and Perceptual Coding

K. R. Rao
University of Texas Arlington, USA

KL1-2 Error Resilient Transmission of Video over Mobile Networks

M. Rupp
Vienna University of Technology, Austria

Session KL2: Keynote Lecture 2

KL2-1 An Overview of Research in 3DTV

L. Onural
Bilkent University, Ankara, Turkey

KL2-2 Robust Recognition-by-Parts Using Transduction and Boosting with Applications to Biometrics

H. Wechsler
George Mason University, Fairfax, Virginia, USA

Session TL1: Tutorial Lecture 1

TL1-1 Overview of Multi-view Video Coding

Yo-Sung Ho, Kwan-Jung Oh
Gwangju Institute of Science and Technology, Korea

TL1-2 Data Protection Technics, Cryptographic Protocols and PKI Systems in Modern Computer Networks

M. Marković
Security Department, Banca Intesa ad Beograd, Belgrade, Serbia

Session TL2: Tutorial Lecture 2

TL2-1 Voice Quality Measurement in Modern Telecommunications Networks

A. E. Mahdi
University of Limerick, Limerick, Ireland

TL2-2 Analysis of Fused Ophthalmologic Image Data

J. Jan, L. Kubečka, R. Kolář and R. Chrastekl
Brno University of Technology, Czech Republic

Session S1: Signal Processing and Systems I

- S1-01 **Signal estimation from uncertain observations coming from multiple sensors**
Aurora Hermoso-Carazo¹, R. Caballero-Águila², J. D. Jiménez López¹, J. Linares-Pérez²
¹Universidad de Jaén, ²Universidad de Granada, Spain
- S1-02 **New filtering algorithm using observations with one or two-step random delay**

LINARES-PÉREZ JOSEFA², R. Caballero-Águila², A. Hermoso-Carazo¹, J. D. Jiménez-López¹
¹Universidad de Jaén, ²Universidad de Granada, Spain
- S1-03 **Threshold Estimation for Wavelet Domain Filtering of Signal-dependent Noise**

Mitko Kostov, Cvetko Mitrovski, and Momcilo Bogdanov
Faculty of Technical Sciences, Bitola, Macedonia
- S1-04 **An Example of Adaptive Sampling and Reconstruction of Signals: Application of Chaikin's Algorithm**

Mile Petkovski, Sofija Bogdanova, Momcilo Bogdanov
Faculty of Technical Sciences, Bitola, Macedonia
- S1-05 **Partial Realization of a Generalized Transfer Function**

Dr. Fragulis George², P.K. Sotiropoulos³ and B.G. Mertzios¹
¹Thessaloniki Institute of Technology, Dept. of Automation, THESSALONIKI, Greece
²Western Macedonia Institute of Technology, Dept. of Computer Science & Mathematics, KOZANI, Greece

³Educational Technology Laboratory, Cultural and Educational Technology Institute (CETI), Centre of Integrated Research for the Information Society (I.R.I.S.), Xanthi, Hellas
- S1-06 **Extracting Self-affine (Fractal) Features from Physiologic Signals**

Ivan Michieli, Branka Medved Rogina
Division of Electronics, Ruđer Bošković Institute, Croatia

Session S2: Signal Processing and Systems II

- S2-01 **Analysis of Electrocardiograms Using the Convolution Kernel Compensation Approach**
Damjan Zazula¹, Aleš Holobar¹, Franck Angely²
¹University of Maribor, Slovenia, ²Ecole Centrale de Nantes, France
- S2-02 **Genomic Signal Analysis of MT Mutations Resulting in RMP Resistance**
Paul Cristea¹, Rodica Tuduce², Dorina Banica³
¹Bio-Medical Engineering Center, University "Politehnica" of Bucharest, Romania,
²ETRO Department, Vrije Universiteit Brussel, Pleinlaan 2, B-1050 Brussels, Belgium,
³National Institute of Pneumo-Phthysiology "Prof. Dr. Marius Nasta", Sos Viilor nr 90,
Bucharest, Romania
- S2-03 **ANN Prediction of Nucleotide Sequences Link of Principal Component Analysis to Fourier Transform**
Paul Cristea, Rudi Deklerck, Jan Cornelis, Rodica Tuduce, Iulian Nastac, Marius Andrei
Bio-Medical Engineering Center, University "Politehnica" of Bucharest, Spl. Independentei
313, Bucharest, Romania
- S2-04 **Mammographic lesions discrimination based on fractal dimension as an indicator**
Daniela Alexandra Crisan¹, Radu Dobrescu², Peter Planinšič³
¹Romanian-American University, Bucharest, ROMANIA
²POLITEHNICA" University, Bucharest, ROMANIA
³University of Maribor, SLOVENIA
- S2-05 **Estimating the parameters of measured self similar traffic for modeling in OPNET**
Matjaz Fras, J. Mohorko, Ž. Čučej
University of Maribor, Faculty of Electrical Engineering and Computer Science, Maribor,
Slovenia
- S2-06 **Using Fractal Dimension as Texture Discriminator for Content Base Image Retrieval**
Radu Dobrescu, Stefan Mocanu
POLITEHNICA University of Bucharest, Romania

Session S3: Image and Video Processing I

S3-01 Perceptual Contrast Estimation for Color Edge Detection

Kuo-Cheng Liu², Chun-Hsien Chou¹

¹*Department of Electrical Engineering, Tatung University, Taiwan*

²*Foreign Language and Information Educating Center, Taiwan Hospitality and Tourism College*

S3-02 Recursive filtering algorithm to estimate images observed by signal-dependent colored noise

García-Ligero MaríaJesús¹, A. Hermoso-Carazo¹, J. Linares-Pérez¹, S. Nakamori²

¹*Universidad de Granada, Spain,*

²*University of Kagoshima, Faculty of Education, Japan*

S3-03 Significance of Region of Interest applied on CT Image in TeleRadiology-Telemedicine

Pervez Akhtar¹, Muhammad Iqbal Bhatti², Tariq Javid Ali³, Muhammad Abdul Muqet⁴

¹*National University of Sciences and Technology,*

²*Sir Syed University of Engineering and Technology,*

³*National University of Sciences and Technology,*

⁴*Sir Syed University of Engineering and Technology*

S3-04 An Improved JPEG Compression Scheme Using Human Visual System Model,

G. SREELEK, P.S.Sathidevi

National Institute of Technology, Calicut, Kerala, India

S3-05 An Efficient View Interpolation Scheme and Coding Method for Multi-view Video Coding

Cheon Lee, Kwan-Jung Oh, Seung-Hwan Kim, and Yo-Sung Ho

Gwangju Institute of Science and Technology (GIST), Korea

S3-06 Thermal and Visual Image Registration in Hough Parameter Space

Rok Istenic¹, Dusan Heric¹, Slobodan Ribaric², Damjan Zazula¹

¹*Faculty of Electrical Engineering and Computer Science, University of Maribor, Slovenia*

²*Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia*

S3-07 Image interpolation Method Based on Wavelets

Emil Dumic, Sonja Grgic, Mislav Grgic

University of Zagreb, Croatia

Session S4: Image and Video coding I

S4-01 A Novel Metric for H.264/AVC No-Reference Quality Assessment

Martin Slanina¹, Vaclav Ricny¹, R. Forchheimer²

¹Institute of Radio Electronics, Czech Republic

²Faculty of Electrical Engineering, Image Coding Group, Sweden

S4-02 Video Object Extraction Using Model Matching Technique: A Novel Approach

Mrs. G. Kavitha, M. Dinesh Chandra, Dr.J.Shanmugam

Madras Institute of Technology, Anna University, India

S4-03 A Scale-dependent Morphological Approach to Motion Segmentation

L. B. Dorini, N. C. Simões, N. J. Leite

Universidade Estadual de Campinas, Instituto de Computação, Campinas, SP, Brasil

S4-04 Algorithm-level Optimization for Real-time H.264/AVC Encoder

Seung-Hwan Kim, Yo-Sung Ho

Gwangju Institute of Science and Technology, Korea

S4-05 Texture Matching Method for Lossless Image Coding

Ulacha Grzegorz², Stasiński Ryszard¹

¹Department of Computer Science, Szczecin University of Technology

²Department of Electronics and Telecommunications, Poznań University of Technology, Poland

S4-06 Adaptive Compression of Compound Images

Roumen Kountchev¹, Mariofanna Milanova², Vladimir Todorov³, Roumiana Kountcheva³

¹Radiocommunications Dept. Technical University, Sofia, Bulgaria,

²Computer Science Dept. UALR USA,

³T&K Engineering, Sofia, Bulgaria

Session S5: Image and Video Processing II

S5-01 Palmprint Image Quality Measures in Minutiae-based Recognition

Yan Zheng¹, GuangShun Shi¹, Lin Zhang², QingRen Wang¹

¹Institute of Machine Intelligence, NanKai University, China,

²Institute of Criminology Technology, P.R.China

S5-02 Super-resolution image reconstruction employing Kriging interpolation technique,

Antigoni Panagiotopoulou , Vassilis Anastassopoulos

Electronics Laboratory, Physics Department, University of Patras, Greece

S5-03 Towards Face Recognition in JPEG2000 Compressed Domain

Kresimir Delac, Mislav Grgic, Sonja Grgic

University of Zagreb, Faculty of Electrical Engineering and Computing, Department of Wireless Communications, Croatia

S5-04 Fast Computation of orthogonal Fourier Mellin Moments

Dr. GeorgePapakostas¹, Y. S. Boutalis¹;D. A. Karras²;B. G. Mertzios³

¹Department of Electrical and Computer Engineering, Democritus University of Thrace, Greece,

²Department of Automation, Chalkis Institute of Technology, Chalkida, Greece,

³Department of Automation, Laboratory of Control Systems. and Comp. Intell., Thessaloniki Institute of Technology, Thessaloniki, Hellas

S5-05 Reducing the Foreground Aperture Problem in Mixture of Gaussians Based Motion Detection

Dr. László Czúni, Ákos Utasi

Department of Image Processing and Neurocomputing, University of Pannonia, Hungary

S5-06 Chromatic Enhancement Technique for JPEG Image

Dr. Giuseppe Spampinato, Alfio Castorina, Arcangelo Bruna, Alessandro Capra

Advanced System Technology, ST Microelectronics, Italy

Session S6: ICT and E-Learning

S6-01 Influence of the use of the MATLAB as an underlying technology on the development of the curriculum for the course in signals and systems

*Radojka Krneta, Miroslav Bjekić, Adam Dostanić, Marko Acović
University of Kragujevac, Technical faculty in Čačak, Serbia*

S6-02 Online Learning System for Biomedical Engineering

*G-ThiagoFonseca, João Batista Destro Filho, Tatiane Vieira Borges
Biomedical Engineering Laboratory (BioLab) – School of Electrical Engineering (FEELT),
Federal University of Uberlândia (UFU), BRAZIL*

S6-03 Bridging the gap between digital technology and science education

*Garyfallido Despinau, G. S. Ioannidis
The Science Laboratory, School of education, University of Patras, Greece*

S6-04 Developing Collaborative Learning Model in DSP Courses

*DimitarTaskovski, Vlado Kitanovski, Sofija Bogdanov
Faculty of Electrical Engineering and Information Technologies, University Ss Cyril and
Methodius, Skopje*

S6-05 The Structure of the Pyramidia E-learning Tool - the Programmer's Point of View

*I. Miletic, P. Pale, H. Pandzic, H. Bogunovic, B. Jeren
Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia*

S6-06 E-learning in Croatia: Possibility of mobile multimedia systems for distance learning

*Irena Vuksanović¹, Branka Zovko Cihlar², Damir Boras³
¹Council for Electronic Media, Zagreb, Croatia,
²Faculty of Electrical Engineering and Computing, Department of Wireless
Communications, Croatia,
³Faculty of Philosophy, Department of Information Sciences, Zagreb, Croatia*

S6-07 A formal approach to hypervideo design

*Samra Mujačić¹, Matjaž Debevc²
¹University Centre for Distance Education Development, University of Tuzla, BIH
²University of Maribor, Faculty of Electrical Engineering and Computer Sciences, Maribor,
Slovenia*

Session S7: Artificial Intelligence and Technologies

S7-01 ANN Flexible Forecasting for the Adaptive Monitoring of a Multi-Tube Reactor

*Dr. Iulian Nastac, Prof. Paul Cristea
Polytechnic University of Bucharest, Romania*

S7-02 Shot Boundary Detection by a Hierarchical Supervised Approach

*Camara- GuillermoChavez², F. Precioso, M. Cord, S. Phillipp-Foliguet, A. de A. Araujo¹
¹Equipe Traitement des Images et du Signal-ENSE, France,
²Federal University of Minas Gerais, Computer Science Department, Brazil*

S7-03 Highly Compressed Zernike Moments by Smoothing

*Dr. GeorgePapakostas¹, Y.S. Boutalis¹;D. A. Karras²;B. G. Mertzios³
¹Department of Electrical and Computer Engineering, Democritus University of Thrace, Hellas,
²Department of Automation, Chalkis Institute of Technology, Chalkida, Hellas,
³Department of Automation, Laboratory of Control Systems. and Comp. Intell., Thessaloniki Institute of Technology, Thessaloniki, Hellas*

S7-04 Looking for Intelligent Image Treatment and Manipulation: An Information Processing Approach

*Emanuel Diamant
VIDIA-mant, Israel*

S7-05 Environmental Intelligence Based on Advanced Sensor Networks

*Darko Stipanicev, Ljiljana Bodrozic, Maja Stula
University of Split - Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture, Croatia*

S7-06 Step Integration based Fusion Algorithm for Multimodal Biometrics

*Aayush Sharma
Department of Electrical Engineering, Indian Institute of Technology, Roorkee – India*

S7-07 A KD-Tree Based Non-Intrusive Speech Quality Evaluation for Telephony Systems

*Abdulhussain E. Mahdi, Timothy Murphy
Department of Electronic & Computer Engineering, University of Limerick, Ireland*

Session S8: Watermarking and Encryption

- S8-01 **Watermarking of audio signals using adaptive subband filtering and Manchester signaling**
Dr. Przemyslaw Dymarski
Warsaw University of Technology, Department of Electronics and Information Technology,
Institute of Telecommunications, Warsaw, Poland
- S8-02 **Semi-Fragile Watermarking Scheme for Authentication of MPEG-1/2 Coded Videos**
Vlado Kitanovski, Dimitar Taskovski, Sofija Bogdanova
Department of Electronics, Faculty of Electrical Engineering and Information Technologies,
Skopje, Republic of Macedonia
- S8-03 **On Optimization of Miller-Rabin Primality Test on TI TMS320C54x Signal Processors**
Goran Đorđević¹, Dr. Milan Marković²
¹Institute for manufacturing banknotes and coins NBS, Belgrade, Serbia
²Banca Intesa ad Beograd, Belgrade, Serbia
- S8-04 **The new watermarking scheme with error-correction codes**
Petr Číka
Department of Telecommunications, Brno University of Technology, Czech Republic
- S8-05 **A Benchmark for Medical Image Watermarking**
Navas K. A, Sasikumar M
College of Engineering Trivandrum, Kerala, India
- S8-06 **An Efficient Lossless Data Hiding Technique for Palette-Based Images with Capacity Optimization**
Noura Saleh¹, Hoda N. Boghdady¹, Samir I. Shaheen² and Ahmed M. Darwish²
¹National Telecommunication Institute, Cairo, Egypt
²Computer Engineering Department, Faculty of Engineering, Cairo University
- S8-07 **BEST WATERMARKING SELECTION FOR FREE-VIEW POINT TELEVISION**
Evlambios E. Apostolidis¹, Alper Koz¹ and Georgios Triantafyllidis²
¹Informatics and Telematics Institute, Thessaloniki, Greece
²Middle East Technical University, Ankara, Turkey

Session S9: Signal Processing and Systems III

S9-01 OFDM PAPR reduction by combination of Interleaving with Repeated clipping and filtering

Josef Urban, Roman Marsalek

Department of Radio Electronics, Brno University of Technology, Brno, Czech Republic

S9-02 2-stage Blind Receiver Based on the CM algorithm for MC-CDMA Signals Detection over the 3-states Channel Model

Lubomir Copjan, Jozef Krahulec, Stanislav Marchevsky, Stanislav Benco

Department of Electronics and Multimedia Communications, Technical University of Kosice, Slovak Republic

S9 -03 Methodology of Path Loss Calculation using Measurement Results

Dr. Winton Afrić¹, Branka Zovko- Cihlar², Sonja Grgić²

¹Croatian Telecom, Strategy and Network Planning Department, Zagreb, Croatia

²University of Zagreb, Faculty of EE and Comp, Zagreb, Croatia

S9-04 Modeling and Implementation of the Complex Telecommunication Systems using the LabView 8.2

Taima Kapetanović¹, Amir Kapetanović²

¹BIgBugDSP LLC, Cheyenne, USA

²Herschel Technologies Inc, Santa Clara, USA

S9-05 Modeling of Middle-range Metallic Lines for Ethernet with VDMT

Jiří Vodrážka, Petr Jareš, Tomáš Prokop

Department of Telecommunication Engineering, Czech Technical University in Prague, Faculty of Electrical Engineering, Praha, Czech Republic

S9- 06 Architecture of Transform Based Invariant Feature Memory

Ján Turán, Ľuboš Ovseník

Department of Electronics and Multimedia Communications, University of Technology Košice, Slovak Republic

S9-07 Wireless Sensor Network Wavelet Signal Processing

A. Dostanic, A. Peulic, S. Randjic, U. Pesovic

Technical Faculty Cacak University of Kragujevac, Serbia

Session S10: Speech and Audio Processing

S10-01 Application of Speaking Style Conversion in the Czech and Slovak TTS System with Cepstral Description

Dr. Jiří Přibíl¹, Ing. Anna Přibilová², PhD.

¹Institute of Photonics and Electronics, Academy of Sciences CR, Czech Republic,

²Slovak University of Technology, Slovakia

S10-02 MABox - Multimodal Microphone Array Algorithm Development System

Jan Vrabc, Gregor Rozinaj, Juraj Vojtko

Slovak University of Technology, Slovakia

S10-03 Noise Reduction Algorithm for Robust Speech Recognition Using Minimum Statistics Method and Neural Network VAD

Marko Kos,

University of Maribor, Slovenia

S10-04 INFLUENCE of FEATURES EXTRACTION METHODS in PERFORMANCE of CONTINUOUS SPEECH RECOGNITION for ROMANIAN

Corneliu Octavian DUMITRU, Inge GAVAT

University POLITEHNICA Bucharest, Romania

S10-05 Speech sampling by level-crossing and its reconstruction using spline-based filtering

Dr. Modris Greitans, R.Shavelis

Institute of Electronics and Computer Science, Latvia

S10-06 Tone Discrimination in Mandarin Chinese

I V McLoughlin

Nanyang Technological University, Singapore

S10-07 ASR for ROMANIAN LANGUAGE

Inge Gavata, Corneliu Octavian DUMITRU

University POLITEHNICA Bucharest, Romania

Session S11: Video Streaming, Conferencing and Broadcasting

S11-01 [Influence of the Baseband Transmission Channel Cut-off Parameter on the Transmission Quality in DVB Baseband Processing](#)

*Tomáš Kratochvíl
Brno University of Technology, Czech Republic*

S11-02 [Image reception and control of IP-cam via digital video broadcasting](#)

*Petr Číka, Vít Novotný, Ivan Dirbák
Brno University of Technology, Czech Republic*

S11-03 [Using Telecommunications Middleware to Dynamically Adapt Multimedia Services](#)

*José Manuel Oliveira^{1,2}, Eurico Carrapatoso^{1,3}
¹Instituto de Engenharia de Sistemas e Computadores do Porto, Portugal,
²Faculdade de Economia da Universidade do Porto, Portugal,
³Faculdade de Engenharia da Universidade do Porto, Portugal*

S11-04 [Complementary Code Keying Implementation in the Wireless Networking](#)

*Jan Mikulka, Stanislav Hanus
Brno University of Technology, Czech Republic*

S11-05 [Location Technologies for Mobile Networks](#)

*Tomislav Kos¹, Mislav Grgic¹, Jakov Kitarovic²
¹Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia,
²Faculty of Maritime Studies, University of Rijeka, Croatia*

S11-06 [Sub-Shots - Basic Units of Video](#)

*Christian Petersohn
Technical University Berlin, Germany*

S11-07 [Introducing a Framework to Create Telephony Speech Databases from Direct Ones](#)

*Saeedeh Momtazi, Hossein Sameti, Saman Vaisipour, Meysam Tefagh
Sharif University of Technology, Iran*

Session S12: Multimedia Communications, Networking and Services

S12-01 Open issues in Wireless Visual Sensor Networking

*Theodore Zahariadis, Stamatis Voliotis
Technological Educational Institute of Chalkida, Greece*

S12-02 Internet Protocol Multimedia Subsystem for Mobile Services

*Bojan Bakmaz, Zoran Bojkovic and Miodrag Bakmaz
University of Belgrade, Serbia*

S12-03 Proposed use of a CDMA technique in wireless sensor networks

*Karl Benkic
University of Maribor, Slovenia*

S12-04 ZigBee wireless network performance analysis and electromagnetic fields modeling

*Aleksandar Peulic¹, U. Pesovic¹, Ž. Čučej²
¹University of Kragujevac, Serbia,
²University of Maribor, Slovenia*

S12-05 Panoramic Scanned Page Using Mobile Phone Camera

*Naveed Iqbal Rao, Huijun Di, GuangYou Xu
Tsinghua University, China*

S12-06 QUALITATIVE COMPARITIVE DATA FUSION ANALYSIS TO MULTIREOLUTION APPROACH

*G.RAGUNATHAN RAGU¹, S.SENTHILKUMAR¹, Dr. S.MUTTAN²
¹St. Joseph's College of Engineering, India,
²Anna University, India*

S12-07 Position Monitoring using Smart Wireless Network System

*N. Zdravkovic¹, A. Peulic²
¹ Faculty of Information Technology, Belgrade, Serbia
²Technical Faculty, Belgrade, Serbia*

Session S13: Multimedia and Multimedia Signal Processing

S13-01 Human lips synchronisation in Autodesk Maya

António Moura¹, Ingrida Mažonavičiūtė^{1,2}, João Nunes¹, Justinas Grigaravičius^{1,2}

¹Instituto Politécnico de Viana do Castelo, Portugal,

²Vilnius Gediminas Technical University, Lithuania

S13-02 Scene Change Detection Using DCT Features in Transform Domain Video Indexing

S. Primechaev, A. Frolov and B. Šimák

Czech Technical University in Prague, Czech Republic

S13-03 Combining Novel Features for Content Based Image Retrieval

RMD Sundaram Ramanathan¹, K.Satya Sai Prakash²

¹Wipro Technologies, India,

²Department of Computer Science and Engineering, India,

S13-04 Content-Based Image Retrieving Improved by Pixel-Based Search

Igor Stojanovic, Sofija Bogdanova and Momcilo Bogdanov

Faculty of Electrical Engineering and Information Technologies, Macedonia

S13-05 Phase-based Motion Estimation for Noisy Sequences

Vittoria Bruni, Daniela De Canditiis, Domenico Vitulano

Istituto per le Applicazioni del Calcolo "M.Picone", Italy

S13-06 Comparison of Background Subtraction Methods for a Multimedia Application

Fida El Baf, Thierry Bouwmans, Bertrand Vachon

University of La Rochelle, France

S13-07 Comparison of PLC Methods Used in VoIP Networks

Zdenek Becvar, Jan Zelenka, Miloslav Brada, Lukas Novak

Department of Telecommunication Engineering, Czech Technical University, Czech Republic

Session S14: Image and Video Processing III

- S14-01 **Scratches Removal in Digitised Aerial Photos Concerning Sicilian Territory**
Mr. GIUSEPPE MAZZOLA, E. Ardizzone, H. Dindo, O. Gambino
Università degli Studi di Palermo, Italy
- S14-02 **IMAGE DENOISING USING TWO DIMENSIONAL GARCH MODEL**
Maryam Amirmazlaghani, Dr. Hamidreza Amindavar
Department of Electrical Engineering, Iran
- S14-03 **Motion vector composition algorithm in H.264 transcoding**
Francesca Lonetti¹, Francesca Martelli²
¹Istituto di Scienza e Tecnologie dell'Informazione "Alessandro Faedo", Italy,
²Università di Pisa, Italy
- S14-04 **A Comparative study of various MCC detection Methods in Digitized mammograms**
Kavitha .K, Dr.N.kumaravel, Dr.N.kumaravel
Anna University, India
- S14-05 **A contrario False Alarms Removal for Improving Blotch Detection in Digitized Films Restoration**
Sorin Tilie¹, Louis Laborelli¹, Isabelle Bloch²
¹DRE, INA, France,
²GET-ENST, TSI, CNRS UMR 5141, France
- S14-06 **A Fast Hue-Preserving Histogram Equalization Method for Color Image Enhancement using a Bayesian Framework**
David Menotti^{1,2}, Laurent Najman³, Arnaldo de Albuquerque Araujo¹, Jacques Facon²
¹Universidade Federal de Minas Gerais, Brazil,
²Pontifícia Universidade Católica do Paraná, Brazil,
³Université de Marne-la-Vallée, France
- S14-07 **MULTI-STREAM ASYNCHRONY DYNAMIC BAYESIAN NETWORK MODEL FOR AUDIO-VISUAL CONTINUOUS SPEECH RECOGNITION**
Guoyun Lv¹, Dongmei Jiang¹, Rongchun Zhao¹, Xiaoyue Jiang¹, H. Sahli²
¹Northwestern Polytechnical University, China
²Vrije Universiteit Brussel, Belgium

Session S15: Implementations and Applications

S15-01 License Plate Localization and Storage Method

Balázs Enyedi¹, Lajos Konyha¹, Kálmán Fazekas¹, Jan Turán²
¹Budapest University of Technology and Economics, Hungary,
²University of Technology Košice, Slovak Republic

S15-02 Edge-based Extraction of a Grasped Object with Retina-like Sensor

Tomoyuki Yamaguchi¹, Shuji Hashimoto¹, Fabio Berton², Giulio Sandini²
¹Waseda University, Japan,
²University of Genoa, Italy

S15-03 Efficient Implementation of VC-1 Decoder on Texas Instrument's OMAP2420 – IVA

Jayaprakash Pai, Lakshmish R., Praveen K. Y., Kausik Maiti, and Tushar K. Adhikary
Emuzed - An Aricent Company, India

S15-04 Basic C Code Implementations for AVR Microcontrollers

Tomas Fryza,
Brno University of Technology

S15-05 An Off-line Electronic Cash System Based on Bilinear Pairings

Constantin Popescu, Horea Oros
University of Oradea, Romania

S15-06 AUTOMATIC DETECTION OF ACCRETION OF GLAUCOMA IN EYE

Rajesh Balaraman, Shankar Ramanathan
St. Joseph's College of Engineering (Affiliated to Anna University), India

S15-07 Modeling methods in OPNET simulations of Tactical Command and Control Information System

Jože Mohorko, M. Fras, Ž. Čučej
University of Maribor, Slovenia

Session S16: Image scanning, Displaying and Printing and Applications

- S16-01 **Fast displacement estimators for freehand ultrasonic strain imaging**
Andreas Eder, Christian Kargel
Carinthia University of Applied Sciences, Austria
- S16-02 **Optimisation of Image Registration for Print Quality Control**
Jurij Rakun, Damjan Zazula
University of Maribor, Slovenia
- S16-03 **Different Color Attributes between Hard-copy and Soft-copy Images**
Lidija Mandić¹, Sonja Grgić², Tomislav Kos²
¹University of Zagreb, Faculty of Graphic Arts, Croatia,
²University of Zagreb, Faculty of Electrical Engineering and Computing, Croatia
- S16-04 **Cardiac Structure Recognition in Ultrasound Images**
Mozart Lemos de Siqueira^{1,2}, Daniel Nehme Müller¹ and Philippe Olivier Alexandre Navaux¹
¹Federal University of Rio Grande do Sul, Brazil,
²Centro Universitário Ritter do Reis, Brazil
- S16-05 **Analysis and diagnostics of the brain-stem ultrasound images**
Josef Schreiber, Edurad Sojka, Laceyar Licev
Technical University of Ostrava, Czech Republic
- S16-06 **Algorithms and Techniques for Image to Sound Conversion for Helping the Visually Impaired People – Application Proposal**
Alexandru Cazan, prof. Radu Varbanescu, prof. Dan Popescu
Politehnica University of Bucharest, Romania
- S16- 07 **Relevance of Earth Observation Images Information Mining to Humanitarian Crisis Management**
D. Faur, I. Gavat, M. Datcu
University Politehnica Bucharest, Romania

Session S17: Miscellaneous

S17-01 KaTaLyzer – framework for Ethernet traffic analysis

*Ivan Kotuliak, S. Bočinec, R. Benkovič
University of Technology Košice, Slovak Republic*

S17-02 Comparative analysis of paper and pencil and computer based tests regarding didactical and psychological aspects

*Marjan Milošević
Technical faculty Čačak, Serbia*

S17 -03 Separation of Vowel and Consonant from Esophageal Speech

*Rintaro Ogane, Futoshi Sugimoto, Masahide Yoneyama
Toyo University, Japan*