

# **IWSSIP 2008**

15th International Conference on Systems,  
Signals and Image Processing

25 – 28 June, 2008

Bratislava, Slovakia

## **IWSSIP 2008 GENERAL INFORMATION**

The 15th International Conference on Systems, Signals and Image Processing, IWSSIP 2008 is organized by:

- *Slovak University of Technology in Bratislava, Faculty of Electrical Engineering and Information Technology, Department of Telecommunications*
- *Czechoslovakia Section of IEEE CAS/COM/SP of CS Section*
- *The European Association for Speech, Signal and Image Processing – EURASIP*
- *Telecommunication Users Group of Slovakia*
- *International Society for Research in Science and Technology. – ISRTS*

IWSSIP 2008 will be held in hotel Nivy in Bratislava, Slovakia, 25 –28 June, 2008.

**IWSSIP 2008 PROGRAM COMMITTEE****General Chair***Gregor Rozinaj*

Slovak University of Technology in Bratislava, Slovakia

**Program Chair***Pavol Podhradský*

Slovak University of Technology in Bratislava, Slovakia

<i>Ansorge M.</i> , Switzerland	<i>Liatsis P.</i> , UK
<i>Bojkovic Z.</i> , Serbia	<i>Lukáč R.</i> , Canada
<i>Bogdanova S.</i> , FYROM	<i>Mertzios B.</i> , Greece
<i>Behlilovic N.</i> , Bosnia and Herzegovina	<i>Turi Nagy M.</i> , Slovakia
<i>Caf D.</i> , Slovenia	<i>Pereira F.</i> , Portugal
<i>Chariglione L.</i> , Italy	<i>Pitas I.</i> , Greece
<i>Cristea P.</i> , Romania	<i>Planinšič P.</i> , Slovenia
<i>Conci A.</i> , Brazil	<i>Prasad B.</i> , USA
<i>Cuevas Casado A.</i> , Germany	<i>Podhradský P.</i> , Slovakia
<i>Čepko J.</i> , Slovakia	<i>Rao K.R.</i> , USA
<i>Čizmár A.</i> , Slovakia	<i>Reljin B.</i> , Serbia
<i>Čučej Z.</i> , Slovenia	<i>Rozinaj G.</i> , Slovakia
<i>Deventer O. V.</i> , Holland	<i>Schaefer R.</i> , Germany
<i>Domanski M.</i> , Poland	<i>Sonka M.</i> , USA
<i>Doshi B.</i> , USA	<i>Stasinski R.</i> , Poland
<i>Ebrahimi T.</i> , Switzerland	<i>Šimák B.</i> , Czech Republic
<i>Enyedi B.</i> , Hungary	<i>Voliotis S.</i> , Greece
<i>Fazekas K.</i> , Hungary	<i>Tekalp M.</i> , USA
<i>Gruhler G.</i> , Germany	<i>Trúchly P.</i> , Slovakia
<i>Grgić M.</i> , Croatia	<i>Turán J.</i> , Slovakia
<i>Grgić S.</i> , Croatia	<i>Vargic R.</i> , Slovakia
<i>Heute U.</i> , Germany	<i>Vlaicu A.</i> , Romania
<i>Izquierdo E.</i> , UK	<i>Wajda K.</i> , Poland
<i>Katsaggelos A. K.</i> , USA	<i>Yo-Sung Ho</i> , Korea
<i>Kačur J.</i> , Slovakia	<i>Zahariadis T.</i> , Greece
<i>Kazakos D.</i> , USA	<i>Zervos N.</i> , Greece
<i>Kotuliak I.</i> , Slovakia	<i>Zorzi M.</i> , Italy
<i>Levický D.</i> , Slovakia	<i>Zovko-Cihlar B.</i> , Croatia

**IWSSIP 2008 INTERNATIONAL REVIEW COMMITTEE****Review Committee Chairman***Juraj Kačur*

Slovak University of Technology in Bratislava, Slovakia

<i>Cristea P.</i> , Romania	<i>Pavlovičová J.</i> , Slovakia
<i>Čepko J.</i> , Slovakia	<i>Planinšič P.</i> , Slovenia
<i>Čučej Z.</i> , Slovenia	<i>Podhradský P.</i> , Slovakia
<i>Diviš Z.</i> , Czech Republic	<i>Polec J.</i> , Slovakia
<i>Farkas P.</i> , Slovakia	<i>Prasad B.</i> , USA
<i>Fazekas K.</i> , Hungary	<i>Róka R.</i> , Slovakia
<i>Grgić M.</i> , Croatia	<i>Rozinaj G.</i> , Slovakia
<i>Grgić S.</i> , Croatia	<i>Šimák B.</i> , Czech Republic
<i>Gruhler G.</i> , Heilbronn	<i>Svečko R.</i> , Slovenia
<i>Hercog D.</i> , Slovenia	<i>Trúchly P.</i> , Slovakia
<i>Juhár J.</i> , Slovakia	<i>Turi Nagy M.</i> , Slovakia
<i>Kapus T.</i> , Slovenia	<i>Vargic R.</i> , Slovakia
<i>Karras D. A.</i> , Greece	<i>Vojtko J.</i> , Slovakia
<i>Kos T.</i> , Croatia	<i>Voliotis S.</i> , Greece
<i>Kotuliak I.</i> , Slovakia	<i>Zodl J.</i> , Slovakia
<i>Levický D.</i> , Slovakia	<i>Zovko-Cihlar B.</i> , Croatia
<i>Marchevský S.</i> , Slovakia	<i>Židek F.</i> , Slovakia
<i>Medvecký M.</i> , Slovakia	
<i>Mohorko J.</i> , Slovenia	
<i>Oravec M.</i> , Slovakia	

**IWSSIP 2008 ORGANIZING COMMITTEE****Organizing Committee Chairman***Jozef Čepko*

Slovak University of Technology in Bratislava, Slovakia

**Organizers**

*Peter Farkaš*, Slovakia  
*Mislav Grgić*, Croatia  
*Jože Mohorko*, Slovenia  
*Juraj Kačur*, Slovakia  
*Ivan Kotuliak*, Slovakia  
*Ján Körösi*, Slovakia  
*Martin Turi Nagy*, Slovakia  
*Andrej Pálenik*, Slovakia  
*Martin Rakús*, Slovakia  
*Renata Talafová*, Slovakia  
*Peter Tríchly*, Slovakia  
*Radoslav Vargic*, Slovakia  
*Juraj Vojtko*, Slovakia  
*Ján Vrabc*, Slovakia

Address: Faculty of Electrical Engineering and Information Technology,  
 Ilkovičova 3, Bratislava 812 19, Slovakia

URL: <http://iwSSIP.stuba.sk>

**PROGRAM SUMMARY**

08:30 - 13:00 Registration				
HALL A				
Wednesday 25.06.2008	09:00 - 09:30			OPENING SESSION - WELCOME SPEECHES
	09:30 - 11:00			PLENARY SESSION – Markus Rupp and Yo-Sung Ho
	11:00 - 11:30			Coffee Break
	HALL A	HALL B	HALL C	
	11:30 - 13:15	11:30 - 13:15	11:30 - 13:15	11:30 - 13:15
	SESSION 1	SESSION 2	SESSION 3	
	Image processing	General Signal Processing	Networks	
	13:15 - 14:30 Lunch Break			
	15:00 - 19:00			
	Short trip in the authentic surrounding of Devin Castle, guided tour, swordplay exhibition (Meeting point: Hotel Nivy, parking place)			
19:00 - 24:00				
IWSSIP 2008 Conference banquet in Restaurant Pegas				
Thursday 26.06.2008	HALL A	HALL B	HALL C	
	08:30 - 10:00	08:30 - 10:00	08:30 - 10:00	08:30 - 10:00
	INVITED SESSION	SESSION 4	SESSION 5	
	Antonio Cuevas and Eugen Mikoczy	Image Feature/Object Detection and Recognition I	Speech & Audio I	
	10:00 - 10:15 Coffee Break			
	10:15 - 11:45	10:15 - 11:45	10:15 - 11:45	10:15 - 11:45
	SESSION 6	SESSION 7	SESSION 8	
	IMS & applications	Image Feature/Object Detection and Recognition II	Speech & Audio II	
	11:45 - 12:45 Lunch Break			
	12:45 - 14:30	12:45 - 14:30	12:45 - 14:30	12:45 - 14:30
SESSION 9	SESSION 10	SESSION 11		
Multimedia Networks & Applications I	Image Feature/Object Detection and Recognition III	Speech & Audio III		
15:00 - 18:00				
Guided Bratislava city sightseeing (Meeting point: Hotel Nivy, parking place)				
18:00 - 20:00				
Cocktail in Mayor's Palace				
Friday 27.06.2008	HALL A	HALL B	HALL C	
	08:30 - 10:15	08:30 - 10:15	08:30 - 10:15	08:30 - 10:15
	SESSION 12	SESSION 13	SESSION 14	
	Modelling and Simulation of Communication Systems	Image Enhancement	Video Motion Estimation and Object Detection	
	10:15 - 10:30 Coffee Break			
	10:30 - 12:30	10:30 - 12:30	10:30 - 12:30	10:30 - 12:30
SESSION 15	SESSION 16	SESSION 17		
Mobile & Wireless NTW	Image Segmentation	Video Compression & Coding		
12:30 - 13:30 Lunch Break				
13:30 - 15:00	13:30 - 15:00	13:30 - 15:00	13:30 - 15:00	
SESSION 18	SESSION 19	SESSION 20		
Multimedia DB	Image Feature/Object Detection and Recognition IV	Multimedia Networks & Applications II		

**Wednesday 25.06.2008**

08:00 - 13:30	<b>Registration</b>
<b>HALL A</b>	
09:00 - 09:30	<b>Opening session - Welcome speeches</b>
09:30 - 11:00	<b>PLENARY SESSION</b>
<i>Session Chairs:</i> Branka Zovko-Cihlar, Gregor Rozinaj	
<b>Measurements of MIMO HSDPA and WiMAX transmissions</b> Markus Rupp	
<b>Multiview Video Coding for Three-Dimensional Multimedia Services</b> Yo-Sung Ho	
11:00 - 11:30	<b>Coffee Break</b>

<b>HALL A</b>	
11:30 - 13:15	<b>SESSION 1</b>
<b>Image Processing</b>	
<i>Session Chairs:</i> Snježana Rimac-Drlje, Radoslav Vargic	
Image Registration Based on Physical Forces <i>Amin Sadri, Ali Beheshti</i>	
Various Filtering Methods of Motion Vector Fields <i>Ján Gamec</i>	
Robust Digital Watermarking in Color Images <i>Radovan Ridzoň, Dušan Levický</i>	
Adaptive Lifting Integer Wavelet Transform for Lossless Image Compression <i>Vlado Kitanovski, Matej Kseneman, Dusan Gleich, Dimitar Taskovski</i>	
A New Simple Context Lossless Image Coding Algorithm Based on Adaptive Context Arithmetic Coder <i>Ulacha Grzegorz, Ryszard Stasinski</i>	
On Residual Vector Quantization for Texture Mapping <i>Roman Parys, Gunter Knittel</i>	
A Non-uniform Image Compression Using Genetic Algorithm <i>M.R Bonyadi, E.Deighani, Mohsen Ebrahimi Moghaddam</i>	

**Wednesday 25.06.2008**

<b>HALL B</b>	
11:30 - 13:15	<b>SESSION 2</b>
<b>General Signal Processing</b>	
<i>Session Chairs:</i> Juraj Kačur, Juraj Vojtko	
Identification of Errors-in-variables Systems Using Data Clustering <i>Levente Hunyadi, István Vajk</i>	
Effect of Multiple Deconvolution Parameters on the Resolvability of Decay Rates of Multiexponential Signals <i>Abdussamad U. Jibia, Momoh-Jimoh E. Salam, Othman O. Khalifa</i>	
Parallelization of IIR Filters Using SIMD Extensions <i>Rade Kutil</i>	
Real Time Localization and 3D Depth Estimation Across Disparate Sensing Systems: Toward Hazard Aware and Tele-Immersive Spaces <i>Peter Bajcsy, Miles Johnson, Suk-Kyu Lee, Rob Kooper</i>	
New Hybrid Method for the 3D Reconstruction of Neuronal Activity in the Brain <i>R. Khemakhem, A. Ben Hamida, A. Ahmed-Taleb, P. Derambure</i>	
An Improved Proportionate Affine Projection Algorithm for Network Echo Cancellation <i>Kirill Sakhnov</i>	
Comparison Between Different Lifting Scheme Algorithms <i>Matej Kseneman, Dusan Gleich, Peter Planinsic, Vlado Kitanovski, Dimitar Taskovski</i>	

13:15 - 14:30	<b>Lunch Break</b>
15:00 - 19:00	
<b>Short trip in the authentic surrounding of Devin Castle, guided tour, swordplay exhibition (Meeting point: Hotel Nivy, parking place)</b>	
19:00 - 24:00	
<b>IWSSIP 2008 Conference banquet in Restaurant Pegas</b>	

**Wednesday 25.06.2008**

HALL C	
11:30 - 13:15	<b>SESSION 3</b>
<b>Networks</b>	
<i>Session Chairs:</i> Ivan Kotuliak, Ján Korosi	
Modeling of Transmission Lines for Digital Subscriber Lines Testing <i>Tomáš Prokop, Jiří Vodrážka</i>	
Forward Error Correction Techniques Suitable for the Utilization in the PLC Technology <i>Stanislav Dlhán</i>	
The Utilization of the Vectored DMT for the FEXT-free signal transmission by means of the VDSL technology <i>Rastislav Róka</i>	
Security Aspects in Future Mobile Networks <i>Bojan Bakmaz, Miodrag Bakmaz, Zoran Bojkovic</i>	
Relative Surface Variation as a Function of Base Station Antenna Heights at WiMAX Cell <i>Winton Afric, Branka Zovko-Cihlar, Mislav Grgic</i>	
Hybrid ARQ Error Control for Broadcast or Multicast in Wireless Networks <i>Peter Farkaš, Ahmad Yassine, Van Phuong Tran</i>	
Evolution of 3GPP Core Network <i>Marek Neruda, Robert Bešťák</i>	

13:15 - 14:30	<b>Lunch Break</b>
15:00 - 19:00	
<b>Short trip in the authentic surrounding of Devin Castle, guided tour, swordplay exhibition (Meeting point: Hotel Nivy, parking place)</b>	
19:00 - 24:00	
<b>IWSSIP 2008 Conference banquet in Restaurant Pegas</b>	

**Thursday 26.06.2008**

HALL A	
08:30 - 10:00	<b>INVITED SESSION</b>
<i>Session Chairs:</i> Žarko Čučej, Peter Trúchly	
All-IP, fixed-mobile convergence, NGN, bit pipes, service platform... how does IMS fit into all this? <i>Antonio Cuevas</i>	
Next Generation of Multimedia Services – NGN based IPTV architecture with or without IMS? <i>Eugen Mikóczy</i>	

HALL B	
08:30 - 10:00	<b>SESSION 4</b>
<b>Image Feature/Object Detection and Recognition I</b>	
<i>Session Chairs:</i> Pamela Begovič, Radoslav Vargic	
Efficient Presentation of DICOM Mammography Images using Matlab <i>Mario Mustra, Mislav Grgic, Kresimir Delac</i>	
Fingerprint Verification using Filter-bank of Gabor and Log Gabor Filters <i>Rehan Jamshaid Nemati, Muhammad Younus Javed</i>	
Enhanced Fingerprint Verification through Novel Matching Modality <i>Rehan Jamshaid Nemati, Muhammad Younus Javed, Athar.M.Zaidi</i>	
Succolarity: Defining a Method to Calculate this Fractal Measure <i>Rafael Heitor Correia de Melo, Aura Conci</i>	
A Unifying Framework for Color Image Calibration <i>Elodie Roullot</i>	
Computational System to Detect Defects in Mounted and Bare PCB Based on Connectivity and Image Correlation <i>Fabiana R. Leta, Flávio F. Feliciano</i>	

10:00 - 10:15	<b>Coffee Break</b>
---------------	---------------------

**Thursday 26.06.2008**

HALL C	
08:30 - 10:00	<b>SESSION 5</b>
<b>Speech &amp; Audio I</b>	
<i>Session Chairs:</i> Ryszard Stasinski, Martin Turi Nagy	
Efficient Adaptations of the SphinxTrain Procedure for Building a Robust ASR System in Slovak <i>Juraj Kačur, Juraj Vojtko</i>	
Automatic Texture Segmentation Based on k-means Clustering and Efficient Calculation of Co-occurrence Features <i>Lucas de O. Bastos, Panos Liatsis, Aura Conci</i>	
Comparison of Speaker Segmentation Methods Based on the Bayesian Information Criterion and Adapted Gaussian Mixture Models <i>Matej Grašič, Marko Kos, Andrej Žgank, Zdravko Kačič</i>	
Text-based vs. Vowel-based Automatic Evaluation of Tracheoesophageal Substitute Voice <i>Tino Haderlein, Tobias Bocklet, Elmar Nöth, Frank Rosanowski</i>	
Impact of Saturation on Speech Quality in VoIP <i>Zdenek Becvar, Jan Zelenka, Miloslav Brada</i>	
Multimodal biometric authentication using speech and hand geometry fusion <i>Peter Varchol, Dušan Levický, Jozef Juhár</i>	
10:00 - 10:15	Coffee Break

**Thursday 26.06.2008**

HALL A	
10:15 - 11:45	<b>SESSION 6</b>
<b>IMS &amp; applications</b>	
<i>Session Chairs:</i> Peter Planinšič, Eugen Mikóczy	
MDI measurement in the IPTV <i>Jaroslav Krejčí</i>	
Evolution of 3GPP Core Network <i>Marek Neruda, Robert Bešták</i>	
Security of Multimedia Services Using WLAN Access Technology <i>Andrej Vrabel, F. Husák</i>	
Interference conditions on Croatian coast in DVB-T planning <i>Miran Gosta, Danijel Vlahović, Branka Zovko Cihlar</i>	
Evaluation of Scalable and Multi-Descriptive Coding Techniques for Video Services over Next Generation Broadband Wireless Networks <i>Huma Noor, Fraz Anjum, Nadeem Khan</i>	
DVB-T/H Laboratory Transmission Using Fading Channel Profiles <i>Tomáš Kratochvíl</i>	
11:45 - 12:45	Lunch Break

**Thursday 26.06.2008****HALL B**

10:15 - 11:45

**SESSION 7****Image Feature/Object Detection and Recognition II***Session Chairs:* Miloš Oravec, Mohsen Ebrahimi Moghadam

Hierarchical Method for Building Extraction in Urban Area's Images using UnSharp Masking [USM] and Bayesian classifier

*Heydar Toossian Shandiz, Seyed Mostafa Mirhassani, Bardia Yousefi*

Transform Based System for Traffic Sign Recognition

*Ján Turán, Martin Fifik, Ľuboš Ovseník, Ján Turán Jr.,*

Computing the 3D Face Recognition based on Pseudo 2D Hidden Markov Models using Geodesic Distances

*M. Castellano, G. Mastronardi, D. Daleno, L. Cariello, G. Decataldo*

An Information Theory Based Image Processing Chain for Change Detection in Earth Observation

*Daniela FAUR, Corina VADUVA, Inge GAVAT, Mihai DATCU*

Localization of Cardiac Cavities Using Hierarchically Search in 2D Grayscale Ultrasound Images

*Mozart L. de Siqueira, Daniel Nehme Müller, Philippe O. A. Navaux*

Iterative Unsupervised Object Detection System

*Sebastien Onis, Henri Sanson, Christophe Garcia*

11:45 - 12:45

**Lunch Break****Thursday 26.06.2008****HALL C**

10:15 - 11:45

**SESSION 8****Speech & Audio II***Session Chairs:* Aura Conci, Juraj Kačur

Robust Text-Independent Speaker Identification Using Multiple Subband-Classifiers in Colored Noise Environment

*Eduardo E. Vale, Alexandre A. Cunha, Abraham Alcaim*

Modelling The I.M.F's Produced By The E.M.D Of Musical Audio For Synthesis and Manipulation

*Michael Fulton, John J. Soraghan*

Speech Bandwidth Classification for Broadcast News Domain Using Artificial Neural Network and Gaussian Mixture Models

*Marko Kos, Matej Grašič, Bojan Kotnik, Zdravko Kačič*

Large Margin Hidden Markov Models in command recognition and speaker verification problems

*Przemyslaw Dymarski, Sebastian Wydra*

Adaptive Empirical Mode Decomposition for Signal Enhancement with Application to Speech

*Navin Chatlani, John Soraghan*

Indexing Join Costs for Faster Unit Selection Speech Synthesis

*Jozef Čepko, Renata Talafová, Ján Vrabec*

11:45 - 12:45

**Lunch Break**

**Thursday 26.06.2008**

<b>HALL A</b>	
12:45 - 14:30	<b>SESSION 9</b> <b>Multimedia networks &amp; applications I</b> <i>Session Chairs:</i> Lidija Mandić, Jarmila Pavlovičová
	Advanced Interactive Television Services Require Content Synchronization <i>M. Oskar van Deventer, Hans M. Stokking, Omar A. Niamut, Fabian A. Walraven, Victor B. Klos</i>
	An Approach to Recommender System Applying Usage Mining to Predict Users' Interests <i>Reginaldo A. Gotardo, Cesar A. C. Teixeira, Sérgio D. Zorzo</i>
	E-training System for Operators, Technological Engineers and Maintenance Automation Systems, Safety and Security <i>Alexandru Cazan, Claudiu Bratu, Radu Varbanescu</i>
	Optimized Erasure-Resilient Streaming of SVC using Unequal Error Protection <i>Dirk Bakker, Maryse Stoufs, Joeri Barbarien, Marc Jacobs, Peter Schelkens, Adrian Munteanu</i>
	Soccer Video Segmentation: referee and player detection <i>Juan Rafael Nuñez, Jacques Facon, Alceu de Souza Brito Junior</i>
	Empirical Study of Subjective Quality for Massive Multiplayer Games <i>Michal Ries, Philipp Svoboda, Markus Rupp</i>
	Digital Image Watermarking by Adaptive Quantization of Wavelet Packet Coefficients <i>Chi-Man Pun, I-Kuan Kong</i>

15:00 - 18:00

**Guided Bratislava city sightseeing (Meeting point: Hotel Nivy, parking place)**

18:00 - 20:00

**Cocktail in Mayor's Palace****Thursday 26.06.2008**

<b>HALL B</b>	
12:45 - 14:30	<b>SESSION 10</b> <b>Image Feature/Object Detection and Recognition III</b> <i>Session Chairs:</i> Esteban Clua, Andrej Páleník
	Study and Analysis of a New Detector of Radar Targets Using CFAR with Gabor Transform <i>H. Larbi Beklaouz, M. Hamadouch, M. Mimi, A. Taleb Ahmed</i>
	Recognition of Selected Fingerprints and Iris Features Enhanced by Curvelet Transform with Artificial Neural Networks <i>Adem Alpaslan Altun</i>
	A Novel Corner Detector with Integrated Corner Angle Computation <i>Hamed Habibi Aghdam, Ali Asghar Pourhaji Kazem</i>
	Novel Approaches for Face Recognition: Template-Matching using Dynamic Time Warping and LSTM Neural Network Supervised Classification <i>Alexandre L. M. Levada, Débora C. Correa, Denis H. P. Salvadeo, José H. Saito and Nelson D. A. Mascarenhas</i>
	A New Technique to Threshold the Courtesy Amount of Brazilian Bank Checks <i>Renata F.P. Neves, Carlos A. B. Mello, Maira S. Silva, Byron L. D. Bezerra</i>
	An effective salience-based algorithm for shape retrieval <i>Glauco V. Pedrosa, Cristiane F. Santos, Marcos A. Batista, Henrique C. Fernandes, Celia A. Z. Barcelos</i>
	Intelligent Image Characterization <i>Eduardo F. Ribeiro, Celia A. Z. Barcelos, Marcos A. Batista</i>

15:00 - 18:00

**Guided Bratislava city sightseeing (Meeting point: Hotel Nivy, parking place)**

18:00 - 20:00

**Cocktail in Mayor's Palace**



**Thursday 26.06.2008**

HALL C	
12:45 - 14:30	<b>SESSION 11</b>
<b>Speech &amp; Audio III</b>	
<i>Session Chairs:</i> Panos Liatsis, Jozef Čepko	
Noisy Speech Recognition Failure Diagnosis Using Minimum Message Length Decision Trees <i>Milos Cernak, Sachia Darjaa</i>	
An Audio Watermarking Method Based on Wavelet Patchwork Algorithm <i>Ondrej Šlučiak, Radoslav Vargic</i>	
Evaluation of Different Feature Extraction Methods for Speech Recognition in Car Environment <i>Martin Wolf, Climent Nadeu</i>	
Emotion Recognition in Speech using Inter-Sentence Glottal Statistics <i>Alexander I. Iliev, Michael S. Scordilis</i>	
Psychoacoustic Evaluation of rotatory switches <i>A. Treiber, G. Gruhler</i>	
Optimum Path Forest Classifier Applied to Laryngeal Pathology Detection <i>João P. Papa, André A. Spadotto, Alexandre X. Falcão, José C. Pereira</i>	

15:00 - 18:00
<b>Guided Bratislava city sightseeing (Meeting point: Hotel Nivy, parking place)</b>
18:00 - 20:00
<b>Cocktail in Mayor's Palace</b>

**Friday 27.06.2008**

HALL A	
08:30 - 10:15	<b>SESSION 12</b>
<b>Modelling and Simulation of Communication Systems</b>	
<i>Session Chairs:</i> Jože Mohorko, Rastislav Róka	
Expert systems design for automatic analysis of communication network simulation results <i>Saša Klampfer, Gregor Globačnik, Jože Mohorko, Žarko Čučej</i>	
Emulation of Mobile payment system <i>Jože Mohorko, Amor Chowdury, Peter Planinsic</i>	
Packet Size Process Modeling of Measured Self-similar Network Traffic with Defragmentation Method <i>Matjaž Fras, Jože Mohorko, Žarko Čučej</i>	
Impact of P2P Traffic on IP Communication Networks' Performances <i>Matjaž Fras, Saša Klampfer, Žarko Čučej</i>	
Using RSSI value for distance estimation in Wireless sensor networks based on ZigBee <i>Karl Benkič, Marko Malajner, Peter Planinšič, Žarko Čučej</i>	
Performance Analysis of Improved ZigBee Wireless Network by Simulation <i>Aleksandar Peulic, Uros Pesovic, Karl Benkič, Žarko Čučej</i>	

10:15 - 10:30	<b>Coffee Break</b>
---------------	---------------------

**Friday 27.06.2008**

<b>HALL B</b>	
08:30 - 10:15	<b>SESSION 13</b>
<b>Image Enhancement</b>	
<i>Session Chairs:</i> Mislav Grgic, Peter Trúchly	
Experiments with Application of Image Reconstruction Method Based on Perspective Imaging Techniques in X-ray CT Mini System <i>Jiri Přebil, Bohumir Zatko, Ivan Frollo, Frantisek Dubecký, Vladimir Juráš,</i>	
Hidden Influences on Image Quality when Comparing Interpolation Methods <i>Emil Dumic, Sonja Grgic, Mislav Grgic</i>	
Phase Unwrapping via Diversity and Graph Cuts <i>Jose Bioucas-Dias, Goncalo Valadão</i>	
Diffusion-Based Image Denoising Combining Curvelet and Wavelet <i>V. G. Ashamol, G. Sreelekha, P. S. Sathidevi</i>	
Improving Potts MRF Model Parameter Estimation using Higher-Order Neighborhood Systems on Stochastic Image Modeling <i>Alexandre L. M. Levada, Nelson D. A. Mascarenhas, Alberto Tannús</i>	
Out of Focus Blur Estimation Using Genetic Algorithm <i>Mohsen Ebrahimi Moghaddam</i>	
Case Study: Digital offset printing- Resolution and Color Reproduction <i>L. Mandić, I. Majnarić, A. Poljičak, D. Agić</i>	

10:15 - 10:30	<b>Coffee Break</b>
---------------	---------------------

**Friday 27.06.2008**

<b>HALL C</b>	
08:30 - 10:15	<b>SESSION 14</b>
<b>Video Motion Estimation and Object Detection</b>	
<i>Session Chairs:</i> Miloš Oravec, Martin Wolf	
Efficient Sign Language Video Representation <i>Roumen Kountchev, Vladimir Todorov, Roumiana Kountcheva</i>	
VSUMM: A Simple and Efficient Approach for Automatic Video Summarization <i>Sandra Eliza F. de Avila, Antonio da Luz Jr., Arnaldo de A. Araiho</i>	
Visual Analysis of Urban Road Traffic <i>Ákos Utasi, László Czúni</i>	
A Hybrid Block-Matching Approach to Motion Estimation with Adaptive Search Area <i>Yi Luo, Mehmet Celenk</i>	
A New Adaptive Kalman Filtering Method for Block-Based Motion Estimation <i>Yi Luo, Mehmet Celenk</i>	
Efficient Video Analytics to overcome Command Latency for Mega-Pixel Video Transmission over Ethernet <i>Muhammad Asif, John Soraghan</i>	
Detecting Shot Transitions Based on Video Content <i>Esteban Clua, M. S. Fonseca, Aura Conci, A. Montenegro</i>	

10:15 - 10:30	<b>Coffee Break</b>
---------------	---------------------

**Friday 27.06.2008**

HALL A	
10:30 - 12:30	<b>SESSION 15</b>
<b>Mobile &amp; Wireless NTW</b>	
<i>Session Chairs: Stamatis Voliotis, Peter Trúchly</i>	
Optimization of Network Entry Procedure in Relay Based WiMAX Networks <i>Pavel Mach, Robert Bestak, Zdenek Becvar</i>	
Evolution of Mobile Networks <i>Robert Bestak</i>	
End-to-end Packet Delays in LEO Satellite Constellations <i>Peter Trúchly, Marek Ocel'</i>	
Technologies used in Wireless Sensor Networks <i>Jakub Slíva</i>	
Analyzing Energy and Time Overhead of Security Mechanisms in Wireless Sensor Networks <i>P. Trakadas, T. Zahariadis, H. C. Leligou, Stamatis Voliotis, K. Papadopoulos</i>	
Real-time Traffic Analysis in Ethernet <i>Tomáš Kováčik, Ivan Kotuliak, Pavol Podhradský</i>	
Dynamic expansion of IBCF entities in IMS interconnection scenarios <i>Stephan Massner</i>	
Effect of Lossy Links on Wireless Sensor Networks <i>Yelena Chaiko</i>	

12:30 - 13:30	<b>Lunch Break</b>
---------------	--------------------

**Friday 27.06.2008**

HALL B	
10:30 - 12:30	<b>SESSION 16</b>
<b>Image Segmentation</b>	
<i>Session Chairs: Sonja Grgic, Ján Vrabec</i>	
Correlation optimized scanning of segmented images <i>Richard Pračko, Jaroslav Polec</i>	
Segmentation of 3D Points from Range Camera Data using Scanlines <i>Alexander Sabov, Jörg Krüger</i>	
Bifurcations in a coupled system of chaotic neurons generating oscillatory responses <i>Mio Musashi, Ken 'ichi Fujimoto, Tetsuya Yoshinaga, Kazuyuki Aihara</i>	
Coarse Adaptive Color Image Segmentation for Visual Object Classification <i>Alain Pujol, Liming Chen</i>	
Introducing a New Metric for Automatic True Color Images Granulometry <i>Anselmo Montenegro, Erick P. Calixto, Aura Conci, E.Clua</i>	
Bhattacharyya Probabilistic Distance of the Dirichlet Density and its Application to Split-And-Merge Image Segmentation <i>Thomas W. Rauber, Aura Conci, Tim Braun, Karsten Berns</i>	
Clustering of Fully Polarimetric SAR Data Using Finite G0p Mixture Model and SEM Algorithm <i>Michelle M. Horta, Nelson D. A. Mascarenhas, Alejandro C. Frery, Alexandre L. M. Levada</i>	
Automatic Natural and Man-made Scene Differentiation Using Perspective Geometrical Properties of the Scenes <i>Jure Kovac, Peter Peer, Franc Solina</i>	

12:30 - 13:30	<b>Lunch Break</b>
---------------	--------------------

**Friday 27.06.2008**

HALL C	
10:30 - 12:30	<b>SESSION 17</b>
<b>Video Compression &amp; Coding</b>	
<i>Session Chairs:</i> Narcis Behlilović, Radoslav Vargic	
Low Computation Method for Fast Mode Decision in H.264/MPEG-4 AVC <i>Son M. TRAN, Marius Preda, Francoise Preteux</i>	
Development in Distributed Video Coding <i>Nida Khalid, Nadeem Khan</i>	
VLC Table Prediction Algorithm for CAVLC in H.264 Using Correlation and Statistics of Mode Information <i>Jin Heo, Yo-Sung Ho</i>	
Simple and Efficient Deblocking Algorithm for H.264/AVC Decoder <i>Jung-Ah Choi, Yo-Sung Ho</i>	
Subjective and Objective Quality Evaluation of the H.264/AVC Coded Video <i>Mario Vranješ, Snježana Rimac-Drlje, Drago Žagar</i>	
Comparation of QoS Parameters of Received IPTV Signals, Using Different Compression Algorithms for Streaming Live or Stored AV Materials <i>Pamela Begović, Narcis Behlilović, Aleksandar Mastilović</i>	
New Objective Criterion for Error Evaluation of Video Object Contour <i>Jaroslav Polec, Tatiana Karlubiková, Sandra Ondrušová, Kvetoslava Kotuliaková</i>	
Introduction to Implementation of Real Time Video Compression Method <i>Tomas Fryza</i>	

12:30 - 13:30	<b>Lunch Break</b>
---------------	--------------------

**Friday 27.06.2008**

HALL A	
13:30 - 15:00	<b>SESSION 18</b>
<b>Multimedia DB</b>	
<i>Session Chairs:</i> Ivan Kotuliak, Renata Talafová	
Content-Based Image Retrieval using Feature Extraction & Statistical Pattern Recognition techniques for Environmental Applications <i>Aggeliki D. Theodossi, George A. Tsihrintzis</i>	
Is Multimedia always the solution for Human-Machine Interfaces? - a case study in the service & maintenance domain <i>Carsten Wittenberg</i>	
Multimodal Search for Effective Image Retrieval <i>Hsin C. Fu, Yeong Y. Xu, Hsiao T. Pao</i>	
An interactive video content-based retrieval system <i>G. Cámara-Chávez, F. Precioso, M. Cord, S. Phillip-Foliguet, A. de A. Araújo</i>	
Retrieving Images Using Content-Based Followed by Pixel-Based Search <i>Igor Stojanovic, Sofija Bogdanova, Momcilo Bogdanov</i>	
Image Database Organization Based on Membership Values and Connectivity Graph <i>Andrew Makedonas, Dimitrios Besiris, George Economou, Spiros Fotopoulos</i>	

**Friday 27.06.2008**

HALL B	
13:30 - 15:00	<b>SESSION 19</b>
<b>Image Feature/Object Detection and Recognition IV</b>	
<i>Session Chairs: Jarmila Pavlovičová, Juraj Kačur</i>	
Classification and Characterization of Places for Mapping of Environment Using Hierarchical Neural Network and Omnivision <i>Luciana Leal da Silva, Mário Luiz Tronco, Henrique A. Vian, Rogéria C. G. Souza, Arthur J. V. Porto</i>	
Automatic Face Detection Based on Chrominance Components Analysis <i>Marian Beniak, Jarmila Pavlovičová, Miloš Oravec</i>	
Meteorological image processing <i>Ladislav Chmela, Jaroslav Burcik</i>	
Smooth WMN-FOCUSS Method for EEG Dipoles Localisation <i>Wassim Zouch, Abdelmalik Taleb-Ahmed, A. Ben Hamida, Jens Luis Bourriez, Jens Luis Derambure</i>	
A Fast Indexing and Retrieval Method for Image Databases <i>M.Sadooghi Yazdi and Mohsen Ebrahimi Moghaddam</i>	
The Comprehensive ICP (CICP) Algorithm and its Application to the Multidmoal Registration of 3D Surfaces of the Heart <i>Ahmad Almhdie, Christophe Léger, Mohamed Deriche, Long-Dang Nguyen, Roger Lédée</i>	

**Friday 27.06.2008**

HALL C	
13:30 - 15:00	<b>SESSION 20</b>
<b>Multimedia networks &amp; applications II</b>	
<i>Session Chairs: Jaroslav Polec, Martin Turi Nagy</i>	
Analysis of HARQ Schemes Using Reed-Solomon Codes nebude <i>Kvetoslava Kotuliaková, Jaroslav Polec</i>	
A Residual Modeling Extension of HNM Model for Prosodic Modification of Slovak Speech <i>Martin.Turi Nagy, Gregor Rozinaj</i>	
Comparison of Automatic Speech Recognizer SPHINX 3.6 and SPHINX 4.0 for Creating Systems in Slovak Language <i>J.Vojtko, J. Korosi, G. Rozinaj</i>	
Error Concealment Schemes For Speech Packet Transmission over IP network <i>Vijaya.P.Bhute, Urmila N.Shrawankar</i>	
Method of Computing Spectral Factors in Piecewise-Quadratic Bases and its Application in Problems of Digital Signal Processing <i>Olim Hidayov, Hakimjon Zaynuddinov, Hyung Chul Park, Kondekar Pravin, Sang-Gug Lee</i>	

**Saturday 28.06.2008**

NOTES:

9:00 - 14:00

**Bratislava Sightseeing Tour**



NOTES:

NOTES:

NOTES:

NOTES: