



18th International Conference on
Systems, Signals and Image Processing

16-18 June 2011, Sarajevo, Bosnia & Herzegovina

18th International Conference on Systems, Signals and Image Processing - IWSSIP 2011 is organized by the Faculty of Electrical Engineering, University of Sarajevo, Bosnia and Herzegovina.

IWSSIP 2011 will be held at hotel "Holiday Inn", Sarajevo
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Wednesday, 15 June 2011

Hotel Holiday Inn (Reception hotel)	
18:00 - 20:00	Registration
Botanical Garden of the National Museum	
21:00 - 23:00	Welcome Party (Cocktail for all participants and guests)

Thursday, 16 June 2011

Congress hall - hotel Holiday Inn		
08:00 - 09:15 Registration		
Congress hall - UNITIC		
09:30 - 10:00 Opening Ceremony - Welcome Speeches		
10:00 - 11:30 Invited Papers (A. Conci; P. Podhradsky; K. Fazekas; H. Adeli; F. Dolenc)		
11:30 - 12:30 Coffee break (UNITIC)		
Hotel Holiday Inn		
12:30 - 13:30 Lunch break		
14:00 - 15:30 Session 1: Signal Processing and Technologies 1	14:00 - 15:30 Session 2: Image and Video 1	14:00 - 15:30 Session 3: Wireless Communications and Techniques for Multimedia Signal Transmission 1
15:30 - 16:00 Coffee break		
16:00 - 17:30 Session 4: Signal Processing and Technologies 2	16:00 - 17:30 Session 5: Image and Video 2	16:00 - 17:30 Session 6: Multimedia Communications, Networking, Services and Applications 1
17:30 - 18:00 Coffee break		
18:00 - 19:30 Session 7: Image and Video 3	18:00 - 19:30 Session 8: Image and Video 4	18:00 - 19:30 Session 9: Speech and Audio 1
20:30 - 23:00 Conference Banquet		

Friday, 17 June 2011

08:00 - 09:45 Session 10: Signal Processing and Technologies 3	08:00 - 09:30 Session 11: Image and Video 5	08:00 - 09:30 Session 12: Multimedia Communications, Networking, Services and Applications 2
09:30 - 10:00 Coffee break		
10:00 - 11:30 Session 13: Image and Video 6	10:00 - 11:30 Session 14: Image and Video 7	10:00 - 11:30 Session 15: Speech and Audio 2
11:30 - 12:00 Coffee break		
12:00 - 13:15 Session 16: Information, Application and Network Security 1	12:00 - 13:15 Session 17: Speech and Audio 3	12:00 - 13:15 Session 18: Wireless Communications and Techniques for Multimedia Signal Transmission 2
13:15- 15:00 Lunch break		
15:00 - 16:30 Session 19: Signal Processing and Technologies 4	15:00 - 16:30 Session 20: Image and Video 8	15:00 - 16:30 Session 21: Information, Application and Network Security 2

Saturday, 18 June 2011

Congress hall hotel Holiday Inn	
08:00 - 09:00	Round Table - Next IWSSIP - Closing Ceremony
Social event	
09:30 - 17:00	Excursion to Mostar (or Međugorje) by bus

HALL Vrbas
Session 1 (Thursday, 16 June 2011, 14:00 - 15:30)
Signal Processing and Technologies 1
<i>Session Chairs: Samim Konjicija, Emir Sokić</i>
Method of Reference Tunnel Formation for Improvement of Forecast Results of Laser Beams Spot Images Behaviour <i>Leonid Timchenko, Aleksandr Poplavskyy, Anna Poplavskaya, Nataliya Kokriatskaia, Igor Ivasyuk</i>
Optimal Weight Selection in Matching Score Fusion based Face Recognition <i>Tran Quang Duc, Liatsis Panos</i>
Robustly Adaptive Wavelet Filter Bank Using L1 Norm <i>Ana Sović, Damir Seršić</i>
An optimum algorithm for voice pathology detection by means of wavelet-packet-based features, linear discriminant analysis and support vector machines <i>Meisam Khalil Arjmandi, Mohammad Pooyan</i>
Definition of VAD reference using different HMM topologies and frame dropping strategy <i>Damjan Vlaj, Marko Kos, Zdravko Kačić</i>
Target Loss Detection in Video Using Confidence Interval Functions <i>Fuat Cogun, Soosan Beheshti, Enis Cetin</i>

HALL Una
Session 2 (Thursday, 16 June 2011, 14:00 - 15:30)
Image and Video 1
<i>Session Chairs: Sonja Grgić, Jelena Božek</i>
A Guide to Digital Image Stabilization Procedure - an Overview <i>Nick. A. Tsoligkas, Donglai Xu, Ian French Stelios Xalkiadis</i>
Infrared Image Segmentation using Enhanced Fuzzy C-Means clustering for Automatic Detection Systems <i>Sitanshu Gupta, Asim Mukherjee</i>
On Face Detection and Performance Evaluation <i>Mahmoud Ali</i>
Polarimetric SAR Image Speckle Reduction <i>Yaswanth Bhanumurthy Manthripragada, Mallikarjuna Reddy Yennapusa, Sreenivasa Reddy Edara</i>
Face Recognition Based on the Statistical Features of BDIP and Wavelet Transform <i>Amany Farag, Randa Atta, Hani Mahdi</i>
Iris Motion Tracking Using Feature Extraction by Color and Shape Matching <i>Cláriton Bernadelli, Antonio Paschoarelli</i>

HALL Pliva
Session 3 (Thursday, 16 June 2011, 14:00 - 15:30)
Wireless Communications and Techniques for Multimedia Signal Transmission 1
<i>Session Chairs: Markus Rupp, Darko Sinanović</i>
Speed Sensitive-Energy Aware Adaptive Fuzzy Logic Based Vertical Handoff Decision Algorithm <i>Ali Çalhan, Celal Çeken</i>
Bandwidth Efficient Data-partitioned Video Streaming for Broadband Wireless <i>Laith Al-Jobouri, Martin Fleury, Mohammed Ghanbari</i>
Receive Antenna Selection for Polarized Antennas <i>Aamir Habib, Christian Mehlführer, Markus Rupp</i>
Spectral Based Solutions for (Near) Optimum Channel/Frequency Allocation <i>Zekeriya Uykan</i>
Comparison of OFDM and SC-FDMA in frequency selective channels <i>Darko Sinanović, Gordana Šišul, Borivoj Modlic</i>
Low-Cost Digital Correlator For Frequency Hopping Radio <i>Slavko Sajic, Nebojsa Maletic, Milan Sunjevaric, Branislav Todorovic</i>

HALL Vrbas
Session 4 (Thursday, 16 June 2011, 16:00 - 17:30)
Signal Processing and Technologies 2
<i>Session Chairs: Melita Ahic-Dokic, Almir Salihbegovic</i>
Digital computing synthesizers of frequency-modulated signals <i>Alexandr Nemtsev, Igor Petukhov, Igor Ryabov, Pavel Yuriev</i>
Introducing a novel concept of an error classifier for the voice and unvoiced classification of speech <i>Sitanshu Gupta, Sharanyan Srikanthan, Asim Mukherjee</i>
Kunchenko's Polynomials for Template Matching <i>Oleg Chertov, Taras Slipets</i>
Online Accelerated Implementation of the Fuzzy C-means algorithm with the use of the GPU platform <i>Sharanyan Srikanthan, Vasiya Krishnan, Arvind Kumar</i>
Stability Issues in Discretization of Wave Equation <i>Emir Sokic, Samim Konjicija, Melita Ahic-Djokic, Almir Salihbegovic</i>
Pulse Active Bit (PAB) Feature Extractor for ECG Biometric Authentication <i>Sairul Safie, John Soraghan, Lykourgos Petropoulakis</i>

HALL Una
Session 5 (Thursday, 16 June 2011, 16:00 - 17:30)
Image and Video 2
<i>Session Chairs: Panos Liatsis, Elma Avdić</i>
Localization of Optic Disc in Fluorescein Angiography Images <i>Rubiel Vargas-Canas, Panos Liatsis</i>
Road sign recognition for automatic inventory systems <i>Gustavo Peláez, María Romero, José Armingol, Arturo de la Escalera</i>
Internet Based Subjective Assessment of Image Quality Experiment <i>Tomasz Grzywalski, Adam Łuczak, Ryszard Stasinski</i>
Farsi Font Recognition Based on Spatial Matching <i>Yaghoub Pourasad, Houshang Hassibi, Majid Banaeyan</i>
Surface Reconstruction from Sparse Non-Parallel Cross-Sections for Freehand 3D Ultrasound Using Variational Implicit Functions <i>Shuangcheng Deng, Yunhua Li, Lipei Jiang, Yingyu Cao, Junwen Zhang</i>
Bessel Transform for Image Resizing <i>Ganga Mohan Paidi, Chetana Prakesh, Surayakanth V Gangashetty</i>

HALL Pliva
Session 6 (Thursday, 16 June 2011, 16:00 - 17:30)
Multimedia Communications, Networking, Services and Applications 1
<i>Session Chairs: Fahrudin Oručević, Aida Sadžak</i>
Analysis of the implementation of the Information Security Management in the IPTV/VoIP system of the Telecom Operator <i>Anel Tanovic, Fahrudin Orucevic</i>
Cooperative Web Cache <i>Tomas Cerny, Petr Praus, Slavka Jaromerska, Lubos Matl, Jeff Donahoo</i>
Performance of Enhanced Error Concealment Techniques in Multi-view Video Coding Systems <i>Brian W. Micallef, Carl J. Debono, Reuben A. Farrugia</i>
Multimedia Techniques in Virtual Museum Applications in Bosnia and Herzegovina <i>Selma Rizvić, Aida Sadžak</i>
Improved Side Information Generation Using Adaptive Overlapped Block Motion Compensation and Higher-Order Interpolation <i>Mobolaji Akinola, Laurence Dooley, Patrick Wong</i>

HALL Vrbas
Session 7 (Thursday, 16 June 2011, 18:00 - 19:30)
Image and Video 3
<i>Session Chairs: Fabiana Leta, Emir Sokić</i>
Parallel image segmentation using fuzzy c-means based on Ordered Weighted Averaging <i>Behrooz Hosseini, Mojtaba Eskandari, Afshin Salajegheh</i>
Topology analysis of scanning microscope images with structural entropy and discrete wavelet transform <i>Szilvia Nagy, András Fehér</i>
Descriptor Dimensionality Reduction for Aerial Image Classification <i>Aleksej Avramovic, Vladimir Risojevic</i>
Complex 2D Matched Filtering Without Halo Artifacts <i>Mihails Pudzs, Modris Greitans, Rihards Fuksis</i>
Semi-automatic segmentation of MR and CT image sequences using a self-organizing map and texture descriptors <i>Fabiana Leta, Alexandre Brandão, Edson Cataldo</i>
Sharpness Enhancement and Noise Removal using Adaptive Bilateral Filter <i>Jyothirmaye Silumula, Renu Babu</i>

HALL Una
Session 8 (Thursday, 16 June 2011, 18:00 - 19:30)
Image and Video 4
<i>Session Chairs: Aura Conci, Ondrej Pribula</i>
Implementation of an Efficient Algorithm for Human Hand Gesture Identification <i>Muhammad Ammar Saeed, Muhammad Ali Qureshi, Abdul Aziz, Muhammad Hayat, Jam Shahid Rasool</i>
Real Time Precise Position Measurement Based on Low-Cost CMOS Image Sensor <i>Ondrej Pribula, Jan Fischer</i>
An improved image de-noising method using a wavelet based Neural Network filter <i>Sergey Tsoy, Yasar Becerikli</i>
Anisotropic diffusion filtering of infrared medical images <i>Gheorghe Gavriiloaia, Catalin Neamtu, Mariuca Gavriiloaia</i>
An ANN based Approach to Approximate Robotic Fingers Positions <i>Ankit Chaudhary</i>
Robust Background Subtraction on Traffic Videos <i>Eldman Nunes, Aura Conci, Angel Sanchez</i>

HALL Pliva
Session 9 (Thursday, 16 June 2011, 18:00 - 19:30)
Speech and Audio 1
<i>Session Chairs: Pavel Podhradsky, Chetana Prakash</i>
Modeling of a 'What You Hear Is What You Speak' (Wyhiwys) Device <i>Karthik Mahesh Varadarajan</i>
Bessel Features for Detection of Voice Onset Time using AM-FM Signal <i>Chetana Prakash, Dhananjaya N, Suryakanth V. Gangashetty</i>
Detection of Glottal Closure Instants from Bessel Features using AM-FM Signal <i>Chetana Prakash, Dhananjaya N, Suryakanth V. Gangashetty</i>
Bessel Features For Estimating Number Of Speaker From Multispeaker Speech Signals <i>Venkata Ashok Kumar Potnuru, Balakrishna Lavu, Chetana Prakash, Surayakanth V Gangashetty</i>
Music Genre Recognition Using Spectrograms <i>Yandre Costa, Luiz Oliveira, Alessandro Koerich, Fabien Gouyon</i>
Speech Enhancement Using Ica With Bessel Features <i>Balakrishna Lavu, Venkata Ashok Kumar Potnuru, Chetana Prakesh, Surayakanth V Gangashetty</i>

HALL Vrbas
Session 10 (Friday, 17 June 2011, 08:00 - 09:45)
Signal Processing and Technologies 3
<i>Session Chairs: Sofija Bogdanova, Emil Dumić</i>
Automated Electronic Pen Aiding Visually Impaired in Reading and Visualizing Textual Contents <i>Joshi Kumar, Madhan Prabhu, Mohan Raj</i>
Balanced Minimal Latency RNS Addition for Moduli Set $\{2^n - 1, 2^n, 2^n + 1\}$ <i>Ghassem Jaberipur, Saeed Nejati</i>
Improved image quality measure through particle swarm optimization <i>Emil Dumic, Sonja Grgic, Mislav Grgic</i>
Speech Enhancement Based on a Simplified Generalized Sidelobe Canceller Structure <i>Ines Hafizovic, Carl-Inge Colombo Nilsen</i>
Adaptive Sampling Algorithm Applied to SCADA Datalog Database Shrinkage <i>Mile Petkovski, Mitko Kostov, Sofija Bogdanova, Momcilo Bogdanov</i>
A New Evolutionary Algorithm for Blind Linear Channel Inversion <i>Valter Ramos Jr, Roberta Lopes, Manoel Lopes, Luis Coradine</i>
Simulation of Prosody Contours with Embedded Signal Generator <i>Anna Kondelová, Ján Tóth, Peter Guzmický</i>

HALL Una
Session 11 (Friday, 17 June 2011, 08:00 - 09:30)
Image and Video 5
<i>Session Chairs: Angel Sanchez, Lidija Mandić</i>
Word-Level Segmentation in Document Images containing Machine Printed and Handwritten Text <i>Lincoln Silva, Aura Conci, Angel Sanchez</i>
Protein Surface Atom Neighborhoods Functional Imaging <i>Paul Dan Cristea, Octavian Arsene, Rodica Tuduce, Dan Nicolau</i>
Maximum Likelihood Estimation for the Generation of Side Information in Distributed Video Coding <i>Frederik Verbist, Nikos Deligiannis, Marc Jacobs, Joeri Barbarien, Adrian Munteanu</i>
A Real-Time Projection System Based on Object Motion Detection and Tracking using Optical Camera <i>Milos Pilipovic, Ivan Kastelan, Milko Leporis</i>
Robust Image Watermarking Using Multiresolution Analysis <i>Mary Saaid, Zaki Nossair, Magdy Hanna</i>
E-learning as a tool for student research <i>Lidija Mandić, Darko Agić, Maja Strgar Kurečić, Ante Poljičak</i>

HALL Pliva
Session 12 (Friday, 17 June 2011, 08:00 - 09:30)
Multimedia Communications, Networking, Services and Applications 2
<i>Session Chairs: Mesud Hadžialić, Darijo Raca</i>
Wireless Barcode Scanning Interface Module <i>Florentina Andra Oana</i>
An educational multimedia IP telephony platform <i>Janez Klanjsek, Janez Stergar, Sibila Vadlja</i>
A Study on Grayscale Image Interpolation Using Windowed Kriging for Delay-bounded Transmission <i>Mauritz Panggabean, Leif Arne Rønningen</i>
Is Burst Loss Worse Than Random Loss For Video Transmission <i>Jimin Xiao, Tammam Tillo, Chunyu Lin</i>
Experiments on Improving Lossless Compression of Biometric Iris Sample Data <i>Herbert Stögner, Georg Weinhandel, Andreas Uhl</i>
Multidimensional Decision Function on Access Technology <i>Amra Hajdarevic, Darijo Raca, Mesud Hadžialić, Narcis Behlilovic</i>

HALL Vrbas
Session 13 (Friday, 17 June 2011, 10:00 - 11:30)
Image and Video 6
<i>Session Chairs: Jan Turan, Dijana Tralić</i>
Methodology for breast surgery simulation using Finite Elements Method and models reconstructed from mammographic images <i>Edgar Diniz, Anselmo Paiva, Aristófanés Silva, Djenane Pamplona, Aura Conci</i>
Application of Non-Iterative Method in Digital Image Restoration <i>Igor Stojanovic, Sofija Bogdanova, Momcilo Bogdanov</i>
Traffic Signs Recognition with Using Optical Correlator <i>Ján Turán, Ľuboš Ovseník, Tomáš Harasthy, Kálmán Fazekas</i>
Face Detection Using Shannon Diversity Index <i>Artur Bernardo Silva Reis, Aristófanés Corrêa Silva, Anselmo Cardoso de Paiva</i>
Shape Analysis and Classification of Masses in Mammographic Images using Neural Networks <i>Dijana Tralic, Jelena Bozek, Sonja Grgic</i>
Foreground Object Extraction from Multiview Images with Layer Quantization and Boundary Refinement <i>Woong Hee Kim, Jongwoon Hwang, Thomas Sikora</i>

HALL Una
Session 14 (Friday, 17 June 2011, 10:00 - 11:30)
Image and Video 7
<i>Session Chairs: Iztok Kramberger, Aleksandar Mastilović</i>
Reconstruction of occluded image areas using asymmetrical Principal Component Analysis <i>Mohammad Al-Naser, Ulrik Söderström</i>
Survey of Image Compression Algorithms for ESMO mission <i>Miha Gostenčnik, Dejan Gačnik, Iztok Kramberger</i>
A Generalization of Quad-Trees Applied to Shape Coding <i>Rade Kutil, Christine Gfrerer</i>
A New Decoder Side Video Stabilization using Particle Filter <i>Masoud Mohammadi, Mahmood Fathi, Mohsen Soryani</i>
Unsupervised Cardiac PET Image Segmentation <i>Renato Dedic, Madjid Allili, Roger Lecomte</i>
On the reduction of cloud influence in natural and aerial images <i>Tiago Bonini Borchardt, Rafael H. C. Melo, João Gabriel F. M. Gazolla, Roger Resmini, Aura Conci, Angel Sanchez, Evelyn de A. Vieira</i>

HALL Pliva
Session 15 (Friday, 17 June 2011, 10:00 - 11:30)
Speech and Audio 2
<i>Session Chairs: Radoslav Vargić, Marko Kos</i>
Rao-blackwellized Particle filter Versus Iterative kalman filter in Speech Enhancement <i>Hojjat Esmaeili</i>
Speaker's gender classification and segmentation using spectral and cepstral feature averaging <i>Marko Kos, Damjan Vlaj, Zdravko Kačič</i>
A Decoder for Large Vocabulary Speech Recognition <i>Nikša Jakovljević, Dragiša Mišković, Marko Janev, Darko Pekar</i>
Time and sampling frequency offset correction in audio watermarking <i>Przemyslaw Dymarski, Robert Markiewicz</i>
Speaker identification by k- nearest neighbors <i>Juraj Kacur, Radoslav Vargic, Pavol Mulinka</i>
PAC-MFCC Feature with Sub-band Classifier for Robust Speaker Recognition <i>Harry Arnold Anacleto Silva, Dirceu Gonzaga Da Silva, Abraham Alcain</i>

HALL Vrbas
Session 16 (Friday, 17 June 2011, 12:00 - 13:15)
Information, Application and Network Security 1
<i>Session Chairs: Lubos Omelina, Anida Sarajlić</i>
Restricted Moduli Symmetrical Signed Residue Addition: A Design Implementation Overview <i>Michael Naseimo Daikpor, Oluwole Adegbenro</i>
A Modular Concept of E-Voting System that Protects Users Privacy Using Random Password Distribution <i>Anida Sarajlic, Narcis Behlilovic, Irma Sokolovic</i>
Universal biometric evaluation system <i>Lubos Omelina, Milos Oravec</i>
Fuzzy Cognitive Map for decision support in image post-processing <i>Maja Štula, Darko Stipaničev, Ljiljana Šerić, Damir Krstinić</i>
Bandwidth Efficient Router Design With Introduction of Buffering to Reduce Retransmission Cost of Corrupt Data <i>Asjad Amin, Shaheer Hussain, Abbad Ur Rehman, Muhammad Arslan Akbar, Assad Abbas Sharif</i>

HALL Una
Session 17 (Friday, 17 June 2011, 12:00 - 13:15)
Speech and Audio 3
<i>Session Chairs: Gregor Rozinaj, Renata Rybarova</i>
An Efficient VQ-based Method for Monaural Speech Separation <i>Sonay Kammi, Mohammad Reza Karami</i>
Learning Methods for Speech Synthesizer <i>Renata Rybárová, Gregor Rozinaj</i>
Speeding up Segmented Dynamic Time Warping for online pattern discovery using GPUs <i>Sharanyan Srikanthan, Vasiya Krishnan, Arvind Kumar</i>
Voice-Driven Applications: Architecture Proposal and Performance Evaluation <i>Jakub Dolezal, Tomas Zeman, Roman Hak</i>
Combined Block Sparse PNLMS/NLMS Algorithms <i>Kirill Sakhnov, Boris Simak</i>

HALL Pliva
Session 18 (Friday, 17 June 2011, 12:00 - 13:15)
Wireless Communications and Techniques for Multimedia Signal Transmission 2
<i>Session Chairs: Pamela Begović, Elma Avdić</i>
Experimental Node Failure Analysis in WSNs <i>Jozef Kenyeres, Martin Kenyeres, Markus Rupp</i>
Soft-Output Sphere Decoding: Single Tree Search vs. Improved K-Best <i>Martin Mayer, Michal Simko, Markus Rupp</i>
Radio Access Technology Selection in Heterogeneous Wireless Networks Based on Service Type and User Mobility <i>Marko Porjazoski, Borislav Popovski</i>
ADC limitation analysis for FPGA based digital pi/4 DQPSK modem <i>Aleksandr Timoshenko, Leonid Pertsev</i>
A Novel Approach for Evaluating Applicability of Existing Empirical Propagation Models to Coverage Planning in 3.5 GHz WiMAX Systems <i>Pamela Begovic, Narcis Behlilovic, Elma Avdic</i>

HALL Vrbas
Session 19 (Friday, 17 June 2011, 15:00 - 16:30)
Signal Processing and Technologies 4
<i>Session Chairs: Leonardo Silva, Jasna Pašić</i>
Luminance Component in Skin Color Detection <i>Marian Beniak, Jarmila Pavlovičová</i>
Prototype of Binocular Head-mounted Device for Steady State Visual Evoked Potential Stimuli <i>Iztok Kramberger, Matej Kirbiš</i>
Singular Spectrum Analysis for detection of abnormalities in periodic biosignals <i>Alena Uus, Panos Liatsis</i>
Monitoring drowsiness of motor vehicles drivers by analysis of eye images <i>Leonardo Silva, Aristófanés Silva, Anselmo Paiva</i>
Adjustment of Fuzzy Reasoning for Implementation on Microcontroller <i>Tarik Uzunović, Samim Konjicija, Irfan Turković</i>
Series Compensated Lines - Fast Detection of Energy Flow Direction <i>Jasna Pašić</i>

HALL Una
Session 20 (Friday, 17 June 2011, 15:00 - 16:30)
Image and Video 8
<i>Session Chairs: Mislav Grgić, Mario Muštra</i>
Automatic Registration of Printed Analog Screen-Film Mammograms <i>Mario Muštra, Danijel Mileta, Mislav Grgić</i>
Automatic CT Image Segmentation of the Lungs with Region Growing Algorithm <i>Nihad Mesanovic, Mislav Grgic, Haris Huseinagic, Matija Males, Emir Skejic, Muamer Smajlovic</i>
Foveation-Based Content Adaptive Structural Similarity Index <i>Snježana Rimac-Drlje, Goran Martinović, Branka Zovko-Cihlar</i>
An Optimized Color Image Steganography Using Linear Feedback Shift Register and Discrete Fourier Transform <i>Asghar Shahrzad Khashandarag, Asghar Shahrzad Khashandarag, Mirkamal Mirnia, Hamid haji agha mohammadi</i>
DWT-DCT (QCD) Based Copy-move Image Forgery Detection <i>Mehdi Ghorbani, Mohammad Firouzmand, Ahmad Faraahi</i>

HALL Pliva
Session 21 (Friday, 17 June 2011, 15:00 - 16:30)
Information, Application and Network Security 2
<i>Session Chairs: Osman Mušić, Vensada Okanović</i>
High Capacity Secure Image Steganography Based on Contourlet Transform <i>Kolsoom Shahryari, Bahram ZahirAzami</i>
A PKI Case Study within the Educational Environment <i>Marian Marius</i>
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