

ISPA 2003

Preliminary Technical Program

Thursday, September 18, 2003

	Track A Room A	Track B Room B	Track C Room C
8:45-9:00	Opening address		
9:00-11:00	A.1 Image and Video Processing I	B.1 Digital Filter Design and Structures	C.1 Special Session on Texture Analysis and Synthesis
11:00-11:20	Coffee Break		
11:20-12:00	Plenary Lecture: <i>The Evolution of Communications and Broadcasting Techniques: From PCM to DTTB and UMTS</i> Professor Maurice Bellanger, Conservatoire National Des Arts et Métiers, France		
12:00-13:30	Lunch Break		
13:30-15:30	A.2 Image and Video Processing II	B.2 Adaptive Signal Processing	C.2 Special Session on Interactive Representation of 3D Objects and Dynamic Scenes
15:30-15:50	Coffee Break		
15:50-17:50	A.3 Image Coding	B.3 Multirate Filtering and Wavelets	C.3 Special Session on System Perspectives in Information Retrieval
20:00	Welcome Reception		

Friday, September 19, 2003

	Track A	Track B	Track C
9:00-11:00	A.4 Video Coding	B.4 Blind Separation of Signals	C.4 Special Session on Signal Processing for Mobile Communications
11:00-11:20	Coffee Break		
11:20-12:00	Plenary Lecture: <i>Perspectives on Next Generation Video</i> Professor Nikil Jayant, Georgia Institute of Technology, USA		
12:00-13:30	Lunch break		
13:30-15:30	A.5 Medical Imaging	B.5 Hardware Architectures	C.5 Special Session on Transforms and Filter Banks
15:30-15:50	Coffee Break		
15:50-16:30	Plenary Lecture: <i>Information Hiding Games</i> Professor Pierre Moulin, University of Illinois Department of Electrical and Computer Engineering Beckman Institute and Coordinated Science Laboratory, USA		
16:30-18:30	Poster Session		
18:30-19:00	ISPA Program Committee Meeting		
20:00	Gala Dinner		

Saturday, September 20, 2003

	Track A	Track B	Track C
9:00-11:00	A.6 Computer and Machine Vision	B.6 Speech Processing and Coding	C.6 Special Session on Biomedical Image Analysis
11:00-11:20	Coffee Break		
11:20-12:00	Plenary Lecture: <i>Image and Signal Processing in Medicine: Detection, Measurement, and Description</i> Professor Andrew Todd-Pokropek, University College London, UK		
12:00-13:30	Lunch break		
13:30-15:30	A.7 Pattern Recognition I	B.7 Spectral Analysis and DSP in Communications	C.7 Special Session on Real-Time Tracking
15:30-15:50	Coffee Break		
15:50-17:50	A.8 Pattern Recognition II	B.8 Special Session on Cardio-Vascular Image Analysis and Modeling	C.8 Special Session on Spectral Methods and Multirate Signal Processing

ISPA 2003 Technical Sessions (Oral Presentations)

Thursday, September 18, 2003

Session A.1: Image and Video Processing I

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|-------------|--|
| 9:00-9:20 | Color Image Denoising and Blind Deconvolution Using the Beltrami Operator
R. Kaftory, N. A. Sochen, Y. Y. Zeevi |
| 9:20-9:40 | Line Scratches Detection and Restoration via Light Diffraction
V. Bruni, A. Kokaram, D. Vitulano |
| 9:40-10:00 | A New Fuzzy Relaxation Algorithm for Image Contrast Enhancement
S.-M. Zhou, Q. Gan |
| 10:00-10:20 | A Statistical Framework to Enlarge the Potential of Digital TV Broadcasting
M. T. Andrade, A. P. Alves |
| 10:20-10:40 | Wavelet Analysis Based Detection Algorithm for Infrared Image Small Target in Background of Sea and Sky
Y. Wei, Z. Shi, H. Yu |
| 10:40-11:00 | 3-D Methods for Difference Estimation in Volumetric Data
E. Rangelova, A. Quinn |

Session B.1: Digital Filter Design and Structures

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| 9:00-9:20 | Subband Auto and Cross-Correlation Estimation by Recursive Filtering
J. C. Sarris, G. E. Cambourakis |
| 9:20-9:40 | A Closed Form Transfer Function of Low Delay Bandpass FIR Filters with Maximally Flat Characteristics in the Passband and the Transmission Zeros in the Stopband
Y. Mori, N. Aikawa |
| 9:40-10:00 | Design of Optimum Recursive Digital Filters with Double Zeros on the Unit Circle Leading to Symmetric Ladder Wave Digital Filter Structures
B. Soltanian, T. Saramaki, H. Johansson |
| 10:00-10:20 | Generation of Two-Dimensional Background Noise by using Computer
M. Tsudagawa |
| 10:20-10:40 | Optimal Design of IIR Digital Filters with Robust Stability using Conic Quadratic Programming
W.-S. Lu, T. Hinamoto |
| 10:40-11:00 | Jointly Optimized Error-Feedback and Rrealization for Roundoff Noise Minimization in State-Space Digital Filters
W.-S. Lu, T. Hinamoto |

Session C.1: Special Session on Texture Analysis and Synthesis

Chair: Patrizio Campisi

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| 9:00-9:20 | A Dynamical System Approach to Texel Identification in Regular Textures
S. E. Grigorescu, N. Petkov |
| 9:20-9:40 | Using Texture to Annotate Remote Sensed Datasets
S. Newsam, L. Wang, S. Bhagavathy, B. S. Manjunath |
| 9:40-10:00 | Directional Analysis of Image Textures for Feature Extraction and Segmentation
I. Kontaxakis, E. Sangriotis, D. Martakos |
| 10:00-10:20 | Segmentation by Color Coalition Labeling for Figure-Ground Segregation in Decoration Designs
M. J. Huiskes, E. J. Pauwels |
| 10:20-10:40 | Busgang Deconvolution for Texture Synthesis and Classification
P. Campisi, A. Neri, G. Scarano |
| 10:40-11:00 | Moments of Size Distributions Applied to Texture Classification
G. Ayala, E. Diaz, J. Domingo, I. Epifanio |

Session A.2: Image and Video Processing II

- 13:30-13:50 A Family of Triangular Grids in Digital Geometry
B. Nagy
-
- 13:50-14:10 Lattice of Generalized Neighbourhood Sequences in nD
A. Fazekas, A. Hajdu, L. Hajdu
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- 14:10-14:30 Simple and Fast Fractal Image Compression for VLSI Circuits
A. Martinez-Ramirez, A. Diaz-Sanchez, M. Linares-Aranda, J. Vega-Pineda
-
- 14:30-14:50 Reliable Adaptive Watermarking Scheme Integrated with JPEG2000
K. Li, X.-P. Zhang
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- 14:50-15:10 A New Fast Multilayer Perceptron Training Procedure Based On The Davidon Fletcher Powell Algorithm
S. Abid, F. Fnaiech
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- 15:10-15:30 Locally Refined Gray-Coded Bit-Plane Matching for Block Motion Estimation
S. Erturk

Session B.2: Adaptive Signal Processing

- 13:30-13:50 A New Sinusoidal Modelling Approach for Parametric Speech and Audio Coding
P. Vera-Candeas, N. Ruiz-Reyes, J. Curpian-Alonso, M. Rosa-Zurera
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- 13:50-14:10 Inner Structure Computation for Audio Signal Analysis
E. Dellandrea, P. Makris, N. Vincent
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- 14:10-14:30 State-Space Recursive Least-Squares with Adaptive Memory
M. B. Malik
-
- 14:30-14:50 Bootstrap and Backward Elimination Based Approaches for Model Selection
A. A. Abd el-sallam, S. Kayhan, A. M. Zoubir
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- 14:50-15:10 A Comparison of Different Time-Frequency Atoms in Both Ambiguity and Time-Frequency Domains
S. Ghofrani, A. Ayatollahi, D. C. McLernon
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- 15:10-15:30 Signal Detection in Compound-Gaussian Noise: Generalized Detector
V. Tuzlukov

Session C.2: Special Session on Interactive Representation of 3D Objects and Dynamic Scenes

Chair: Guido Cortelazzo

- 13:30-13:50 Predictive Image Compression for Interactive Remote Visualizazion
G. M. Cortelazzo, P. Zanuttigh
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- 13:50-14:10 Widening the Remote Visualization Bottleneck
S. Stegmaier, J. Diepstraten, M. Weiler, T. Ertl
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- 14:10-14:30 Distributed Interaction Processing and Visualization of 3D Scenes in Realtime
J.-M. Frahm, J.-F. Evers-Senne, R. Koch
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- 14:30-14:50 Real-Time Active 3D Shape Reconstruction for 3D Video
X. Wu, T. Matsuyama
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- 14:50-15:10 Dynamic 3D Shape from Multi-Viewpoint Images using Deformable Mesh Models
S. Nobuhara, T. Matsuyama
-
- 15:10-15:30 Efficient Visualization of 3D Medical Scenes for Remote Interactive Applications
J. Montagnat, E. Davila, I. E. Magnin

Session A.3: Image Coding

- 15:50-16:10 Progressive Near-Lossless Coding of Medical Images
A. Krivoulets
-
- 16:10-16:30 Fractal Image Coding for Images using B-Splines
T. Asahi
-
- 16:30-16:50 An Enhanced Fractal Image Compression Based on Quadtree Partition
G. Farhadi
-
- 16:50-17:10 ROI Coding of Volumetric Medical Images with Application to Visualisation
D. Agrafiotis, D. R. Bull, N. Canagarajah
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- 17:10-17:30 Compression of IP Images for Autostereoscopic 3D Imaging Applications
N. P. Sgouros, A. G. Andreou, M. S. Sangriotis, P. G. Papageorgas, D. M. Maroulis, N. G. Theofanous
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- 17:30-17:50 Problem-Oriented Change of Image Dimensionality
J. Valantinas, R. Valantinas

Session B.3: Multirate Filtering and Wavelets

- 15:50-16:10 Fast Rate-Distortion Estimation and Optimization for Wavelet Video Coding
E. S. Jackson, R. Peplow
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- 16:10-16:30 A Novel Morphological Subband Decomposition Scheme for 2D+t Wavelet Video Coding
G. C. K. Abhayaratne, H. J. A. M. Heijmans
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- 16:30-16:50 Two-Step Algorithm for Detecting Video Shot Boundaries in a Wavelet Transform Domain
S. Hasebe, S. Muramatsu, S. Sasaki, J. Zhou, H. Kikuchi
-
- 16:50-17:10 Robust Audio Watermarking in Wavelet Domain using Frequency Hopping and Patchwork Method
N. Cvejic, T. Seppanen
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- 17:10-17:30 Scalable Reduced Dimension Object Segmentation Based Adaptive Progressive Color-Image Coding
L. Zhang, G. F. Tu
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- 17:30-17:50 The Symmetric Rudin-Shapiro Transform - an Easy, Stable, and Fast Construction of Multiple Orthogonal Spread Spectrum Signals
A. la Cour-Harbo

Session C.3: Special Session on System Perspectives in Information Retrieval

Chair: Nikil Jayant

- 15:50-16:10 Emergent Document Semantics
D. V. Sreenath, W. I. Grosky
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- 16:10-16:30 Emerging Requirements for Information Access
R. Jain
-
- 16:30-16:50 Issues Concerning Dimensionality and Similarity Search
J. Tesic, S. Bhagavathy, B. S. Manjunath
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- 16:50-17:10 A System of Video Information Capture, Indexing and Retrieval for Interpreting Human Activity
H. D. Wactlar, M. Christel, A. Hauptmann, S. Stevens
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- 17:10-17:30 Learning Semantics in Content Based Image Retrieval
H.-J. Zhang
-
- 17:30-17:50 Question Answering on Large News Video Archive
T.-S. Chua
-
- 17:50-18:10 Annotation and Retrieval of Video Documents: Sports Videos
J. Assfalg, M. Bertini, C. Colombo, A. Del Bimbo, W. Nunziati

Friday, September 19, 2003

Session A.4: Video Coding

- 9:00-9:20 Stereo Video Coding Based on Interpolated Motion and Disparity Estimation
J. N. Ellinas, M. S. Sangriotis
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- 9:20-9:40 Video Coding Rate Control Strategy Based on Characteristics of Picture
L. Xiaohui, W. Xiaopei
-
- 9:40-10:00 A Video Compression Technique using Zerotree Wavelet and Hierarchical Finite State Vector Quantization
I. Kilic, R. Yilmaz
-
- 10:00-10:20 Implementation and Analysis of MPEG-4 Dynamic Resolution Conversion
M. Tomic, N. Stojkovic, M. Kovac
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- 10:20-10:40 Structured "Truncated Golomb Code" for Context-Based Adaptive VLC
S. Kato, K. Sugimoto, S. Adachi, M. Etoh

Session B.4: Blind Separation of Signals

- 9:00-9:20 Mental EEG Analysis Based on Independent Component Analysis
X. Wu, X. Guo
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- 9:20-9:40 Shift-Invariant Multichannel Blind Restoration
F. Sroubek, J. Flusser
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- 9:40-10:00 Sidelobe Suppression using the Locations of the Subarrays of the Antenna Array
J. A. Hejres, J. A. Hejres
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- 10:00-10:20 LIBS Chemical Images Analysis for Fatigue Estimation in Industrial Materials
A. Mora, J. Fonseca, J. Martins, A. Steiger-Garcaó
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- 10:20-10:40 An Image Processing Approach for Underdetermined Blind Separation of Nonstationary Sources
K. Abed-Meraim, N. Linh-Trung, V. Sucic, F. Tupin, B. Boashash
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- 10:40-11:00 Blind Separation of Instantaneous Mixtures of Impulsive Alpha-Stable Sources
M. Sahnoudi, K. Abed-Meraim, M. Benidir

Session C.4: Special Session on Signal Processing for Mobile Communications

Chair: Gaetano Giunta

- 9:00-9:20 Global Fitting of a Facial Model to Facial Features for Model-Based Video Coding
P. Hillman, J. Hannah, P. Grant
-
- 9:20-9:40 Investigations on Link to System Level Interface for MIMO Systems
A. Szabo, N. Geng, A. Seeger, W. Utschick
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- 9:40-10:00 Packet Loss Protection of Scalable Video Bitstreams using Forward Error Correction and Feedback
Y. Charfi, R. Hamzaoui
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- 10:00-10:20 Direct Group-Blind Multiuser Detection for DS-CDMA Systems in Dispersive Channels
G. Gelli, S. Milano, L. Paura, F. Verde
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- 10:20-10:40 Optimizing High-Speed Satellite Communications with High-Order Modulation via Adaptive Signal Processing at Both Ends of the Link
L. Giugno, V. Lottici, M. Luise
-
- 10:40-11:00 Timing-Free Blind Multiuser Detection for Multicarrier DS/CDMA Systems with Multiple Antennas
S. Buzzi, E. Grossi, M. Lops

Session A.5: Medical Imaging

- 13:30-13:50 Automated Detection of Nodules in The CT Lung Images using Multi-Modal Genetic Algorithm
J. Dehmeshki, M. Siddique, X.-Y. Lin, M. Roddie, J. Costello
-
- 13:50-14:10 A Statistical Detection of an Anomaly/Target from Noisy Tomographic Projections
L. Fillatre, I. Nikiforov
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- 14:10-14:30 DFT and DCT Based Discrete Sinc-Interpolation Methods for Direct Fourier Tomographic Reconstruction
L. Yaroslavsky, Y. Chernobrodov
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- 14:30-14:50 Curvature-Based Rational Surface Model for the Detection of Age and Gender-Related Diversity in Cortical Morphology
R. G. N. Meegama, J. C. Rajapakse
-
- 14:50-15:10 Line Pattern Segmentation using Morphological Probing
C. Barat, C. Ducottet, M. Jourlin
-
- 15:10-15:30 Scene Specific Imaging for Bionic Vision Implants
J. Boyle, A. Maeder, W. Boles

Session B.5: Hardware Architectures

- 13:30-13:50 A Coding Method for UVLC Targeting Efficient Decoder Architecture
S. Xue, B. Oelmann
-
- 13:50-14:10 Efficient Parallel Finite Field Modular Multiplier
H. Li
-
- 14:10-14:30 An Intelligent Hardware Structure for Impulse Noise Suppression
G. Louverdis, I. Andreadis, N. Papamarkos
-
- 14:30-14:50 A Content-Based Motion Estimation Algorithm for Power-Aware Architecture
H.-W. Cheng, L.-R. Dung, J.-H. Yen, J. Wang
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- 14:50-15:10 A Hybrid CSA Tree for Merged Arithmetic Architecture of FIR filter
Z. Ye, C.-H. Chang
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- 15:10-15:30 A Novel Low Power Low Voltage Full Adder Cell
C.-H. Chang, M. Zhang, J. Gu

Session C.5: Special Session on Transforms and Filter Banks

Chairs: Karen Egiazarian, Tapio Saramaki

- 13:30-13:50 Signal Denoising via Overlapping Atoms in a Wavelet Domain
V. Bruni, D. Vitulano
-
- 13:50-14:10 Exact Image Reconstruction using a Limited Number of Projection Samples
A. L. Kesidis, N. Papamarkos
-
- 14:10-14:30 Singing Voice Features by Time-Frequency Representations
A. Mesaros, E. Lupu, C. Rusu
-
- 14:30-14:50 On the Lifting Construction of a Class of Non-Separable 2D Orthonormal Wavelets
Y. Zhan, H. J. A. M. Heijmans
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- 14:50-15:10 V/HS Structure for Transforms and their Fast Algorithms
Y. Katiyi, L. Yaroslavsky
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- 15:10-15:30 Single Chip FPGA Realization of a 2D Multicomponent Wavelet Transform
O. Venard, Y. Blanchard, R. Lioni, L. Chra

Poster Session (16:30-18:30)

Saturday, September 20, 2003

Session A.6: Computer and Machine Vision

- 9:00-9:20 A PCA Based Method for Improving the Reliability of Bank Note Classifier Machines
A. Ahmadi, S. Omatu, T. Kosaka
-
- 9:20-9:40 Face Detection in Video using Combined Data-Mining and Histogram Based Skin-Color Model
D. Tsishkou, M. Hammami, L. Chen
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- 9:40-10:00 Application of the Tensor Voting Technique for Perceptual Grouping to Grey-Level Images: Quantitative Evaluation
A. Massad, M. Babos, B. Mertsching
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- 10:00-10:20 Illumination Independent Color-Based Face Detection
J. Kovac, P. Peer, F. Solina
-
- 10:20-10:40 Correction of Geometric Lens Distortion Through Image Warping
L. Lucchese, S. K. Mitra
-
- 10:40-11:00 An Experimental Study of a Robust Self-Calibration Method for a Single Camera
N. Pessel, J. Operbecke, M.-J. Aldon

Session B.6: Speech Processing and Coding

- 9:00-9:20 Computationally Efficient Implementation of AMR Speech Coder
K. J. Byun, H. B. Jung, M. Hahn, K. S. Kim
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- 9:20-9:40 Adaptive Differential Pulse-Coded Modulation with Exponential Tracking
M. A. Aldajani, A. H. Sayed
-
- 9:40-10:00 A Novel Approach to Variable Dimension Vector Quantization of Harmonic Magnitudes
W. C. Chu
-
- 10:00-10:20 A MATLAB Simulink Implementation of Speech Masking Based on the MPEG Psychoacoustic Model 1.
R. Arelhi, D. R. Campbell
-
- 10:20-10:40 A Robust Singing Melody Tracker using Adaptive Round Semitones (ARS)
C. Wang, R. Lyu, Y. Chiang

Session C.6: Special Session on Biomedical Image Analysis

Chair: Andres Santos

- 9:00-9:20 Fast Variational PCA for Functional Analysis of Dynamic Image Sequences
V. Smidl, A. Quinn
-
- 9:20-9:40 Denoising of Functional MRI using ICA
K. Yang, J. C. Rajapakse
-
- 9:40-10:00 Automatic Landmark Detection on Chromosomes' Images for Feature Extraction Purposes
M. Moradi, S. K. Setarehdan, S. R. Ghaffari
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- 10:00-10:20 Tissue Segmentation of Multi-Channel Brain Images with Inhomogeneity Correction
C. L. Tan, J. C. Rajapakse
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- 10:20-10:40 Automatic Polyp Detection of Colon using High Resolution CT Scans
J. Dehmeshki, H. Amin, W. Wong, M. E. Dehkordi, N. Kamangari, M. Roddie, J. Costello
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- 10:40-11:00 Automatic Tracking of Particles in Dynamic Fluorescence Microscopy
D. Sage, F. Hediger, S. M. Gasser, M. Unser

Session A.7: Pattern Recognition I

- 13:30-13:50 Feature Extraction for Automatic Ball Recognition: Comparison Between Wavelet and ICA Preprocessing
M. Leo, T. D'Orazio, A. Distanto
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- 13:50-14:10 Enhanced Affine Invariant Shape Description by ESPRIT
Q. Wu, X. He, T. Hintz
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- 14:10-14:30 Video Object Extraction
T. Murugas, R. Peplow, J.-R. Tapamo
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- 14:30-14:50 NMF vs ICA for Face Recognition
M. Rajapakse, L. Wyse
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- 14:50-15:10 A Robust Algorithm for Text Detection in Images
J. Gllavata, R. Ewerth, B. Freisleben
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- 15:10-15:30 A Hybrid Fingerprint Matcher in Memory Constrained Environments
V. Krivec, J. A. Birchbauer, W. Marius, H. Bischof

Session B.7: Spectral Analysis and DSP in Communications

- 13:30-13:50 Performance Region of Center Affine Filter for Eliminating of Interference Terms of Discrete Wigner Distribution
F. Khandan, A. Ayatollahi
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- 13:50-14:10 Electromagnetic Spectrum and Color Vision
J. Irigoyen, J. Herraiz
-
- 14:10-14:30 A Simple Scheme for Enhanced Reassignment of the SPWV Representation of Noisy Signals
A. Loza, N. Canagarajah, D. Bull
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- 14:30-14:50 Simplified Power Allocation for the DSL Multi-Access Channel through Column-Wise Diagonal Dominance
R. Cendrillon, M. Moonen, R. Suci
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- 14:50-15:10 Power- and Bit-Loading Algorithms for Multitone Systems
D. Daly, C. Heneghan, A. D. Fagan

Session C.7: Special Session on Real-Time Tracking

Chair: Axel Pinz

- 13:30-13:50 Towards Robust Automatic Segmentation and Tracking Analysis of Objects in Video Sequences
A. Al-Hamadi, R. Niese, B. Michaelis
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- 13:50-14:10 Tracking from Optical Flow
M. J. Lucena, J. M. Fuertes, J. I. Gomez, N. P. de la Blanca, A. Garrido
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- 14:10-14:30 Exemplar-Based Tracking and Recognition of Arm Gestures
A. Elgammal, V. Shet, Y. Yacoob, L. S. Davis
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- 14:30-14:50 Real-Time Moving Object Detection Under Complex Background
J. Ren, P. Astheimer, D. D. Feng
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- 14:50-15:10 Scale-Based Human Motion Representation for Action Recognition
J. Pers, G. Vuckovic, B. Dezman, S. Kovacic

Session A.8: Pattern Recognition II

- 15:50-16:10 Fast Face Detection using Hash Table of Large Set of Templates
B.-Z. Shaick, L. Yaroslavsky
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- 16:10-16:30 On Least-Squares Digital Contour Smoothing
J. Glasa, G. Podhajecky
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- 16:30-16:50 Fractal Analysis of Multiscale Pore Connectivity Networks
T. L. Lian, B. S. D. Sagar
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- 16:50-17:10 Color and Texture Priors in Active Contours for Model-Based Image Segmentation
Q. Zhou, L. Ma, D. Chelberg, M. Celenk
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- 17:10-17:30 A Fast Learning Neural Network Approach to Protein Secondary Structure Identification
T. Masetti, A. Salvini, M. Carli, A. Neri
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- 17:30-17:50 Text Identification in Color Documents
C. Strouthopoulos, N. Papamarkos, A. Atsalakis, C. Chamzas

Session B.8: Special Session on Cardio-Vascular Image Analysis and Modeling

Chairs: Patrick Clarysse, Alejandro Frangi, Andres Santos

- 15:50-16:10 Automatic Realignment of Myocardial First-Pass MR Perfusion Images
A. Comte, A. Lalande, F. Brunotte
-
- 16:10-16:30 Segmentation of RT3D Ultrasound with Implicit Deformable Models without Gradients
E. Angeli, J. Holmes, A. Laine, S. Homma
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- 16:30-16:50 Computer Based Analysis of Ultrasound Images for Assessing Carotid Artery Plaque Risk
P. Theocharakis, I. Kalatzis, N. Piliouras, N. Dimitropoulos, D. Cavouras
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- 16:50-17:10 A Snake Model for Anatomic M-Mode Tracking in Echocardiography
N. Malpica, A. Santos, E. Perez, M. A. Garcia-Fernandez, M. Desco
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- 17:10-17:30 Densitometric Measurements in Coronarographic Images for Blood Flow Estimation
H. Goszczynska, P. Bogorodzki, T. Wolak, R. Kurjata, M. Orzechowski
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- 17:30-17:50 Region-Based Deformable Model for Aortic Wall Segmentation
M. Subasic, S. Loncaric, E. Sorantin

Session C.8: Special Session on Spectral Methods and Multirate Signal Processing

Chairs: Tapio Saramaki, Karen Egiazarian

- 15:50-16:10 Signal De-Noising in Tree-Structured Haar Basis
E. Pogossova, K. Egiazarian, J. Astola
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- 16:10-16:30 Polynomial-Based Filters with Polynomial Pieces of Different Lengths for Interpolation
D. Babic, M. Renfors
-
- 16:30-16:50 Farrow Structure Interpolators Based on Even Order Shaped Lagrange Polynomials
A. Shahed hagh ghadam, M. Renfors
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- 16:50-17:10 Design of Linear-Phase Two-Channel FIR Filter Banks with Rational Sampling Factors
R. Bregovic, T. Saramaki
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- 17:10-17:30 A Windowing Approach for Designing Critically Sampled Nearly Perfect-Reconstruction Cosine-Modulated Transmultiplexers and Filter Banks
P. Martin, F. Cruz-Roldan, T. Saramaki

ISPA 2003 Technical Sessions (Poster Presentations)

Friday, September 19, 2003, 16:30-18:30

Poster Session: Image Processing and Analysis

- A Soft Approach to ERA Algorithm for Hyperspectral Image Classification
J.D. Martín-Guerrero, L. Gómez-Chova, J. Calpe-Maravilla, G. Camps-Valls, E. Soria-Olivas, J. Moreno
-
- Hierarchical Classification of Bank Checks Using Genetic Algorithms
H. A. Elnemr, M. Rashwan, M. S. Elsherif, A. Hussien
-
- Image Restoration Based On Level Lines
L. Qi, N. Feng, L. Zhengkai
-
- NewsBR: A Content-Based News Video Browsing and Retrieval System
L. Huayong, Z. Dongru
-
- Adaptive Weighted Median Filter Using Local Entropy for Ultrasonic Image De-Noiseing
P. Yang, O. A. Basir
-
- Video Syntactic Coding Optimization
S. Itzikowitz, S. SHERAZIN
-
- A Spatio-Temporal Video Analysis System for Object Segmentation
J. Xia, Y. Wang
-
- Object Recognition using Polar-Exponential Grid Technique
H.-Y. Zhang, D.-M. Wang, K.-O. Song
-
- On Discretization Error of Image Spectrum Restoration
D. G. Asatryan
-
- Multiscale Variational Approach to Simultaneous Image Regularization and Segmentation
A. Petrovic, P. Vanderghenst
-
- An Alternative Search Motion Estimation Algorithm
S. Huang, M. Ahmadi, W.C. Miller
-
- Fragile Watermark Based on Polarity of Pixel Points
C. Kailasanathan
-
- Identification of Military Ground Vehicles by Feature Information Fusion in FLIR Images
S.-Gu Sun, Junsung Park and Yong Woon Park
-
- On the Evaluation of Wavelet Filter Banks for Wavelet-Based Image Watermarking
A. Miyazaki
-
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