2012 5th International Symposium on Communications, Control and **Signal Processing**

(ISCCSP 2012)

Roma, Italy 2-4 May 2012



IEEE Catalog Number: ISBN:

CFP12824-PRT 978-1-4673-0274-6



Special Session SP-1: Audio Signal Processing

Self-calibration of microphone arrays from measurement of Times Of Arrival of acoustic signals "

Alessio Contini, Antonio Canclini, Fabio Antonacci, Marco Compagnoni, Augusto Sarti and Stefano Tubaro *Politecnico di Milano, Italy*

Pitch-based Digital Audio Effects "

Udo Zoelzer

Helmut Schmidt University, Germany

Evaluation of perceptual properties of phase-mode beamforming in the context of databased binaural synthesis ...

Sascha Spors and Hagen Wierstorf

Deutsche Telekom Laboratories, Germany

Geometric Inference of the Room Geometry under Temperature Variations "

Paolo Annibale¹, Jason Filos², Patrick Naylor² and Rudolf Rabenstein¹

- ¹ University Erlangen-Nuremberg, Germany
- ² Imperial College London, UK

PDE-SVD based audio denoising "

Gianpaolo Evangelista¹, George Baravdish¹, Olof Svensson¹ and Faten Sofya²

- ¹ Linköping University, Sweden,
- ² Mosul University, Iraq

Special Session COM-1: Novel Cooperative Methods in Wireless Networks

Dynamic Decode-and-Forward Relaying with Rate-Compatible LDPC Convolutional Codes "

Zhongwei Si, Ragnar Thobaben and Mikael Skoglund Royal Institute of Technology (KTH), Sweden

Compute-and-Forward in the Two-Hop multi-antenna X-Channel

Eduard Jorswieck and Johannes Richter Dresden University of Technology, Germany

A Game Theoretical Approach for Coded Cooperation in Cognitive Radio Networks "

Ivan Stupia¹, Luc Vandendorpe¹, Riccardo Andreotti² and Vincenzo Lottici²

- ¹ Université Catholique de Louvain, Belgium
- ² University of Pisa, Italy

Joint Network-Channel Coding in the Multiple-Access Relay Channel: Beyond Two Sources "

Andreas Winkelbauer and Gerald Matz Vienna University of Technology, Austria

On the Noisy MIMO Interference Channel with CSI Through Analog Feedback "

Dirk Slock

Eurecom, France

Special Session SP-2: Interactive Behaviour Analysis

Affective gaming: beyond using sensors "

Irene Kotsia¹, Ioannis Patras¹ and Spiros Fotopoulos²

- ¹ Queen Mary University of London, UK
- ² Department of Physics, University of Patras, Greece

Towards Distributed Recognition of Emotion from Speech "

Bjoern Schuller, Wenjing Han, Zixing Zhang, Jun Deng, Martin Woellmer and Felix Weninger *Technische Universitaet Muenchen, Germany*

Modeling Conversational Dynamics and Performance in a Social Dilemma Task "

Wen Dong¹, Bruno Lepri¹, Taemie Kim¹, Fabio Pianesi² and Alex Pentland¹

- ¹ Mit Media Lab, MA, USA
- ² Fondazione Bruno Kessler (FBK), Italy

How Emotions Affect Relations Between Interlocutors in Bad News Conversations "

Bart Van Straalen and Dirk Heylen

University of Twente, Netherlands

A Comparison of Different Features for Automatic Eye Blinking detection with an application to analysis of Deceptive Behavior "

Kiril Minkov, Stefanos Zafeiriou, Maja Pantic Imperial College London, UK

Special Session COM-2: Geometry of Complex Networks

Lack of Spectral Gap and Hyperbolicity in Asymptotic Erdos-Renyi Sparse Random Graphs "

Iraj Saniee¹, Onuttom Narayan², Gabriel Tucci¹

- ¹ Bell Labs, Alcatel-Lucent, USA
- ² University of California, Santa Cruz, CA, USA

Asymptotic Traffic Flow in a Hyperbolic Network "

Gabriel Tucci¹ and Yuliy Baryshnikov²

- ¹ Bell Labs, Alcatel-Lucent, USA
- ² University of Illinois at Urbana-Champaign, USA

Curvature of quantum rings "

Edmond Jonckheere¹, Frank Langbein² and Sophie Schirmer³

- ¹ University of South California, CA, USA
- ² Cardiff University, UK
- ³ Swansea University, UK

On the Structure Space of Networks and Traffic Patterns "

Yuliy Baryshnikov University of Illinois at Urbana-Champaign, USA

Special Session SP-3: 3D face recognition: Current challenges and future directions

Real time 3D head pose estimation: recent achievements and future challenges "

Gabriele Fanelli, Juergen Gall and Luc Van Gool Computer Vision Laboratory - ETH Zurich, Switzerland

Geometric based 3D Facial Gender Classification "

Lahoucine Ballihi^{1,2}, Boulbaba Ben Amor^{1,3}, Mohamed Daoudi^{1,3}, Anuj Srivastava⁴ and Driss Aboutajdine²

- ¹ LIFL, Universite de Lille1, France.
- ² LRTT, Universite Mohammed V, Maroc.
- ³ Institut TELECOM; TELECOM Lille 1, France.
- ⁴ Departement of Statistics, Florida State University, FL, USA.

Florence faces: a dataset supporting 2D/3D face recognition "

Andrew D. Bagdanov, Alberto Del Bimbo and Iacopo Masi *MICC, University of Florence, Italy*

Special Session COM-3: Communication Challenges in the Smart Grid

A subspace approach to fault diagnostics in large power systems "

Romain Couillet¹ and Enrico Zio^{1,2}

- ¹ Centrale-Supelec, France.
- ² Politecnico di Milano, Italy

The Emergence of Deferrable Energy Requests and a Greener Future: What Stands in the Way? "

 $Mahnoosh\ Alizadeh^1,\ Tsung-Hui\ Chang^1,\ Anna\ Scaglione^1,\ Chen\ Chen^2\ and\ Shalinee\ Kishore^2$

- ¹ UC Davis, CA, USA
- ² Lehigh University, USA

How Will Demand Response Aggregators Affect Electricity Markets? - A Cournot Game Analysis "

Chen Chen¹, Shalinee Kishore¹, Zhifang Wang², Mahnoosh Alizadeh² and Anna Scaglione²

¹ Lehigh University, USA ² UC Davis, CA, USA

Pricing Mechanisms for Cooperative State Estimation "

E. V. Belmega^{1,2}, L. Sankar¹, H. V. Poor¹, and M. Debbah²

¹ Princeton University, NJ, USA

² Supelec, France

Structured Security Testing in the Smartgrid "

Patrick McDaniel and Stephen McLaughlin Pennsylvania State University, USA

Special Session SP-4: Image Forensics Technologies

Color Separation To Facilitate Handwriting Examination

Giuseppe Schirripa Spagnolo¹, Gianluca Ferrari² and Beatrice Calabrese¹ *University Roma Tre, Italy*

² FDE (forensic documents examiner), Italy

Video Provenance By Motion Vector Analysis: A Feasibility Study "

Matthew Sorell University of Adelaide, Australia

Fast Camera Fingerprint Search Algorithm For Source Camera Identification

Yongjian Hu¹, Chang-Tsun Li¹, Zhimao Lai² and Shangfan Zhang²

¹ The University of Warwick, UK

² South China University of Technology, China

On The Effectiveness Of Local Warping Against Sift-Based Copy-Move Detection "

Roberto Caldelli¹, Irene Amerini¹, Lamberto Ballan¹, Giuseppe Serra¹, Mauro Barni² and Andrea Costanzo²

- ¹ University of Florence, Italy
- ² University of Siena, Italy

Spectral methods to determine the exact scaling factor of resampled digital images "

Stefan Pfennig¹ and Matthias Kirchner²

- ¹ TU Dresden, Germany
- ² ICSI Berkeley, CA, USA

Special Session CONT-1: Modeling and Co-Design of Wireless Networked Control Systems

A Framework For Modeling Wireless Embedded Control Systems "

Claudia Rinaldi, Alessandro D'Innocenzo, Maria Domenica Di Benedetto and Fortunato Santucci

University of L'Aquila, Italy

Quality of Service and Quality of Control in Real-Time Control Systems

Luigi Palopoli and Daniele Fontanelli *University of Trento, Italy*

Real-Time Scheduling in LTE for Smart Grids

Yuzhe Xu and Carlo Fischione Royal Institue of Technology, Sweden

Performance Analysis and Optimization of the Joining Protocol for a Platoon of Vehicles "

Mohammadreza Khaksari and Carlo Fischione Royal Institue of Technology, Sweden

A Speech Indicator For The VOWSN Approach "

Claudia Rinaldi, Luigi Pomante and Daniele Ciuca *University of L'Aquila, Italy*

Special Session SP-5: Information Theoretic Methods in Signal Processing

Robust Local Scale Estimators for Blind Evaluation of Noise Variance in Images "

Sergey Abramov¹, Victoriya Abramova¹, Vladimir Lukin¹ and Karen Egiazarian²
¹National Aerospace University, Ukraine
²Tampere University of Technology, Finland

On the Use of Lee-codes for Constructing Multiple-Valued Error-Correcting Decision Diagrams "

Helena Astola and Stanislav Stankovic Tampere University of Technology, Finland

Depth Image Lossless Compression Using Mixtures Of Local Predictors Inside Variability Constrained Regions "

Ionut Schiopu and Ioan Tabus
Tampere University of Technology, Finland

Information Theoretic Methods For Alligning Audio Signals Using Chromagram Representations "

Ioan Tabus, Vlad Tabus and Jaakko Astola Tampere University of Technology, Finland

Special Session COM-4: Information Theory and Coding Techniques for Networks

Selective Coding Strategy for Composite Relay Channels "

Arash Behboodi and Pablo Piantanida Supelec, France

Integer-forcing Architectures: An Overview

Jiening Zhan¹, Bobak Nazer², Uri Erez³ and Michael C. Gastpar^{1,4}
¹ University of California, Berkeley, CA, USA

- ² Boston University,
- ³ Tel Aviv University, Israel
- ⁴ EPFL, Switzerland

A Comparison of Decoding Techniques for Interference Alignment :

Giuseppe Caire and Vasileios Ntranos University of Southern California, CA, USA

On interactive message secrecy over erasure networks :

Laszlo Czap¹, Vinod Prabhakaran², Suhas Diggavi³ and Christina Fragouli¹

- ¹ EPFL, Switzerland
- ² TIFR, India
- ³ University of California, Los Angeles, CA, USA
- ⁴ EPFL, Switzerland

Poster Session SP-1: Image processing and analysis

A Two-pass Clustering Algorithm Based on Linear Assignment Initialization and K-means Method $\ddot{}$

Kin Luen Cheng¹, Jianchao Fan² and Jun Wang^{2,3}

- ¹ ASM Pacific Technology Limited, Hong Kong
- ² Dalian University of Technology, China
- ³ The Chinese University of Hong Kong, Hong Kong

Driver Fatigue Monitoring System Using Support Vector Machines "

Reuben Farrugia and Matthew Sacco *University of Malta, Malta*

A Novel Segmentation Technique For Splitting A Typed Persian Text To Sub-Words

Mahnaz Shafii, Maher Sid-Ahmed and Majid Ahmadi *University of Windsor, Canada*

Robust scene classification by gist with angular radial partitioning "

Liu We, Serkan Kiranyaz and Moncef Gabbouj Tampere University of Technology, Finland

Perceptual Watermarking Robust To Jpeg Compression Attack "

Phi Bang Nguyen, Azeddine Beghdadi and Marie Luong University Paris 13, France

Perceptual Non Local Mean (P-Nlm) Denoising "

Wided Souidene¹, Sameh Megrhi^{1,2}, Azeddine Beghdadi¹, Chokri Ben Amar² ¹ *L2TI, France*

² Ecole Nationale d'Ingenieurs de Sfax, Tunisie

Lecture Content Classification Tool "

Ali Imran and Faouzi Cheikh Gjøvik University College, Norway

Computationally-Efficient Compressive Sampling of Pulse Stream Images Using Radon-like Measurements "

Stefania Colonnese, Roberto Cusani, Stefano Rinauro and Gaetano Scarano Università di Roma "La Sapienza", Italy

Reduced Polynomial Classifier using Within-Class Standardizing Transform "

Gaetano Scarano, Laura Forastiere, Stefania Colonnese, Stefano Rinauro Università di Roma "La Sapienza", Italy

Poster Session SP-2: Signal and image processing for security

Is it possible to use Biometric Techniques as Authentication Solution for Objects? Biometry vs. Hylemetry "

Lorenzo Cozzella, Giuseppe Schirripa Spagnolo and Carla Simonetti University Roma Tre, Italy

A New Pipelined-Interleaved Structure for FIR Hilbert Transformers based on Frequency Transformation Technique "

David Troncoso, Miriam Cruz-Jimenez and Gordana Jovanovic Dolecek *Institute INAOE, Mexico*

Wireless Sensor Networks and Video Analysis for Scalable People Tracking

Nicola Conci, Alfredo Armanini, Mattia Daldoss, Alessio Colombo, Daniele Fontanelli, Luigi Palopoli

University of Trento, Italy

Authentication and Scrambling of Radio Frequency Signals Using Reversible Watermarking

Muhammad Samee and Jürgen Götze *TU Dortmund, Germany*

New 2D Barcode Solution based on Computer Generated Holograms: Hologhaphic Barcode "

Lorenzo Cozzella, Giuseppe Schirripa Spagnolo, Michele De Santis *University Roma Tre, Italy*

An Improved Chaotic Shift Keying Technique

Ashraf Zaher Kuwait University, Kuwait

Saliency detection as a support for image forensics

Oleg Muratov, Duc Tien Dang Nguyen, Giulia Boato and Francesco De Natale *University of Trento, Italy*

Oral Session SP-1: Signal processing and applications

Clustering Analysis For Gene Expression Data: A Methodological Review

Rui Fa, Asoke Nandi and Li-Yun Gong *The University of Liverpool, UK*

On Multi-Sensor Linear State Estimation Under High Rate Quantization

Alex Leong, Subhrakanti Dey and Girish Nair *University of Melbourne, Australia*

Realization of 2D Reverse-Lattice Discrete Filters "

George Antoniou

Montclair State University, USA

A Robust Constrained Set-Membership Affine-Projection Adaptive-Filtering Algorithm

Andreas Antoniou and Md. Zulfiquar Bhotto *University of Victoria, Canada*

Oral Session SP-2: Speech and audio processing

A Study on Pitch Variation on the use of DWT with SVM for Speaker Independent Phoneme Recognition "

Michelle Cutajar, Edward Gatt, Ivan Grech, Owen Casha and Joseph Micallef *University of Malta, Malta*

Phase Spectrum Prediction Of Audio Signals :

Ali Bahrami Rad and Tuomas Virtanen Tampere University of Technology, Finland

Analysis Of Extracted Pitch Contours Across Speakers For Intonation Modelling In TTS Synthesis

Branislav Gerazov and Zoran Ivanovski Faculty of Electrical Engineering and Information Technologies, Macedonia

Accurate Analysis and Visual Feedback of Vibrato in Singing "

José Ventura, Ricardo Sousa and Aníbal Ferreira *University of Porto, Portugal*

Measuring resonances of the vocal tract using frequency sweeps at the lips "

Farzaneh Ahmadi and Ian McLoughlin Nanyang Technological University, Singapore

Poster Session CONT-1: Control Applications

Average Modeling and Linear Control of a Buck-Boost KY Converter :

Marc Aoun¹, Michel El Maalouf¹, Najib Rouhana¹, Hadi Kanaan¹ and Kamal Al-Haddad²

¹ Saint-Joseph University, USA

² Ecole de Technologie Supérieure, Canada

Real-Time Fuzzy Control of a Three-Phase Phase-Controlled Rectifier Operating in Discontinuous Conduction Mode "

Hadi Kanaan¹, Geoffrey Khalil¹, Kamal Geagea¹, Simon Abourida² and Kamal Al-Haddad³

- ¹ Saint-Joseph University, USA
- ² OPAL-RT Technologies Inc., MI, USA
- ³ Ecole de Technologie Supérieure, Canada

Poster session COM-1: Digital Communications

Analysis on Precise Intermodulation Product Computing Technique and Reduction of Computational Load "

Authors: Nay Oo1 and Woon-Seng Gan2

- ¹ Fraunhofer IDMT, Germany
- ² Nanyang Technological University, Singapore

FS-FBMC: an alternative scheme for filter bank based multicarrier transmission "

Maurice Bellanger

CNAM, France

Improved Message Passing Algorithm for Phase Noise Channels Using Optimal approximation of Tikhonov Mixtures "

Shachar Shayovitz and Dan Raphaeli *Tel Aviv University, Israel*

Performance Evaluation of GSM Robustness Against Smart Jamming Attacks "

Marco Petracca¹, Marco Vari², Francesco Vatalaro² and Graziano Lubello³

- ¹ Radiolabs, Italy
- ² University of Rome Tor Vergata, Italy
- ³ Elettronica S.p.A., Italy

Incremental Decode and Forward Relaying using Distributed Space Time Coding "

Hatem Boujemâa and Ons Mabrouk

SUP'COM, Tunisia

Reversible Data Embedding For Any Digital Signal "

Mustafa Abdul Karim¹, KokSheik Wong¹ and Kiyoshi Tanaka²

- ¹ University of Malaya, Malaysia
- ² Shinshu University, Japan

Poster session SP-3: Signal processing and applications

Beamformer Robust Sinr Optimization With Ellipsoidal Steering Vector Errors "

Tsvi Dvorkind and Isaac Engel

RAFAEL Advanced Defense Systems LTD, Israel

Cooperative Pedestrian Tracking by Multiple Mobile Robots with Laser Range Scanners

Masafumi Hashimoto, Kei Kakinuma, Takumi Yokoyama, Kazuhiko Takahashi *Doshisha University, Japan*

Using of environment's dynamic geometric models for solving the mobile robot SLAM problem "

Nadezhda Babakina and Maxim Kolesnikov St. Petersburg State Polytechnic University, Russia

The optimum approximation of vector-signals and estimation of the velocity of an object causing Doppler shift "

Takuro Kida¹ and Yuichi Kida²

¹ Tokyo Institute of Technology,

Identification Of Nonlinear Stochastic Systems Described By A Reduced Complexity Volterra Model Using An Argls Algorithm '

Imen Laamiri, Anis Khouaja and Hassani Messaoud *ENIM. Tunisia*

A generalized waveform identifier technique for software radio

Claudia Rinaldi and Maurizio Colizza *University of L'Aquila, Italy*

Boosting the EKF for distributed estimation in binary WSN through unscented transformation and iterative processing "

Rim Amara, Fatma Aounallah and Monia Turki National School of Engineers of Tunis, Tunisia

SVM For Hystorical Sport Video Classification "

Licia Capodiferro, Luca Costantini, Federica Mangiatordi and Emiliano Pallotti Fondazione Ugo Bordoni, Italy

Chip - Cultural Heritage Image Processing Tool "

Luca Costantini¹, Federica Mangiatordi¹, Emiliano Pallotti¹ and Paolo Sità²

¹ Fondazione Ugo Bordoni, Italy

Low Power Non-Recursive Comb-Based Decimation Filter Design

Gordana Jovanovic Dolecek and Gerardo Molina Salgado *Institute INAOE, Mexico*

Increasing information Capacity and Improving detection reliability in audio watermarking system `

Mohammed Khalil¹, Abdellah Adib¹ and Nawal El Hamdouni²

¹ FSTM, Morocco

² LRIT -FSR, Morocco

Special Session SP-6: Beyond Video Surveillance - Emerging Applications and Open Problems

² The School of Pharmaceutical Sciences, Ohu University, Japan

² University Roma Tre, Italy

Salient Motion Detection In Crowded Scenes

Chen Change Loy, Tao Xiang and Shaogang Gong *Queen Mary University of London, QMUL, UK*

Scene and crowd behaviour analysis with local space-time descriptors

Marco Bertini, Alberto Del Bimbo, Lorenzo Seidenari *University of Florence, MICC, Italy*

Feature-Based Tracking On A Multi-Omnidirectional Camera Dataset

Barıs Evrim Demiroz, Orhan Eroglu, Ismail Arı, Albert Ali Salah and Lale Akarun Bogazici University, Computer Engineering Department, Turkey

Recursive Segmentation Based On Higher Order Statistics In Thermal Imaging Pedestrian Detection "

Marco San Biagio, Marco Crocco and Marco Cristani *Istituto Italiano di Tecnologia, IIT, Italy*

Collecting Data For Socially Intelligent Surveillance And Monitoring Approaches: The Case Of Conflict In Competitive Conversations

Alessandro Vinciarelli, Samuel Kim, Fabio Valente and Hugues Salamin *University of Glasgow, UK*

Special Session SP-7: Wireless Network based Mobile Terminal Localization

Cooperative Location-Based Adaptive Beamforming `

Shahid Mumtaz, Du Yang, Joaquim Bastos and Jonathan Rodriguez Institute of Telecommunications, Portugal

Rectangular Room Dimensions Estimation Using Narrowband Signal And Sectorized Antennas "

Igor Arambasic, Javier Casajus and Ivana Raos *Universidad Politécnica de Madrid, Spain*

Framework for Optimizing Cluster Selection using Geo-assisted Movement Prediction :

Thomas Kristensen, Jacob Madsen, Michael Pedersen, Chres Sørensen, Jimmy Nielsen and Tatiana Madsen

Aalborg University, Denmark

Location Aided Wireless Communications

Dirk Slock
Eurecom, France

Improved Particle Filtering by Exploring Nomadic Movements

Siwei Zhang and Ronald Raulefs German Aerospace Center (DLR), Germany

Oral Session COM-1: Mobile and wireless communication

$\begin{tabular}{ll} Performance Evaluation of an Opportunistic Distributed Power Control Procedure for Wireless Multiple Access $\dot{\ }$ \\ \end{tabular}$

Romeo Giuliano¹, Franco Mazzenga¹, Marco Petracca² and Remo Pomposini²

¹ University of Rome Tor Vergata, Italy

Throughput of Cooperative HARQ Protocols with Opportunistic Relaying over Rayleigh Channels "

Maymouna Ben Saïd and Hatem Boujemâa SUP'COM, Tunisia

Realistic Rician Fading Channel based Optimal Linear MIMO Precoding Evaluation

Xiaonan Shi, Yoshikazu Miyanaga, Shingo Yoshizawa and Constantin Siriteanu *Hokkaido University, Japan*

A Compressive Sampling Data Gathering Approach for Wireless Sensor Networks Using a Sparse Acquisition Matrix with Abnormal Values

Andrea Abrardo, Cesare Carretti, Alessandro Mecocci Università di Siena, Italy

Improved Energy Efficiency for Wireless SC MIMO Through Data-Dependent Superimposed Training

Toni Levanen and Markku Renfors
Tampere University of Technology, Finland

Oral Session SP-3: Biomedical signal and image processing

Vocal Folds Paralysis Clasiffication Using FLDA and PCA Algorithms Suported by an Adapted Block Matching Algorithm '

Amaia Mendez Zorrilla, Eneko Lopetegui and Begoña Garcia Zapirain *University of Deusto, Spain*

An Interactive Game For Teaching Facial Expressions To Children With Autism Spectrum Disorders

Jake Aggarwal¹, Suyog Jain¹, Birgi Tamersoy¹, Veronica Orvalho², Yan Zhang¹

¹ The University of Texas at Austin, USA

² Universidade do Porto, Portugal

Use of Nucleotide Genomic Signals to Determine Distances between Mitochondrial DNA Genes of Mammals '

Paul Cristea and Rodica Tuduce University "Politehnica" of Bucharest, Romania

Using Hidden Markov Toolkit For Arrhythmia Recognition

Samar Krimi *ENIT, Tunisia*

² Radiolabs, Italy

Full-Automated System for the Segmentation of the Common Carotid Artery In Ultrasound Images :

Lakis Christodoulou Cyprus University of Technology, Cyprus

Oral Session CONT-1: Advances in Modeling and Control

Optimal and Suboptimal Decoupling Controllers :

Vladimir Kucera Czech Technical University, Czech Republic

Tuning Pid Controller With Multi-Objective Differential Evolution

Ibtissem Chiha, Jalel Ghabi and Noureddine Liouane *ENIT, Tunisia*

Pd-Correction Functional Link Network Control For Air-Breathing Hypersonic Vehicles

Yanli Du¹, Jie Fang² and Yuping Lu¹

- ¹ Zhengzhou University of Light Industry, China
- ² Nanjing University of Aeronautics and Astronautics, China

Prediction Of The Syngas Composition Of A Gasification Process

Silvia Zanoli¹, Giacomo Astolfi¹ and Luca Barboni² ¹ Dii, Universita Politecnica delle Marche, Italy ² I&C, API, Italy

A Smarter Fire Sprinkler

Rogério Neves, Francisco Zampirolli and Thiago Okazaki *UFBAC, Brazil*

Poster Session SP-4: Multimedia signal processing

Improving Motion Vector Prediction using Linear Regression

Reuben Farrugia University of Malta, Malta

A Secure Hybrid Intra/Wyner-Ziv video coding for surveillance

Said Benierbah and Mohammed khamadja SP-Lab, Mentouri University of Constantine, Algeria

Comparison of Different Multiclass SVM Methods for Speaker Independent Phoneme Recognition $\dot{}$

Michelle Cutajar, Edward Gatt, Ivan Grech, Owen Casha and Joseph Micallef *University of Malta, Malta*

Perceptual Analysis Of Higher-Order Statistics In Estimating Reverberation

Thiago Prego¹, Amaro De Lima^{1,2} and Sergio Netto¹

- ¹ Federal University Rio de Janeiro, Brazile
- ² Federal Center for Technological Education Celso Suckow da Fonseca, Brazil

Fast Multi-View Video Plus Depth Coding With Hierarchical Bi-Prediction "

Brian Micallef, Carl Debono and Reuben Farrugia *University of Malta, Malta*

An a Priori Information Based Algorithm for Artifact Preventive Reconstruction in Few-View Computed Tomography $\ddot{}$

Vitaly Vlasov, Alexander Konovalov and Alexander Uglov Russian Federal Nuclear Center, Russia

Poster Session COM-2: Coding and applications

Time-Varying Space-Only Code: A New Paradigm for Coded MIMO Communication

Dieter Duyck¹, Sheng Yang², Fambirai Takawira³, Joseph Boutros⁴ and Marc Moeneclaey¹

- ¹ Ghent University, Belgium
- ² Supelec, France
- ³ University of Kwazulu Natal, South Africa
- ⁴ University at Qatar, Qatar

FFT and Filter Bank Based Spectrum Sensing and Spectrum Utilization for Cogntive Radios '

Sener Dikmese, Sudharsan Srinivasan and Markku Renfors Tampere University of Technology, Finland

Codes over M3(F3) with connection to Golden Space-time coded modulation

Houda Sboui¹, Ammar Bouallegue¹ and Patrick Sole²

- ¹ Ecole nationale d'ingenieurs de Tunis Tunisia
- ² ENST ParisTech, France

Enabling Rural Broadband Via TV "White Space"

Colin McGuire, Malcolm Brew, Faisal Darbari, Stephan Weiss and Robert Stewart *University of Strathclyde, UK*

Finite Radon Coding For Content Delivery Over Hybrid Client-Server And P2P Architecture "

Benoit Parrein¹, Nicolas Normand¹, Majd Ghareeb¹, Giulio D'Ippolito² and Federica Battisti² *Polytechnique Nantes, France*

² University Roma Tre

MCCA-Assisted Multi-Radio System using Directional Antenna

Nordin Ramli, Ying Loong Lee, Mohammad Tahir and Hafizal Mohamad *MIMOS Berhad, Malaysia*

Widely-Linear Beamforming/Combining Techniques for MIMO Wireless Systems

Giacinto Gelli¹, Donatella Darsena², Luigi Paura¹ and Francesco Verde¹

- ¹ Università Federico II di Napoli
- ² Università Parthenope di Napoli

Design of randomized space-time block codes for amplify-and-forward cooperative relaying $\ddot{}$

Francesco Verde Università Federico II di Napoli

Special Session COM-5: New Trends in Multimedia Signal Processing and Coding for Networking

Media-Agnostic Congestion Control in Peer-to-Peer Multimedia Streaming Networks"

Riccardo Bernardini and Roberto Rinaldo *University of Udine, Italy*

Reliable 3D video P2P transmission enabling synthesis of virtual views "Simone Milani and Giancarlo Calvagno University of Padova, Italy

Optimal overlay generation for P2P video streaming applications "Livio Lima, Marco Dalai, Pierangelo Migliorati and Riccardo Leonardi *University of Brescia, Italy*