

ELMAR-2014 PROGRAM

Wednesday, September 10	Thursday, September 11	Friday, September 12
09:00 - 09:30 Registration	09:00 - 09:30 Registration	09:00 - 09:30 Registration
09:30 - 10:00 OPENING SESSION: Welcome Speeches	09:00 - 10:30 Session 4 & 5	09:00 - 10:30 Special Session 4 & Session 7
10:00 - 10:30 PLENARY SESSION: Keynote Talk	10:30 - 11:00 Session break	10:30 - 11:00 Session break
10:30 - 11:00 Welcome cocktail	11:00 - 11:30 Invited Talk	11:00 - 13:00 Session 8 & 9
11:00 - 13:00 Session 1 & Special Session 1	11:40 - 13:00 Special Session 3 & Session 6	
13:00 - 14:00 Lunch break	13:00 - 14:00 Lunch break	13:00 - 14:00 Lunch break
14:15 - 16:15 Session 2 & Special Session 1/Session 3	14:15 – 19:30 Excursion by ship	14:15 - 16:15 Session 10 & 11
17:00 - 20:00 Guided Zadar sightseeing		
21:00 ELMAR-2014 Symposium Dinner		

ELMAR-2014 PROGRAM

Wednesday, 10 September 2014

09:00 - 09:30 Registration	
HALL A	
09:30 - 10:00 OPENING SESSION: Welcome Speeches	
10:00 - 10:30 PLENARY SESSION: Keynote Talk	
10:30 - 11:00 WELCOME COCKTAIL	
HALL A	HALL B
11:00 - 13:00 SESSION 1: Image and Video Processing 1	11:00 - 13:00 SPECIAL SESSION 1: From 3G to 4G and Beyond
13:00 - 14:00 Lunch Break	
14:15 - 16:15 SESSION 2: Speech and Audio Processing 1	14:15 - 15:15 SPECIAL SESSION 2: Sea and Port Ecology
	15:15 - 16:15 SESSION 3: Navigation
17:00 - 20:00 GUIDED ZADAR SIGHTSEEING <u>Meeting Point:</u> Hotel "Funimation", Main Entrance, 17:00	
21:00 ELMAR-2014 SYMPOSIUM DINNER <u>Meeting Point:</u> Hotel "Funimation", bar at the pool, 21:00	

ELMAR-2014 PROGRAM

Thursday, 11 September 2014

09:00 - 09:30 Registration	
HALL A	HALL B
09:00 - 10:30 SESSION 4: Image and Video Processing 2	09:00 - 10:30 SESSION 5: Multimedia
10:30 - 11:00 Session Break	
11:00 - 11:30 Invited Talk	---
11:40 - 13:00 SPECIAL SESSION 3: New Trends in Spectrum Engineering	11:40 - 13:00 SESSION 6: Security
13:00 - 14:00 Lunch Break	
14:15 - 19:30 EXCURSION BY SHIP <u>Meeting Point:</u> Hotel "Funimation", Main Entrance, 14:15	

Friday, 12 September 2014

09:00 - 09:30 Registration	
HALL A	HALL B
09:00 - 10:30 SPECIAL SESSION 4: Computer Vision for New Emerging Applications	09:00 - 10:30 SESSION 7: Power Electronics and Automation
10:30 - 11:00 Session Break	
11:00 - 13:00 SESSION 8: Speech and Audio Processing 2	11:00 - 13:00 SESSION 9: Telecommunications
13:00 - 14:00 Lunch Break	
14:15 - 16:15 SESSION 10: Antennas	14:15 - 16:15 SESSION 11: e-Learning and m-Learning

Wednesday, 10 September 2014

09:00 - 09:30 **Registration**

HALL A

Wednesday, 10 September 2014

09:30 - 10:00 **OPENING SESSION: Welcome Speeches**

Session Chair: Branka Zovko-Cihlar, Viljem Jerič, Mario Muštra

10:00 - 10:30 **PLENARY SESSION: Keynote Talk**

Session Chair: Branka Zovko-Cihlar

Miloš Oravec, Faculty of Electrical Engineering and Information Technology, Slovak University of Technology in Bratislava; SLOVAKIA

Feature Extraction and Classification by Machine Learning Methods for Biometric Recognition of Face and Iris

10:30 - 11:00 **WELCOME COCKTAIL**

11:00 - 13:00 **SESSION 1: Image and Video Processing 1**

Session Chair: Mario Muštra

Pavel Chmelar, Ladislav Beran, Nataliia Kudriavtseva; CZECH REPUBLIC

Projection of Point Cloud for Basic Object Detection

Konstantinos Georgopoulos, Ioannis Papaefstathiou; GREECE

Fast and Efficient FPGA-based Euro Coin Identification

Riad Azzam, Nabil Aouf; UNITED KINGDOM

Non Parametric Tool For Vision Detection Analysis

Vojtěch Jirka, Matej Féder, Jarmila Pavlovičová, Miloš Oravec; SLOVAKIA

Face Recognition System with Automatic Training Samples Selection Using Self-organizing Map

Radoslav Vargic, Juraj Kacur; SLOVAKIA

Detection of Closed and Open Eyes via Brain Control Interface

Mario Vranješ, Denis Vranješ, Snježana Rimac-Drlje; CROATIA

Influence of spatial and temporal activity of upscaled video on its perceived quality

13:00 - 14:00 **Lunch Break**

14:15 - 16:15 **SESSION 2: Speech and Audio Processing 1**

Session Chair: Gregor Rozinaj

Martin Sulír, Ján Staš, Jozef Juhár; SLOVAKIA

Design of Phonetically Balanced SUS Test for Evaluation of Slovak TTS Systems

Ján Staš, Daniel Hládek, Jozef Juhár; SLOVAKIA

Recent Advances in the Statistical Modeling of the Slovak Language

Martin Lojka, Jozef Juhár; SLOVAKIA

Hypothesis Combination for Slovak Dictation Speech Recognition

Eva Kiktova, Martin Lojka, Jozef Juhár, Anton Cizmar; SLOVAKIA

Comparison of Feature Selection Algorithms for Acoustic Event Detection System

Gregor Rozinaj, Renata Rybárová, Marek Vančo; SLOVAKIA

Interactive Speech Synthesizer

17:00 - 20:30 **GUIDED ZADAR SIGHTSEEING AND CONCERT
AT ST. DONAT'S CHURCH**

Meeting Point: Hotel "Funimation", Main Entrance, 17:00

21:00 **ELMAR-2014 SYMPOSIUM DINNER**

Meeting Point: Hotel "Funimation", bar at the pool, 21:00

11:00 - 13:00**SPECIAL SESSION 1: From 3G to 4G and Beyond****Session Chairs: Sonja Zentner Pilinsky and Alberto Teković****Zdenek Nemec, Jan Pidanic, Radovan Dolecek; CZECH REPUBLIC**

OFDM channel modelling for railway corridors

Angelo Gary Markoč, Gordan Šišul; CROATIA

Mobile network optimisation for smartphones

Tihomir Pušnik, Goran Skok, Ivica Ivandić; CROATIA

High capacity event network planning - Poljud

Winton Afrić, Sonja Zentner Pilinsky; CROATIA

LTE Cell Coverage for Various Modes of Operation

Alberto Teković, Dina Šimunić, Lara Zezelj; CROATIA / SERBIA

Electromagnetic radiation compliance considering Small Cell for access layer deployment

13:00 - 14:00**Lunch Break****14:15 - 15:15****SPECIAL SESSION 2: Sea and Port Ecology****Session Chair: Irena Jurdana****Jasmin Ćelić, Sanjin Valčić, Miroslav Bistrovic; CROATIA**

Air pollution from cruise ships

Irena Jurdana, Renato Ivče, Darko Glažar; CROATIA

Submarine Optical Cables: Impact on the Marine Environment

Jasna Prpić-Oršić, Odd M. Faltinsen, Marko Valčić; CROATIA / NORWAY

Development Strategies for Greener Shipping

15:15 - 16:15 **SESSION 3: Navigation**

Session Chair: **Gordan Šišul**

Ladislav Beran, Pavel Chmelar, Martin Dobrovolný; CZECH REPUBLIC

Navigation of robotic platform with using inertial measurement unit and Direct Cosine Matrix

Andrea Claudi, Daniele Accattoli, Paolo Sernani, Paolo Calvaresi, Aldo Franco Dragoni; ITALY

A Noise-Robust Obstacle Detection Algorithm for Mobile Robots Using Active 3D Sensors

Tarek Mouats, Nabil Aouf; UNITED KINGDOM

Robust Feature Matching for Aerial Visual Odometry

17:00 - 20:30 **GUIDED ZADAR SIGHTSEEING AND CONCERT
AT ST. DONAT'S CHURCH**

Meeting Point: Hotel "Funimation", Main Entrance, 17:00

21:00 **ELMAR-2014 SYMPOSIUM DINNER**

Meeting Point: Hotel "Funimation", bar at the pool, 21:00

Thursday, 11 September 2014

HALL A

Thursday, 11 September 2014

09:00 - 10:30 **SESSION 4: Image and Video Processing 2**

Session Chair: Mario Muštra

Abdenour Amamra, Tarek Mouats, Nabil Aouf; UNITED KINGDOM

GPU based GMM segmentation of Kinect data

Tarek Mouats, Nabil Aouf; UNITED KINGDOM

Foreground Segmentation Based on Thermo-Visible Fusion

Steffen Wulf, Udo Zölzer; GERMANY

Extension of a Visual Saliency Guided Bit Allocation Approach Using Laplace Distribution of DCT Coefficients

Pavel Jetensky, Simeon Karamazov; CZECH REPUBLIC

3D Associative Symbol Array as Component of User Interface

Marek Loderer, Jarmila Pavlovičová; SLOVAKIA

Optimization of LBP Parameters

Emil Dumic, Sonja Grgic, David Jiménez Bermejo, Luis Alberto da Silva Cruz;

CROATIA / SPAIN / PORTUGAL

Benchmark of State of the Art Objective Measures for 3D Stereoscopic Video Quality Assessment on the Nantes Database

10:30 - 11:00 **Session Break**

11:00 - 11:30 **INVITED TALK**

Session Chairs: Ana Katalinić Mucalo and Miran Gosta

Thomas Weber, European Communications Office, Copenhagen; DENMARK

Existing and Near Future Work in CEPT on Cognitive Radio Solutions

11:40 - 13:00 **SPECIAL SESSION 3: New Trends in Spectrum Engineering**

Session Chairs: **Ana Katalinić Mucalo and Miran Gosta**

Ana Katalinic Mucalo; CROATIA

Overview of the Regulatory Aspects for the Deployment Line-of-Sight MIMO for Fixed Links

Miran Gosta; CROATIA

Spectrum efficiency achieved by the implementation of DVB-T2 with H.264/AVC and H.265/HEVC

Krešimir Ruščić, Andrej Skenderović; CROATIA

Measurements and Propagation Model Tuning in DVB-T2 Network

Ján Pastirčák, Juraj Gazda, Dušan Kocur; SLOVAKIA

A Survey on the Spectrum Trading in Dynamic Spectrum Access Networks

Leonard Novosel, Gordan Šišul; CROATIA

Comparison of pseudo noise sequence lengths for a correlator channel sounder

13:00 - 14:00 **Lunch Break**

14:15 - 19:30 **EXCURSION BY SHIP**

Meeting Point: Hotel "Funimation", Main Entrance, 14:15

09:00 - 10:30**SESSION 5: Multimedia****Session Chair: Pavol Podhradsky****Damir Bartolin, Tigran Vržina, Aleksandar Golub; CROATIA**

Reliable Real-time Video Delivery over IP Networks

Ondrej Zach, Martin Slanina; CZECH REPUBLIC

A Comparison of H.265/HEVC Implementations

Arianit Maraj, Adrian Shehu; REPUBLIC OF KOSOVO / ALBANIA

Bandwidth Allocation and QoS Analysis For Multi IPTV Video Channels Transmission Through ADSL Line

Sanja Zukovic, Milica Medenica, Andjela Draganic, Irena Orovic, Srdjan Stankovic; MONTENEGRO

A Virtual Instrument for Compressive Sensing of Multimedia Signals

Abdenour Amamra, Nabil Aouf; UNITED KINGDOM

RGBD Sensors Correction with Gaussian Process Regression

10:30 - 11:00**Session Break****11:40 - 13:00****SESSION 6: Security****Session Chair: Dijana Tralić****Damir Omerasevic, Narcis Behlilović, Sasa Mrdovic; BOSNIA AND HERZEGOVINA**

An Implementation of Secure Key Exchange by Using QR Codes

Riki Mukhaiyar, Satnam Singh Dlay, Wai Lok Woo; UNITED KINGDOM

Alternative Approach in Generating Cancellable Fingerprint by Using Matrices Operations

Vladimír Bánoci, Gabriel Bugár, Martin Broda, Dušan Levický; SLOVAKIA

Robust Spread Spectrum Watermarking System in Video

Gabriel Bugár, Vladimír Bánoci, Martin Broda, Dušan Levický; SLOVAKIA

A Novel Approach for Image Steganalysis

Luka Kedmenec, Ante Poljicak, Lidija Mandic; CROATIA

Copyright protection of images on a social network

13:00 - 14:00**Lunch Break****14:15 - 19:30****EXCURSION BY SHIP**Meeting Point: Hotel "Funimation", Main Entrance, 14:15

Friday, 12 September 2014

HALL A

Friday, 12 September 2014

09:00 - 10:30

SPECIAL SESSION 4: Computer Vision for New Emerging Applications

Session Chairs: Irena Galić and Časlav Livada

Danilo Babin, Michail Spyrantis, Aleksandra Pižurica, Wilfried Philips, Lazar Velicki, Vladimir Zlokolica; BELGIUM / SERBIA

Pixel Profiling for Extraction of Arteriovenous Malformation in 3-D CTA Images

Vladimir Zlokolica, Lazar Velicki, Marko Janev, David Mitrinovic, Danilo Babin, Nebojsa Ralevic, Nada Cemerlic-Adic, Ratko Obradovic, Irena Galic; SERBIA / BELGIUM / CROATIA

Epicardial fat registration by local adaptive morphology-thresholding based 2D segmentation

Časlav Livada, Hrvoje Leventić, Irena Galić; CROATIA

Image Segmentation Using Active Contour Models and Partial Differential Equations

Tomislav Galba, Krešimir Romić, Alfonzo Baumgartner; CROATIA

Edge-preserving partial variable median filtering for fast noise reduction in CT slices

Michel Findeisen, Lars Meinel, Gangolf Hirtz; GERMANY

A Trinocular Omnidirectional Stereo Vision System for High-Precision RGB-D Acquisition

10:30 - 11:00

Session Break

11:00 - 13:00

SESSION 7: Speech and Audio Processing 2

Session Chair: Jarmila Pavlovičová

Nataliia Kudriavtseva, Vyacheslav Tykhonov, Konstantin Netrebenko; CZECH REPUBLIC / UKRAINE

Recognition of Non-Gaussian Signals Against a Background of Noise Using Higher Order Statistics

Riad Azzam, Nabil Aouf; UNITED KINGDOM

Embedded Fusion of Visual and Acoustic for Active Acoustic Source Detection with SGGMM

Marjan Joorabchi, Seyed Ghorshi, Ali Sarafnia; IRAN

Single-Channel Speech Dereverberation in Acoustical Environments

Mário Varga, Ivan Lapin, Juraj Kačur; SLOVAKIA

Performance Evaluation of GMM and KD-KNN Algorithms Implemented in Speaker Identification Web-Application Based on Java EE

13:00 - 14:00

Lunch Break

14:15 - 16:15

SESSION 8: Antennas

Session Chair: Zvonimir Šipuš

Tomáš Shejbal, Pavel Bezoušek, Tomáš Zálabský; CZECH REPUBLIC

Active Antenna Array Concepts for Precision Approach Radar

Tomáš Zálabský, Pavel Bezoušek, Tomáš Shejbal; CZECH REPUBLIC

Double Cosecant Squared Antenna for a RFID System on Railway

Andrey I. Semenikhin, Diana V. Semenikhina, Yury V. Yukhanov; RUSSIA

Control of RCS of Cylindrical Microstrip Antenna Array

Mladen Vukomanović, Marko Bosiljevac, Zvonimir Šipuš; CROATIA

Efficient analysis of gap-waveguide structures through a rigorous mode-matching approach

09:00 - 10:30

SESSION 9: Power Electronics and Automation**Session Chair: Gordan Šišul****Hamza Šehović, Željko Jurić; BOSNIA AND HERZEGOVINA**

New Concept of Surge Arresters in Low Voltage Networks

Hamza Šehović, Željko Jurić; BOSNIA AND HERZEGOVINA

Protection of Computer Equipment from Power Surges

Irina Astrova, Stefan Nitz, Carsten Kleiner, Arne Koschel, Florian Herrmann, Daniel Isern, Christopher Popp; ESTONIA / GERMANY

Power-Aware Notification Distribution

10:30 - 11:00

Session Break

11:00 - 13:00

SESSION 10: Telecommunications**Session Chair: Narcis Behlilović****Alen Begović, Namir Škaljo, Narcis Behlilović; BOSNIA AND HERZEGOVINA**

An Example of Modeling Local Loop Transfer Function in DSL Environment

Nermin Goran, Alen Begović, Mesud Hadžialić; BOSNIA AND HERZEGOVINA

A Testing of IQX Hypothesis: An Example at Data Link Layer in DSL Environment

Irena Orovic, Srdjan Stankovic, Ljubisa Stankovic; MONTENEGRO

Compressive Sensing Based Separation of LFM Signals

Patrik Gallo, Dusan Levicky, Gabriel Bugar, Vladimir Banoci; SLOVAKIA

Edwards curve addition and doubling formula analysis for effective parallel decomposition

Marko Šprem, Tin Komljenović, Dubravko Babić, Zvonimir Šipuš; CROATIA

Colorless optical sources for fiber-optic access networks of new generation

Matej Petkov, Jan Pidanic; CZECH REPUBLIC

Remote Control Software for R&S PR100 Receiver

13:00 - 14:00

Lunch Break

14:15 - 16:015

SESSION 11: e-Learning and m-Learning

Session Chair: Lidija Mandić

Anita Prelas Kovačević, Marijana Špoljarić, Damir Vuk; CROATIA

The Impact of Internet Use on Education Process

Mireilla Bikanga Ada; UNITED KINGDOM

Using MyFeedBack application to statistically investigate students' feedback access

Kristian Skracic, Juraj Petrovic, Predrag Pale, Dijana Tralic; CROATIA

Virtual wireless penetration testing laboratory model

Frano Škopljanač-Maćina, Bruno Blašković, Zoran Skočir; CROATIA

Using Formal Concept Analysis for student assessment

Alen Delić, Mirna Domančić, Petra Vujević, Neven Drljević, Ivica Botički; CROATIA

AuGeo: A geolocation-based augmented reality application for vocational geodesy education

Sia Tsoleva, Kremena Angelova; BULGARIA

E-learning and M-learning System at Higher Academic Musical Educational Institution – Specifics, Challenges and Results

Mansour Al-Shumari, Giampaolo Bella; UNITED KINGDOM

Online English Vocabulary Learning on Different Systems for Non-English Speakers