



Session Allocation

23 - 25 May 2016

Monday 23 May 2016

Room Prag

Image and Video Processing 1

13:30-15:00

Estimation of Time-To-Contact from Tau-margin and Statistical Analysis of Behavior

Angel Juan Sanchez Garcia, Homero Vladimir Rios Figueroa, Antonio Marin Hernandez, Maria Karen Cortes Verdin, Gerardo Contreras Vega

Exposure Fusion Algorithm for Scenes with an Extremely High Dynamic Range

Junwon Mun, Yunseok Jang, Jaeseok Kim

Variational Scene Flow and Occlusion Detection from a Light Field Sequence

Julia Navarro, J. F. Garamendi

Unsupervised Abnormal Crowd Activity Detection in Surveillance Systems

Łukasz Kamiński, Paweł Gardziński, Krzysztof Kowalak, Sławomir Maćkowiak

Splash Detection in Surveillance Videos of Offshore Fish Production Plants

Vedran Jovanović, Vladimir Risojević, Zdenka Babić, Eirik Svendsen, Annette Stahl

Comparison of Different PDE-based Image Compression Methods with Respect to the choice of PDE

Irena Galić, Branka Zovko-Cihlar, Časlav Livada

Room Prag

Human Machine Interface

15:30-17:00

HandyDepth: Example-based Stereoscopic Hand Depth Estimation using Eigen Leaf Node Features

Rilwan R. Basaru, Gregory G. Slabaugh, Christopher Child, Eduardo Alonso

Novel Approach to Enhance Face Recognition Using Depth Maps

Yaser Saleh, Eran Edirisinghe

Facial Expression Recognition Using Geometric Features

Alptekin Durmuşoğlu, Yavuz Kahraman

Learning of a Robusted Nearest Neighbor Classifier Using Multiple Training Data

Tobias Malach, Jitka Pomenkova

Room Antwerpen

Networks and Wireless Communication

13:30-15:00

DSL Loop Qualification by Using Noise Margin

Namir Škaljo, Alen Begović, Narcis Behlilović

Practical Experience with CDN Interconnection

Richard Roštecký, Ivan Kotuliak, Andrej Binder

On the Capacity of Fractional Frequency Reuse with Three Power Levels for Non-Uniform User

Edward Kassem, Roman Maršálek, Jiri Blumenstein

Binary error models for Wireless Sensor Networks

Tibor Csóka, Jaroslav Polec, Ivana Ilčíková, Ján Doboš

Optimizing the Energy Efficiency for Future 5G Networks

Betim Maloku, Bujar Krasniqi, Fjolla Ademaj

Analysis of the Correlation Properties of QOCCC

Monika Dávideková, Peter Farkaš, Michal Greguš ml.

Room Antwerpen

Security

13:30-15:00

Towards a Theoretical Framework for an Active Cyber Situational Awareness Model

Ahmed Al-Shamisi, Panos Louvieris, Mohammed Al-Mualla, Martin Mihajlov

LSB Steganography with Usage of Mojette Transform for Secret Image Scrambling

Jakub Oravec, Ján Turán, Luboš Ovseník

A Simple Image-Adaptive Watermarking Algorithm with Blind Extraction

Mohamed Hamid, Chunyan Wang

A Novel Steganographic Method Using 8-Neighboring PVD (8nPVD) and LSB Substitution

Manashee Kalita, Themrichon Tuithung - **Video Presentation**

Tuesday 24 May 2016

Room Prag

Image and Video Processing 2

8:30-10:00

Low Complexity Image Registration Techniques Based on Integral Projections

Felix Albu

Video-based Discomfort Detection for Infants Using a Constrained Local Model

Cheng Li, S. Zinger, W. E. Tjon a Ten, P. H. N. de With

The Properties of the Cornea Based on Hyperspectral Imaging: Optical Biomedical Engineering Perspective

Siti Salwa Md Noor, K.Michael, S.Marshall, J.Ren, J.Tschannerl, F.J.Kao

Interest of Non-Negativity Constraint in Perfusion DSC-MRI Deconvolution for Acute Stroke

Mathilde Giacalone, Carole Frindel, Marc Robini, David Rousseau

A Taxonomy of Mutual Information in Medical Image Registration

Thuvanan Borvornvitchotikarn, Werasak Kurutach

Automatic Brain Segmentation Method based on Supervoxels

Martin Tamajka, Wanda Benešová

Room Prag

Image and Video Processing 3

10:30-12:00

View Centered Video-based Object Recognition for Lightweight Devices

László Czúni, Metwally Rashad

Image Processing Based Traffic Sign Detection and Recognition with Fuzzy Integral

Canan Taştımur, Mehmet Karaköse, Yavuz Çelik, Erhan Akin

Real-Time Railway Speed Limit Sign Recognition from Video Sequences

David Agudo, Ángel Sánchez, José F. Vélez, A. Belén Moreno

Deep Background Subtraction with Scene-Specific Convolutional Neural Networks

Marc Braham, Marc Van Droogenbroeck

Quality Inspection of Printed Texts

Jesper B. Pedersen, Kamal Nasrollahi, Thomas B. Moeslund

Optic Disc Localization in Fundus Images

Boris Lesay, Jarmila Pavlovičová, Miloš Oravec, Veronika Kurilová

Room Antwerpen

Signal Processing 1

8:30-10:00

Estimation of Aircraft State during Landing by means of Multiple Observers

Mihai Lungu, Romulus Lungu, Octavian Preotu

Segmented and Directional Impact Detection for Parked Vehicles using Mobile Devices

André Ebert, Sebastian Feld, Florian Dorfmeister

Disturbance Elimination in Near-infrared Spectroscopy through L2-Correlated Empirical Mode Decomposition

Ya-Wen Tang, Yue-Der Lin

Tennis Stroke Detection and Classification Using Miniature Wearable IMU Device

Marko Kos, Jernej Ženko, Damjan Vlaj, Iztok Kramberger

Trend Deviation Analysis for Automated Detection of Defects in GPR Data for Road Condition Surveys

Alena Uus, Panos Liatsis, Gregory Slabaugh, Athanasios Anagnostis, Sam Roberts, Stephen Twist

Classification of Image Degradation Using Riesz Transform

Anamaria Bjelopera, Emil Dumic, Sonja Grgic

Room Antwerpen

Speech and Audio Processing

10:30-12:00

Quick and Efficient Definition of Hangbefore and Hangover Criteria for Voice Activity Detection

Damjan Vlaj, Marko Kos, Zdravko Kačič

Letter-To-Sound Conversion for Speech Synthesizer

Matúš Vasek, Gregor Rozinaj, Renata Rybárová

Towards Human-machine Dialog in Slovak

Stanislav Ondáš, Jozef Juhár

Fuzzy Clustering in HMM-Based Triphone Classes of 2DLDA in Slovak LVCSR

Dávid Čonka, Peter Vizslay, Jozef Juhár

GUI for Interactive Speech Synthesis

Renata Rybárová, Ivan Drozd, Gregor Rozinaj

Semi-tight covariance matrices implementation in Masper HMM Training Procedure

Juraj Kačur, Róbert Kožička, Radoslav Vargic

Room Prag

Image and Video Processing 4

13:00-14:30**Mobile Ear Recognition Application**

Miloš Oravec, Jarmila Pavlovičová, Dominik Sopiak, Vojtěch Jirka, Marek Loderer, Ľuboš Lehota, Marek Vodička, Matej Fačkovec, Matej Mihalik, Martin Tomík, Jozef Gerát

Second-Moment Matrix Adaptation for Local Orientation Estimation

Adib Akl, Joe Iskandar

FPGA Implementation of the RANSAC Based Image Mosaicing Algorithm Using the Nios II Softcore

Irki Zouhir, Lati Abdelhai, Sakhi Samir, Nemra Abdelkrim, Hameurlain Mustapha

A Simple Approach for Biometrics: Finger-Knuckle Prints Recognition Based on a Sobel Filter and Similarity Measures

E. O. Rodrigues, T. M. Porcino, Aura Conci, Aristofanes C. Silva

Room Antwerpen

Modern ICT in E-Learning

13:00-14:30**Developing a Blended Learning Approach for the Effective Teaching of Electronic Circuit Analysis**

Paul M Holland

New Forms of Education for Engineering Professional Schools

Tomáš Zeman, Jaromír Hrad, Pavol Podhradský, Peter Trúchly

Importance of Recommendation System in Modern Forms of Learning

Marián Špilka, Alexandra Posoldová, Gregor Rozinaj, Pavol Podhradský

Implementation and evaluation of IPv6 to IPv4 transition mechanisms in network simulator 3

Peter Trúchly, Pavol Helebrandt, Lukáš Danielovič

Security Aspects in Education Oriented Multimedia Networks

Juraj Londák, Pavol Podhradský, Peter Trúchly

Wednesday 25 May 2016

Room Prag

Image and Video Processing 5

9:00-10:00**Image Sharpness Assessment Based on Local Phase Coherence and LAD Criterion**

Ana Sović Kržić, Matea Donlić, Mihaela Pejčinović, Damir Seršić

Texture Aware Image Error Concealment with Fuzzy Segmentation

Ivana Ilčiková, Wanda Benešová, Jaroslav Polec, Tibor Csóka

Verifying Isolation in a Mantrap Portal via Thermal Imaging

Dirk Siegmund, David Handtke, Olga Kaehm

Normalized Cross-Correlation Based Global Distortion Correction in Fingerprint Image Matching

Ekberjan Derman, Mehmet Keskinöz

Room Antwerpen

Signal Processing 2

9:00-10:00**Pulse Rate Variability and Blood Oxidation Content Identification Using Miniature Wearable Wrist Device**

Jernej Ženko, Marko Kos, Iztok Kramberger

A Web Platform for Analysis of Multivariate Heterogeneous Biomedical Time-Series - a Preliminary Report

Alan Jovic, Davor Kukulja, Kresimir Jozic, Marko Horvat

Multi-Speaker Voice Activity Detection Using a Camera-assisted Microphone Array

Trond F. Bergh, Ines Hafizovic, Sverre Holm

A Bayesian Approach for the Multifractal Analysis of Spatio-Temporal Data

S. Combrexelle, H. Wendt, J.-Y. Tourneret, Y. Altmann, S. McLaughlin, P. Abry

Robust IR Attenuation Measurement for non-Invasive Glucose Level Analysis

Tomasz Kossowski, Ryszard Stasiński

Room Prag**Image and Video Processing 6****10:30-12:00****MBSEM Image Acquisition and Image Processing in LabView FPGA**

Shammi Rahangdale, Paul Keijzer, P. Kruit

IMU Based Adaptive Blur Removal Approach using Image Processing for Railway Inspection

Yunus Santur, Mehmet Karaköse, İlhan Aydın, Erhan Akin

The Influence of a Lossy Compression on the Quality of Estimated Depth Maps

Adrian Dziembowski, Marek Domański, Adam Grzelka, Dawid Mieloch, Jakub Stankowski, Krzysztof Wegner

Analysis of the complexity of the HEVC motion estimation

Jakub Stankowski, Damian Karwowski, Krzysztof Klimaszewski, Krzysztof Wegner, Olgierd Stankiewicz, Tomasz Grajek

Despeckling of Interferometric SAR Data

Dušan Gleich, Peter Planinšič

Room Prag**Image and Video Processing 7****13:00-14:30****A Nonlinear Fourth-order PDE-based Image Denoising Technique**

Tudor Barbu

Comparison Between HEVC and Thor Based on Objective and Subjective Assessments

Lorenzo Re Fiorentin, Maurizio Masera, Sabino Mantovano, Paola Sunna, Guido Masera, Maurizio Martina

Low Complexity Implementation of Slim - HEVC Encoder Design

Kyungmook Oh, Jaehyuk So, Jaeseok Kim

Fast Frame-Rate Up-Conversion Method for Video Enhancement

Snježana Rimac-Drlje, Denis Vranješ

Room Antwerpen**Machine Learning****10:30-12:00****Coarse-grained Reconfigurable Hardware Accelerator of Machine Learning Classifiers**

Vuk Vranjković, Rastislav Struharik

Ensemble Based Classifiers Using Dictionary Learning

Goksu Tuysuzoglu, Nazanin Moarref, Yusuf Yaslan

Improved Image Classification by Proper Patch Size Selection: TerraSAR-X vs. Sentinel-1A

Corneliu Octavian Dumitru, Gottfried Schwarz, Shiyong Cui, Mihai Datcu

A Disagreement Based Co-Active Learning Method for Sleep Stage Classification

Ayşe Betül Yüce, Yusuf Yaslan

Room Antwerpen**Signal Processing 3****13:00-14:30****Optimization of Time-Frequency Curve Description via Kernel Smoothing**

Jitka Pomenkova, Eva Klejmová

Spectrum Sensing Under Transmitter Front-End Constraints

Demian Lekomtcev, Roman Maršálek

Ambiguity Function of Two-Dimensional Orthogonal Complete Complementary Codes

Ivan Lapin, Peter Farkaš

Image Protection Method Based on Binary Operations

Yevgeniya Sulema

ARMA Digital Filter Design Method For Audio And Musical Purposes

Toshifumi Kunimoto, Tsuyoshi Yamamoto

