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Federica Battisti (Roma Tre University, Italy), Chiara Di Stefano, (Independent researcher, Italy)

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TUESDAY NOVEMBER 27

Plenary Talk 2 (9:00-10:00, 27.11, Chair: Ioan Tabus)

Sparse Modeling in Image Processing and Deep Learning
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Gary Atkinson (Bristol Robotics Laboratory, UK), Thomas Thornton (University of the West of England, UK), Demitri Peynado (University of the West of England, UK), Jorgen Ernst (Fraunhofer-Institut for Integrierte Schaltungen IIS, Germany)

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Plenary Talk 3 (13:30-14:30, 27.11, Chair: Chaker Larabi)

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Vladimir Lukin, National Aerospace University of Ukraine

Oral Session 2.2 : Color and Hyperspectral Imaging (14:30-15:30, 27.11, Chair: Vladimir Lukin)

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Fedor Zolotarev (Lappeenranta University of Technology, Finland), Arto Kaarna (Lappeenranta University of Technology, Finland)

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Poster Session 2 (16:00-17:00, 27.11, Chair: Federica Battisti)

JPEG BASED COMPRESSION OF DIGITAL HOLOGRAMS
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VIEWPORT-AWARE OMNIDIRECTIONAL VIDEO STREAMING USING VISUAL ATTENTION AND DYNAMIC TILES
Cagri Ozcinar (Trinity College Dublin, Ireland), Julian Cabrera (Universidad Politecnica de Madrid, Spain), Aljosa Smolic (Trinity College Dublin, Ireland)

AN IMPROVEMENT OF BM3D IMAGE DENOISING AND DEBLURRING ALGORITHM BY GENERALIZED TOTAL VARIATION
Andrey Nasonov (Lomonosov Moscow State University, Russia), Andrey Krylov (Lomonosov Moscow State University, Russia)

AUTOMATIC 3D DETECTION AND SEGMENTATION OF HEAD AND NECK CANCER FROM MRI DATA
Baixaing Zhao (University of Strathclyde, UK), John Soraghan (University of Strathclyde, UK), Gaetano Di Caterina (University of Strathclyde, UK), Derek Grose (Beatson West of Scotland Cancer Centre, UK)

GRID WARPING POSTPROCESSING FOR LINEAR MOTION BLUR IN IMAGES
Andrey Nasonov (Lomonosov Moscow State University, Russia), Yakov Pchelintsev (Lomonosov Moscow State University, Russia), Andrey Krylov (Lomonosov Moscow State University, Russia)

DRIVER DROWSINESS DETECTION: A COMPARISON BETWEEN INTRUSIVE AND NON-INTRUSIVE SIGNAL ACQUISITION METHODS
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Heinz Hofbauer (University of Salzburg, Austria), Florent Autrusseau (University of Nantes, France), Andreas Uhl (University of Salzburg, Austria)

A NOVEL HUMAN IDENTIFICATION METHOD BY GAIT USING DYNAMICS OF FEATURE POINTS AND LOCAL SHAPE FEATURES

Daisuke Imoto (National Research Institute of Police Science, Japan)

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WEDNESDAY NOVEMBER 28

Plenary Talk 4 (9:00-10:00, 28.11, Azeddine Beghdadi)

Novel Machine Learning Solutions for Pertinent Applications
Moncef Gabbouj, Signal Processing Laboratory, Tampere University of Technology

Oral Session 3.1 : Video Compression (10:30-12:10, 28.11, Chair: Moncef Gabbouj)

HIGHER PRECISION RANGE ESTIMATION FOR CABAC
Sio-Kei Im (Macao Polytechnic Institute), Ka-Hou Chan (Macao Polytechnic Institute)

PERCEPTUAL VIDEO CONTENT ANALYSIS AND APPLICATION TO HEVC QUANTIZATION REFINEMENT
Kais Rouis (National School of Engineering of Sousse, Tunisia), Chaker Larabi (University of Poitiers, France)

FAST MOTION ESTIMATION ALGORITHM WITH EFFICIENT MEMORY ACCESS FOR HEVC HARDWARE ENCODERS
Farhad Pakdaman (Nokia Technologies, Finland), Moncef Gabbouj (Nokia Technologies, Finland), Mahmoud R. Hashemi (University of Tehran, Iran), Mohammad Ghanbari (University of Essex, UK)

EFFICIENT 2D VIDEO CODING OF VOLUMETRIC VIDEO DATA
Nahid Sheikhi-Pour (Tampere University of Technology, Finland), Sebastian Schwarz (Nokia Technologies, Finland), Vinod Malamal Vadakital (Nokia Technologies, Finland), Moncef Gabbouj (Tampere University of Technology, Finland)

FAST INTRA-PREDICTION MODE DECISION ALGORITHM BASED ON GRADIENT IN HEVC
Wenwu Li (National University of Defense Technology, China), Shuwei Sun (National University of Defense Technology, China), Yang Guo (National University of Defense Technology, China)

Oral Session 3.2 : Sparse Visual Data Representations (13:30-14:30, 28.11, Chairs: Stefania Colonnese and Ioan Tabus)

LEARNING OVERCOMPLETE AND SPARSIFYING TRANSFORM WITH EXACT AND APPROXIMATE CLOSED FORM SOLUTIONS
Dimche Kostadinov (University of Geneva, Switzerland), Svyatoslav Voloshynovskiy (University of Geneva, Switzerland), Sohrab Ferdowsi (University of Geneva, Switzerland)

COMPOUND MARKOV RANDOM FIELD MODEL OF SIGNALS ON GRAPH: AN APPLICATION TO GRAPH LEARNING
Stefania Colonnese (University of Rome La Sapienza, Italy), Giulio Pagliari (University of Rome La Sapienza, Italy), Mauro Biagi (University of Rome La Sapienza, Italy), Roberto Cusani (University of Rome La Sapienza, Italy), Gaetano Scarano (University of Rome La Sapienza, Italy)

COMPRESSIVELY SENSED IMAGE RECOGNITION
Mehmet Yamac (Tampere University of Technology, Finland), Aysen Degerli (Tampere University of Technology, Finland), Bulent Sankur (Bogazici University, Turkey), Moncef Gabbouj (Tampere University of Technology, Finland), Sinem Aslan (Department of Informatics, Systems and Communication, University of Milano-Bicocca, Italy)

Student posters, demos and industrial presentations (14:30-15:30, 28.11, Chair: Mykola Ponomarenko)

COMBINING DATA OBTAINED IN DIFFERENT ELECTROMAGNETIC RANGES
Evgeny Semenishchev (Don State Technical University, Russia), Viacheslav Voronin (Don State Technical University, Russia)

IMPROVED 3D-POSITION DETECTION BY HOLOGRAPHICAL POINT REPLICATION
Flavio Guerra (University of Stuttgart, Germany), Simon Hartlieb (University of Stuttgart, Germany), K. Hoppe (University of Stuttgart, Germany), Tobias Haist (University of Stuttgart, Germany), Wolfgang Osten (University of Stuttgart, Germany)

REAL TIME SYSTEM FOR FACIAL ANALYSIS
Janne Tommola (Tampere University of Technology, Finland), Pedram Ghazi (Tampere University of Technology, Finland), Bishwo Adhikari (Tampere University of Technology, Finland), and Heikki Huttunen (Tampere University of Technology, Finland)

VIDEO STABILIZATION: CHALLENGES, METHODS AND EVALUATION
Wilko Guilluy (Universit´e Paris 13, France), Laurent Oudre (Universit´e Paris 13, France), Azeddine Beghdadi (Universit´e Paris 13, France)

SINGLE EXPOSURE LENSLESS PHASE IMAGING
Péter Kocsis (Tampere University of Technology, Finland), Igor Shevkunov (Tampere University of Technology, Finland), Vladimir Katkovnik (Tampere University of Technology, Finland), Karen Egiazarian (Tampere University of Technology, Finland)

UNSUPERVISED APPROACH TOWARDS VISUAL SALIENCY MODELLING
Homapriya Tarigopula (The University of Edinburgh, United Kingdom), Beren Millidge (The University of Edinburgh, United Kingdom), Richard Shillcock (The University of Edinburgh, United Kingdom)

COLOR IMAGE DENOISING BASED ON CASCADED CNN AND NONLOCAL FILTERS
Cristovao Cruz (Noiseless Imaging Ltd, Finland), Alessandro Foi (Tampere University of Technology, Finland), Vladimir Katkovnik (Tampere University of Technology, Finland), Karen Egiazarian (Tampere University of Technology, Finland)

COMPRESSION OF POINT CLOUD GEOMETRY WITH RANDOM ACCESS
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REAL-TIME 3D IMAGING SYSTEM OPERATING IN LOW-SENSING MODE
Mihail Georgiev (Tampere University of Technology, Finland), Atanas Gotchev (Tampere University of Technology, Finland)

HYPERSPECTRAL DATA DENOISING FOR TERAHERTZ PULSE TIME-DOMAIN HOLOGRAPHY
Maksim Kulya (ITMO University, Russia), Nikolay Petrov (ITMO University, Russia), Karen Egiazarian (Tampere University of Technology, Finland), Vladimir Katkovnik (Tampere University of Technology, Finland)

RECORDING AND DIGITAL HOLOGRAPHIC ANALYSIS OF COMPLEX SUPERIMPOSED GRATINGS
Cazac Veronica (Tampere University of Technology, Finland), Meshalkin Alexey (Institute of Applied Physics, Moldova), Loshmanschii Constantin (Institute of Applied Physics, Moldova), Abaskin Vladimir (Institute of Applied Physics, Moldova), Achimova Elena (Institute of Applied Physics, Moldova)