Paper Schedule by Day/Time

Monday, January 30, 2017

8:50 am

AVM-009   Architectures for automated driving *(Weast)*

COIMG-453   Deep neural networks for synchrotron X-ray imaging *(Yang)*

DPMI-063   Stabilized high-speed video from camera arrays *(El Choubassi)*

IQSP-218   Blind image quality assessment using multiscale local binary patterns (JIST-first) *(Garcia Freitas)*

MWSF-316   The nimble challenges for media forensics *(Phillips)*

SD&A-353   Expert viewers' preferences for higher frame rate 3D film (JIST-first) *(Allison)*

9:10 am

COIMG-415   Synchrotron x-ray diffraction dynamic sampling for protein crystal centering *(Simpson)*

DPMI-064   Panoramic background estimation from RGB-D videos *(Bampis)*

HVEI-111   Vision at a glance (Invited) *(Rosenholtz)*

IQSP-219   Dimension reduction-based attributes selection in no-reference learning-based image quality algorithms *(Charrier)*

SD&A-354   Investigating aircrew depth perception standards using a stereoscopic simulation environment *(Winterbottom)*

9:30 am

COIMG-416   An iterative method to estimate and recover systematic and random errors in grating based x-ray phase contrast imaging *(Lim)*

DPMI-065   Accurate measurement of point to point distances in 3D camera images *(Seshadrinathan)*

IQSP-220   GPGPU based implementation of a high performing No Reference (NR)- IQA algorithm, BLIINDS-II *(Yadav)*

SD&A-355   Estimation of altitude in stereoscopic-3D versus 2D real-world scenes *(Deas)*

9:40 am

CVAS-342   Virtual tracking shots for sports analysis *(Bennett)*

9:50 am

AVM-010   3D Perception: multi-camera embedded structure-from-motion prototype for real-time mapping *(Mueller)*

COIMG-417   A model based neuron detection approach using sparse location priors *(Majee)*

DPMI-066   A novel framework for fast MRF optimization *(Somanath)*

IQSP-221   No-reference image contrast assessment based on just-noticeable-difference *(Kim)*

SD&A-356   Study of objective parameters of 3D visual fatigue based on analysis of salient area *(Du)*

10:00 am

CVAS-343   Aerodynamic analysis via foreground segmentation *(Carey)*

10:10 am

AVM-451   Measuring MTF with wedges: Pitfalls and best practices *(Koren)*

COIMG-449   Multi-resolution Data Fusion (MDF) for computational electron microscopy *(Sreehari)*

10:30 am

HVEI-112   Eidolons: Effects of capricious local sign (Invited) *(Koenderink)*

MWSF-317   Embedding information into objects fabricated with 3-D printers by forming fine cavities inside them *(Suzuki)*

10:50 am

AVM-012   Free-view multi-camera visualization and harmonization for automotive systems *(Zlokolica)*

COIMG-418   High spatial resolution detection method for point light source in scintillator *(Xu)*

CVAS-344   Goal! Event detection in sports video *(Tsagkatakis)*

DPMI-067   Heterogeneous computational imaging *(Pulli)*

IQSP-222   How to use video quality metrics for something other than video compression *(Kokaram)*

MAAP-273   Comparison between angularly and spectrally resolved gloss measurements with gloss measurements carried out on a national reference goniometer for gloss calibration *(Charriere)*

SD&A-357   Architectures and codecs for real-time light field streaming (JIST-first) *(Kovács)*

VIPC-398   A fast TU mode decision algorithm based on residual difference for HEVC *(Li)*

10:55 am

MWSF-319   High-capacity reversible data hiding in encrypted images using MSB prediction *(Puteaux)*

11:00 am

HVEI-113   Careful methods and measurements for comparisons between men and machines (Invited) *(Wichmann)*

11:10 am

AVM-013   Accelerated stereo matching for autonomous vehicles using upright pinhole camera model *(Chen)*

COIMG-419   A randomized approach to reduce metal artifacts in x-ray computed tomography *(Castañón)*

CVAS-345   Pose estimation for deriving kinematic parameters of competitive swimmers *(Zecha)*

MAAP-274   A normal vector and BTF profile measurement system using a correlation camera and scanning dome illumination *(Kimachi)*

SD&A-358   Wide viewing angle projection-type integral 3D display system with multiple UHD projectors *(Watanabe)*

VIPC-399   A fast intra mode decision algorithm for HEVC *(Liao)*

11:20 am

MWSF-320   The A Priori knowledge based secure payload estimation for additive model *(Ma)*

11:30 am

AVM-014   Perspectively correct bird's views using stereo vision, Christian Fuchs and Dietrich Paulus, University of Koblenz-Landau *(Germany)*

COIMG-420   Joint segmentation and material recognition in dual-energy CT images *(Castañón)*

CVAS-346   Comparison of a virtual game-day experience on varying devices *(Miller)*

DPMI-068   Is there a multi-camera future? (Invited) *(Macmillan)*

HVEI-114   Perceptual and engineering implications of cascaded gain control models (Invited) *(Simoncelli)*

IQSP-223   MS-UNIQUE: Multi-model and sharpness-weighted unsupervised image quality estimation *(Prabhushankar)*

MAAP-275   Polarimetric multispectral bidirectional reflectance distribution function measurements using a Fourier transform instrument *(Boher)*

SD&A-359   A novel hardware based method for multiview glassless 3D display *(Chen)*

VIPC-400   Diamond frequency domain inter frame motion estimation for HEVC *(Abdelazim)*

11:50 am

AVM-015   A sense and avoid algorithm using surround stereo vision for drones *(Godaliyadda)*

COIMG-421   MultiGPU acceleration of branchless distance driven projection and backprojection for Clinical Helical CT (JIST-first) *(Mitra)*

CVAS-347   Digital playbook – A teaching tool for American football *(Vorstandlechner)*

DPMI-069   Capturing light field video for 6-DOF VR playback (Invited) *(Jiang)*

IQSP-224   Microarchitectural analysis of a GPU implementation of the most apparent distortion image quality assessment algorithm *(Kannan)*

MAAP-276   Optimal LED selection for multispectral lighting reproduction *(LeGendre)*

SD&A-360   Multilevel light modulation of three-dimensional magneto-optic spatial light modulator using optically addressing method *(Nakamura)*

VIPC-401   Compression of infrared images *(Mantel)*

12:00 pm

HVEI-116   Emerging visual representations in deep learning networks (Invited) *(Oliva)*

12:10 pm

AVM-011   Real-time flight altitude estimation using phase correlation with gram polynomial decimation *(Badshah)*

COIMG-422   Fast and robust discrete computational imaging *(Tuysuzoglu)*

DPMI-070   Representation and compression for cinematic VR (Invited) *(Lakshman)*

IQSP-225   Image quality assessment by comparing CNN features between images (JIST-first) *(Ali Amirshahi)*

SD&A-361   Integral three-dimensional display with high image quality using multiple flat-panel displays *(Okaichi)*

VIPC-402   Graph regularized sparse coding by modified online dictionary learning *(Sha)*

2:00 pm

PLENARY   Giga-scale 3D computational microscopy *(Waller)*

3:30 pm

AVM-016   Needs and challenges analysis for reference architectures in autonomous systems *(Zander)*

COIMG-423   Linear mapping based inverse tone mapping *(Kim)*

CVAS-348   Automated sports broadcasting *(Carr)*

DPMI-071   Quantifying the luminance ratio of interior and exterior scenes: Challenges and tradeoffs in definitions, current standards, measurement methodologies and instrumentation, capturing capabilities of digital cameras, effects of veiling glare *(Voltolini de Azambuja)*

HVEI-117   Movies and meaning: From low-level features to mind reading (Invited) *(Benini)*

IQSP-226   Potential contrast – A new image quality measure *(Shaus)*

MAAP-288   Modeling and reproducing effect paints *(Meyer)*

MWSF-321   Benefits of combining forensic image creation and file carving *(Steinebach)*

SD&A-362   Stereoscopic displays, tracking, interaction, education, and the web *(Chavez)*

VIPC-403   A coarse-to-fine framework for video object segmentation *(Zhang)*

3:50 pm

COIMG-424   Performance of the 14 skin-colored patches to accurately estimate the human skin *(Choi)*

DPMI-072   Sensitivity analysis applied to ISO recommended camera color calibration methods to determine how much of an advantage, if any, does spectral characterization of the camera offer over the chart-based approach *(Sampat)*

IQSP-227   Observer calibrator for color vision research *(Zhou)*

MAAP-289   How to design a recto-verso print displaying different images in various everyday-life lighting conditions *(Dalloz)*

VIPC-404   A fast and accurate segmentation method for medical images *(Wu)*

3:55 pm

MWSF-322   Codec-embedded MP3 partial encryption for DRM *(Steinebach)*

4:10 pm

COIMG-425   Skin-representative region in a face for finding true skin color *(Suk)*

DPMI-073   Perceptual optimization driven by image quality metrics (Invited) *(Wang)*

IQSP-228   Knowledge based taxonomic scheme for full reference objective image quality measurement models (JIST-first) *(Lahoulou)*

MAAP-290   Appearance decomposition and reconstruction of textured fluorescent objects *(Tominaga)*

VIPC-405   Adaptive combination of local motion, appearance, and shape for video segmentation (JIST-first) *(Lee)*

4:20 pm

HVEI-119   On the role of color in visual saliency *(Etchebehere)*

MWSF-323   How to recompress a JPEG crypto-compressed image? *(Itier)*

4:30 pm

AVM-017   Enabling functional safety ASIL compliance for autonomous driving software systems *(Chitnis)*

DPMI-074   Looming challenges in mobile imaging quality: New technologies and new markets (Invited) *(Cardinal)*

IQSP-229   A RGB-NIR data set for evaluating dehazing algorithms *(Lüthen)*

MAAP-291   Assessing the proper color of translucent materials by an extended two-flux model from measurements based on an integrating sphere *(Simonot)*

Tuesday, January 31, 2017

8:50 am

AVM-018   Common themes in autonomous navigation on earth and in space *(Matthies)*

COIMG-454   Atomistic simulations of interface characteristics in materials systems *(Rickman)*

COLOR-026   Wide-gamut mobile-device displays: Gamut-mapping and color enhancement challenges *(Safaee-Rad)*

HVEI-378   Depth-compressed expression for providing natural, visual experiences with integral 3D displays *(Sawahata)*

IPAS-197   Compressed sensing MRI using curvelet sparsity and nonlocal total variation *(Pour Yazdanpanah)*

IQSP-249   Towards the development of the IEEE P1858 CPIQ standard – A validation study *(Jin)*

MWSF-324   Pre-training via fitting deep neural network to rich-model features extraction procedure and its effect on deep learning for steganalysis *(Zeng)*

VIPC-406   Improvement of infrared image based on directional anisotropic wavelet transform *(Jin)*

9:00 am

SRV-349   Traffic light recognition and dangerous driving events detection from surveillance video of vehicle camera *(Guan)*

9:10 am

COIMG-426   A phase-coded aperture camera with programmable optics *(Chen)*

COLOR-027   Methods of defining a gamut boundary based on a face/vertex encoding *(Green)*

HVEI-379   Blind quality prediction of stereoscopic 3D images *(Wang)*

IPAS-198   Brand detection framework in LG wavelet domain *(Mangiatordi)*

MAAP-282   Graininess appearance of goniochromatic samples in lighting cabinets *(Iacomussi)*

VIPC-407   New diamond half-pel hexagon serach algorithm for block matching motion estimation *(Abdelazim)*

9:15 am

MWSF-325   Histogram layer, moving convolutional neural networks towards feature-based steganalysis *(Sedighianaraki)*

9:20 am

IQSP-250   A methodology for perceptual image quality assessment of smartphone cameras – color quality *(Farnand)*

SRV-350   A combined HOG and deep convolution network cascade for pedestrian detection *(Lipetski)*

9:30 am

COIMG-427   Wavefront correction using self-interference incoherent digital holography *(Bang)*

COLOR-028   Gamut mapping in RGB colour spaces with the iterative ratios diffusion algorithm *(Farup)*

IPAS-199   Texture representations in different basis functions for image synthesis using system criteria analysis *(Voronin)*

MAAP-283   Measurement and evaluation method of orange peel *(Sone)*

SD&A-380   Pseudo-haptic by stereoscopic images and effects on muscular activity *(Kawai)*

VIPC-408   Self-example-based edge enhancement algorithm for around view monitor images *(Choi)*

9:40 am

IQSP-251   Assessing the ability of simulated laboratory scenes to predict the image quality performance of HDR captures (and rendering) of exterior scenes using mobile phone cameras. *(Spooner)*

MWSF-326   Model based steganography with precover *(Denemark)*

SRV-352   A multi-scale approach to skin pixel detection *(Roheda)*

9:50 am

AVM-019   Milpet – The self-driving wheelchair *(Echefu)*

COIMG-428   Non-iterative image reconstruction for single photon image sensors *(Chan)*

COLOR-029   Checklist for daltonization methods: Requirements and characteristics of a good recoloring method *(Simon-Liedtke)*

IPAS-200   2-D octonion discrete fourier transform: Fast algorithms *(Grigoryan)*

MAAP-284   Enhanced RTI for gloss reproduction *(Fornaro)*

SD&A-381   The effects of proximity cues on visual comfort when viewing stereoscopic contents (JIST-first) *(Xie)*

VIPC-409   Adaptive multireference prediction using a symmetric framework *(Liu)*

10:00 am

SRV-351   Detecting and estimating sound events locations through a microphone array *(Martínez-García)*

10:10 am

COLOR-030   On the edge: A scalable daltonization method focusing on color contrasts and color edges *(Simon-Liedtke)*

10:30 am

MWSF-327   A preliminary study on convolutional neural networks for camera model identification *(Bondi)*

10:40 am

AVM-020   Efficient pre-processor for CNN *(Mody)*

HVEI-120   Interactions between saliency and utility *(Scott)*

10:50 am

COIMG-429   Single image super-interpolation using adjusted self-exemplars *(Kim)*

COLOR-033   Estimating appearance differences of 3D objects with an RGB camera *(Sun)*

IPAS-201   Artifact suppression in compressed images using residual-based deep convolutional network *(Nam)*

IQSP-253   Characterization of entire imaging plane spatial frequency response *(Lenchenkov)*

MAAP-285   Consistent tool-independent virtual material appearance *(Guarnera)*

SD&A-363   See-through projection 3D display using time-division multiplexing *(Kajimoto)*

VIPC-411   Semi-supervised learning feature representation for historical Chinese character recognition *(Yu)*

10:55 am

MWSF-328   Design principles of convolutional neural networks for multimedia forensics *(Bayar)*

11:00 am

AVM-021   Free-space detection with self-supervised and online trained fully convolutional networks *(Sanberg)*

HVEI-121   Perceptual evaluation of psychovisual rate-distortion enhancement in video coding *(Duanmu)*

11:10 am

COIMG-430   Temporal super-resolution for time domain continuous imaging *(Dietz)*

COLOR-034   A metric for the evaluation of color perceptual smoothness *(Marchessoux)*

IPAS-202   Full-reference metrics multidistortional analysis *(Ieremeiev)*

IQSP-254   Reverse-projection method for measuring camera MTF *(Birchfield)*

MAAP-286   Interactive object surface retexturing using perceptual quality indexes *(Hirai)*

SD&A-364   Flat autostereoscopic 3D display with enhanced resolution using a static color filter barrier *(Jurk)*

VIPC-412   Document image classification on the basis of layout information *(Zavalishin)*

11:20 am

AVM-022   Motion estimation using visual odometry and deep learning localization *(Bag)*

HVEI-122   Balancing Type I errors and statistical power in video quality assessment *(Brunnstrom)*

MWSF-329 — Image recapturing detection with convolutional and recurrent neural network *(Li)*

11:30 am

COIMG-431 — Edge-aware light-field flow for depth estimation and occlusion detection *(Zhou)*

COLOR-035 — Towards a perceptually-motivated color space for high dynamic range imaging *(Abebe)*

IPAS-203 — ICA-based background subtraction method for an FPGA-SoC *(Carrizosa-Corral)*

IQSP-255 — Texture MTF from images of natural scenes *(Branca)*

SD&A-365 — Portrait and landscape mode convertible stereoscopic display using parallax barriers *(Minami)*

11:40 am

AVM-023 — Deep reinforcement learning framework for autonomous driving *(El Sallab)*

HVEI-123 — On the perceptual factors underlying the quality of post-compression enhancement of textures *(Yaacob)*

11:45 am

MWSF-330 — Autoencoder with recurrent neural networks for video forgery detection *(D'Avino)*

11:50 am

COIMG-432 — Evaluating age estimation using deep convolutional neural nets *(Belver)*

DPMI-256 — Camera phone texture preservation measurements with modulation transfer function: An alternative approach for noise estimation of random texture chart images *(Suresh)*

IPAS-204 — A robust line segmentation for Arabic printed text with diacritics *(Mohammad)*

SD&A-366 — Digital holographic display with two-dimensional and three-dimensional convertible feature by high speed switchable diffuser *(Hong)*

12:00 pm

AVM-024 — Automatic glare detection via photometric, geometric, and global positioning information *(Andalibi)*

HVEI-124 — Do gaze disruptions indicate the perceived quality of non-uniformly coded natural scenes? *(Rai)*

12:10 pm

COIMG-452 — 3-D Shape recovery from real images using a symmetry prior *(Jayadevan)*

IQSP-257 — The effects of misregistration on the dead leaves cross-correlation texture blur analysis *(Burada)*

SD&A-382 — A low-cost static volumetric display based on layered high incidence angle scattering *(Frayne)*

12:20 pm

AVM-025 — Pose estimation from rigid face landmarks for driver monitoring systems *(Shankar)*

HVEI-125 — Subjective evaluation of distortions in first-person videos *(Bai)*

2:00 pm

PLENARY — VR 2.0: Making virtual reality better than reality *(Wetzstein)*

3:30 pm

COIMG-433 — Augmenting salient foreground detection using Fiedler vector for multi-object segmentation *(Kucer)*

COLOR-036 — Color discrimination threshold for medical test devices *(Hassani)*

DPMI-083 — BM3D-HVS: Content-adaptive denoising for improved visual quality (Invited) *(Egiazarian)*

HVEI-126 — Image and video compression for mobile: Is my screen small enough? (Invited) *(Delp)*

IQSP-230 — Towards a quantitative evaluation of multi-imaging systems *(Vlachomitrou)*

MAAP-277 — The future of material communication via the Appearance Exchange Format (AxF) *(Ellens)*

MWSF-339 — PRNU in practice *(Bruehs)*

SD&A-367 — Real time depth estimation method using hybrid camera system *(Baek)*

3:40 pm

HVEI-127 — Business perspectives on perceptually lossless and lossy quality (Invited) *(Daly)*

3:50 pm

COIMG-434 — Non-destructive localization of overpaintings in Byzantine miniature illuminations *(Psarrou)*

COLOR-037 — Content-dependent adaptation in a soft proof matching experiment *(High)*

HVEI-128 — Usage perspectives on perceptually lossless and lossy quality and assessment (Invited) *(Corriveau)*

IPAS-084 — Refining raw pixel values using a value error model to drive texture synthesis *(Dietz)*

IQSP-231 — Resolution enhancement through superimposition of projected images: An evaluation of the image quality *(Hansen)*

SD&A-368 — Pixel based adaptive normalized cross correlation for illumination invariant stereo matching *(Chang)*

4:00 pm

HVEI-129 — Subjective assessment and the criteria for visually lossless compression (Invited) *(Wilcox)*

4:10 pm

COIMG-435 — Computing height and width of in situ sorghum plants using 2.5d infrared images *(Baharav)*

COLOR-038	Comparisons of measures of blurriness in transparent displays *(Yang)*
HVEI-130	Masked detection of compression artifacts on laboratory, consumer, and mobile displays (Invited) *(Zhang)*
IPAS-085	Color interpolation based on colorization for RGB-white color filter array *(Oh)*
IQSP-232	Evaluation of major factors affecting spatial resolution of gamma-rays camera *(Xie)*
MAAP-278	Material with visual effects: Study of the gonioapparency of the anodized titanium *(Cridling)*
SD&A-369	Guide image filtering based disparity range control in stereo vision *(Mun)*

4:20 pm

HVEI-131	Industry and business perspectives on the distinctions between visually lossless and lossy video quality: Mobile and large format displays (Invited) *(Brunnstrom)*

4:30 pm

COIMG-436	Non-parametric texture synthesis using texture classification *(Ziga)*
COLOR-039	The smallest projection optics for the vertical shaped ultra short throw projector *(Takano)*
IPAS-086	Video frame synthesizing method for HDR video capturing system with four image sensors *(Yamashita)*
IQSP-233	Development and image quality evaluation of 8K high dynamic range cameras with hybrid log-gamma *(Funatsu)*
MAAP-279	Adapted modulation transfer function method for characterization and improvement of 2.5D printing. *(PAGE)*

4:50 pm

COIMG-437	On-the-fly performance evaluation of large-scale fiber tracking *(Yu)*
COLOR-040	Pareto optimality in primary selection for multiprimary displays *(Xie)*
DPMI-088	Robust defect pixel detection and correction for Bayer Imaging Systems *(El-Yamany)*
IQSP-234	Detection of streaks caused by dust in the sheetfed scanners *(Kenzhebalin)*
MAAP-280	Evaluating an image based multi-angle measurement setup using different reflection models *(Sole)*

5:10 pm

COIMG-438	Point cloud based approach to biomass feature extraction *(Jin)*
IQSP-235	Effect of dark current distribution on image quality *(Skorka)*
MAAP-281	*Model-based skin pigment cartography by high-resolution hyperspectral imaging (JIST-first) (Seroul)*

Wednesday, February 1, 2017

8:50 am

COLOR-041	Color halftoning based on Neugebauer Primary Area Coverage *(Jiang)*
HVEI-132	Orientation-ocularity maps: A technique for computer vision *(Restrepo)*
IMSE-077	Bayer pattern and image quality *(Kunze)*
IPAS-205	Water region extraction in thermal and RGB sequences using spatiotemporally-oriented energy features *(Ghahremani)*
IRIACV-258	Efficient visual loop closure detection via moment based global image descriptors *(Erhan)*
MOBMU-292	Introduction to WLAN-fingerprinting based indoor localization *(Akopian)*
MWSF-331	Videos versus still images: Asymmetric sensor pattern noise comparison on mobile phones *(Galdi)*
SD&A-340	Sharpness mismatch and 6 other stereoscopic artifacts measured on 10 Chinese S3D movies *(Vatolin)*

9:10 am

COLOR-042	Color halftoning based on multi-stage, multi-pass, clustered-DBS *(Xi)*
ERVR-089	Oculus rift with stereo camera for augmented reality medical intubation training *(Lim)*
HVEI-133	Evaluation of color prediction methods in terms of least dissimilar asymmetric matching *(Roshan)*
IMAWM-157	The internet on things: Delivering augmented reality experiences in context *(Gormish)*
IPAS-206	Cloud and shadow detection using sequential characteristics on multi-spectral satellite images *(Groot)*
IQSP-238	Feature ranking and selection used in a machine learning framework for predicting uniformity of printed pages *(Nguyen)*
IRIACV-259	Real-time mobile robot navigation based on stereo vision and low-cost GPS *(Hong)*
MOBMU-299	Android door and window image based measurements *(Mohammad)*
SD&A-370	Bringing 3DMap to the 21st century *(Keith)*

9:15 am

MWSF-332	Linear filter kernel estimation based on digital camera sensor noise *(Liu)*

9:30 am

COLOR-43	On large local error accumulation in multilevel error diffusion (JIST-first) *(Eschbach)*
ERVR-090	Virtual reality instructional modules in education based on gaming metaphor *(Sharma)*

HVEI-134	Characterization of spatiotemporal fluctuation in absorbed light energy by an array of interleaved photosensitive elements *(Peyvandi)*
IMSE-078	Accurate joint geometric camera calibration of visible and far-infrared cameras *(Shibata)*
IPAS-207	Thermal facial signatures for state assessment during deception *(Powar)*
IQSP-239	Real-time print quality diagnostics *(Xiao)*
IRIACV-260	The acceleration effect to the perception of velocity difference in passive elbow flexion movement *(Akatsuka)*
MOBMU-293	Usability of smart mobile micro photonic sensor systems for industrial and non-industrial quality assurance *(Dittrich)*
SD&A-371	Subjective and objective study of the relation between 3D and 2D views based on depth and bit rate *(Appina)*

9:40 am

MWSF-333	PRNU-based forgery detection with discriminative random fields *(Chakraborty)*

9:50 am

COLOR-044	Edge-preserving error diffusion for multi-toning based on dual quantization *(Kiyotomo)*
DPMI-079	Interferometric measurement of sensor MTF and crosstalk *(Georgiev)*
ERVR-092	Drawing towards virtual reality *(Dolinsky)*
HVEI-135	Robust dynamic range computation for high dynamic range content *(Hulusic)*
IPAS-208	Face spoofing detection based on local binary descriptors *(Tsai)*
IRIACV-261	Targeted intelligent autonomous robotics contest: The European Roboathlon *(Röning)*
MOBMU-294	Blackmagic production camera raw color investigation by spectral analysis of Macbeth color charts *(Hasche)*
SD&A-373	Improved depth of field analysis of multilayer displays *(Gotoda)*

10:10 am

MOBMU-295	Liquid crystal lens characterization for integrated depth sensing and all in focus imaging application *(Emberger)*

10:30 am

HVEI-136	GPU-accelerated vision modeling with the HPE cognitive computing toolkit (Invited) *(Chandler)*
MWSF-335	Sensitivity of different correlation measures to print-and-scan process *(Tkachenko)*

10:50 am

COLOR-045	Selecting best ink color for sparse watermark *(Reed)*
DPMI-080	Silicon retina technology (Invited) *(Delbruck)*

ERVR-093	The Destiny-class CyberCANOE- a surround screen, stereoscopic, cyber-enabled collaboration analysis navigation and observation environment *(Kawano)*
IMAWM-158	MS-Celeb-1M: A review of large-scale face recognition (Invited) *(Guo)*
IPAS-209	Real-time estimation of the 3D transformation between images with large viewpoint differences in cluttered environments *(van de Wouw)*
IQSP-240	UHD quality analyses at various viewing conditions *(Lee)*
IRIACV-262	Application of big data analytics for recognition of microbial colonies from hyperspectral images *(Yoon)*
SD&A-374	Stereo rendering of photorealistic precipitation *(Hussain)*

10:55 am

MWSF-336	Scalable processing history detector for JPEG images *(Boroumand)*

11:00 am

HVEI-137	A neurally-inspired algorithm for detecting ordinal depth from motion signals in video streams (Invited) *(Livitz)*
MOBMU-296	High quality virtual lighting using image-based-lighting and projection onto meshes generated from Lidar and SfM Point Clouds *(Hasche)*

11:10 am

COLOR-046	Page classification for print imaging pipeline *(Xu)*
ERVR-094	CAVE versus head-mounted displays: On-going thoughts *(Mestre)*
IPAS-210	Camera-to-model back-raycasting for extraction of RGBD images from pointclouds *(Javan Hemmat)*
IQSP-241	Image quality assessment for holographic display *(Seo)*
IRIACV-263	Weaving pattern recognition of ancient Chinese textiles by regular bands analysis *(Chan)*
SD&A-372	Utilization of stereoscopic 3D images in elementary school social studies classes *(Shibata)*

11:20 am

MOBMU-297	A billion words to remember *(Nagy)*
MWSF-337	Deciphering severely degraded license plates *(Agarwal)*

11:30 am

COLOR-047	Indirect periodic disturbance compensator using feedforward control for image noises *(Kaneko)*
DPMI-081	TIK: A time domain continuous imaging testbed using conventional still images and video *(Dietz)*
ERVR-095	Distributed rendering using NVIDIA OptiX *(McCarthy)*
HVEI-138	Computational estimation of scene structure through texture gradient cues (Invited) *(Tyler)*

IMAWM-159   Evaluation of Hadoop and HPCC for multimedia big data analysis *(Chinta)*

IPAS-212   Depth image object extraction approach based on improved fractal dimension *(Cao)*

IQSP-242   Subjective viewer preference model for automatic HDR down conversion *(Lenzen)*

IRIACV-264   Finding a needle in a haystack: Recognizing surgical instruments through vision and manipulation *(Zhou)*

SD&A-375   360° 3D capture: Meeting the need in VR *(Macmillan)*

11:40 am

MOBMU-298   Demographic prediction based on mobile user data *(Podoynitsina)*

11:45 am

MWSF-338   PCB surface fingerprints based counterfeit detection of electronic devices *(Iqbal)*

11:50 am

COLOR-048   3D halftoning *(Mao)*

ERVR-096   Laser illuminated projectors and the technological advancements brought forth to immersive environments *(Rains)*

IMAWM-160   Creating the world's largest real-time camera network *(Dailey)*

IMSE-082   CMOS image sensor pixel design and optimization *(Fowler)*

IQSP-243   A foveated just noticeable difference model for virtual reality *(Deng)*

IRIACV-265   Automatic detection of plant roots in multispectral images *(Srinivas)*

12:00 pm

HVEI-139   Learning visual representations for active perception (Invited) *(Olshausen)*

MOBMU-300   Optimizing video transmission for mobile devices *(Lee)*

12:10 pm

ERVR-097   New VR navigation techniques to reduce cybersickness *(Kemeny)*

IMAWM-161   Multimedia instant messaging with real-time attribute-based encryption *(Pan)*

IRIACV-266   Education in industrial machine vision in Upper Austria University of Applied Sciences (bachelor/master) with respect to the needs by the European industry and automation engineering *(Niel)*

12:20 pm

MOBMU-308   Comparative visualization of the geometry of a hollow box girder using 3D-LiDAR – Part 2: Reconstruction of a 3D geometric model *(Maack)*

2:00 pm

PLENARY   Designing VR video camera systems *(Cabral)*

3:30 pm

COLOR-049   What makes hue special? *(Farup)*

HVEI-140   Simulation of the biological information available for relative position acuity *(Jiang)*

IMAWM-162   Distracted driver detection: Deep learning vs handcrafted features *(Hssayeni)*

IMSE-178   High sensitivity and high readout speed electron beam detector using steep pn Junction Si diode for low acceleration voltage *(Koda)*

IQSP-244   A framework for auto-exposure subjective comparison *(Oh)*

IRIACV-267   Unsupervised video segmentation and its application to region-based local contrast enhancement *(Park)*

MOBMU-301   Investigation of three security relevant aspects of Android eHealth Apps - permissions, storage properties, and data transmission *(Knackmuss)*

SD&A-105   Designing a cloud-based 3D visualization engine for smart cities *(Holliman)*

VDA-383   Topological analysis at the extreme scale: Finding features in large data sets *(Weber)*

3:50 pm

COLOR-050   Revealing the Dark Ages – Imaging erased manuscripts *(Knox)*

HVEI-141   Can 'crispening' be explained by contrast gain? *(Kane)*

IMAWM-163   Logo recognition using data augmentation techniques *(Mas Montserrat)*

IMSE-179   A full-resolution 8K single-chip portable camera system *(Nakamura)*

IQSP-245   Autofocus measurement for imaging devices *(Robisson)*

IRIACV-268   High-precision 3D sensing with hybrid light field & photometric stereo approach in multi-line scan framework *(Antensteiner)*

MOBMU-302   Privacy issues in mobile health applications - Assessment of current Android Health Apps *(Hoppe)*

SD&A-106   Interactive computer graphics, stereo and VR practice at the Electronic Visualization Laboratory University of Illinois at Chicago *(Brown)*

4:10 pm

COLOR-051   Image quality for visually impaired? *(Triantaphillidou)*

ERVR-107   Designing at the Advanced Visualization Lab at Indiana University *(Dolinsky)*

HVEI-142   Defining self-similarity of images using features learned by convolutional neural networks *(Brachmann)*

IMAWM-164   Detection and characterization of Coordinate Measuring Machine (CMM) probes using deep networks for improved quality assurance of machine parts *(Nair)*

IMSE-180   Filter selection for multispectral imaging optimizing spectral, colorimetric and image quality *(Wang)*

IQSP-246   Auto Focus Performance – What can we expect from today's cameras? *(Artmann)*

IRIACV-269   Line-scan stereo using binary descriptor matching and regularization *(Štolc)*

MOBMU-303   A forensic mobile application designed for both steganalysis and steganography in digital images *(Li)*

4:30 pm

COLOR-052   Lights, camera, metameric failure *(Pines)*

ERVR-108   Exploring Calit2 *(Schulze)*

HVEI-143   Determining the influence of image-based cues on human skin gloss perception *(Wang)*

IMAWM-165   Robust head detection with CNN *(Chen)*

IMSE-181   The challenge of shot-noise limited speckle patterns statistical analysis *(Tualle)*

IQSP-247   Autofocus analysis: Latency and sharpness *(Passarella)*

IRIACV-270   Traffic Camera Dangerous Driver Detection (TCD3™): Contextually aware heuristic feature & OFA density-based computer vision with movement machine learning analysis of live streaming traffic camera footage to identify anomalous & dangerous driving *(Prasad)*

MOBMU-304   Pokemon Go – A forensic analysis *(Creutzburg)*

VDA-384   An interactive tool for Analyzing the Correlation, Uncertainty, and Clustering (ACUC) over ensembles in climate dataset *(Abedzadeh)*

4:36 pm

VDA-385   Analysis enhanced particle-based flow visualization *(Shi)*

4:42 pm

VDA-450   Constellations of movement: An interactive application to visualise research in motor imagery decoding *(Rogers)*

4:50 pm

COLOR-053   What we see and what we know: Partners in human vision *(McCann)*

HVEI-144   Writer identification in modern and historical documents via binary pixel patterns, Kolmogorov-Smirnov test and Fisher's method (JIST-first) *(Shaus)*

IMSE-182   Overview of machine vision standards *(Darmont)*

IRIACV-271   An in-situ defect detection system for Big Area Additive Manufacturing using laser profilometry *(Goin)*

MOBMU-305   Computation of equidistant curve for the image with blurred contours *(Semenishchev)*

SD&A-109   3D-Stereoscopic immersive analytics projects at Monash University and University of Konstanz *(Sommer)*

5:10 pm

HVEI-145   CNN-based transfer learning for historical Chinese seal character recognition based on artificial random samples *(Shang)*

IMSE-183   Hot pixel rate behavior as pixel sizes go to 1 micron *(Chapman)*

IRIACV-272   Outlier detection in large-scale traffic data by naïve bayes method and Gaussian mixture model method *(Lam)*

MOBMU-306   Prune the convolutional neural networks with Sparse Shrink *(Li)*

SD&A-110   Image distortions in large-scale immersive display systems – Cylinder and wedge displays *(Woods)*

5:20 pm

IMSE-184   Performance evaluation of the thick pinhole gamma rays diagnostic system *(Xie)*

5:30 pm

COIMG-439   Non-iterative joint demosaicing and super resolution framework *(Petrova)*

COIMG-440   Localized high dynamic range plenoptic image compression *(Chang)*

COIMG-441   Image-based age estimation: Comparing hand crafted and deep features *(Dornaika)*

COIMG-442   Compressive light field display using scattering polarizer *(Lee)*

COIMG-443   High-resolution image reconstruction for PET using local and non-local regularizations *(Ren)*

COIMG-444   3D reconstruction based multiple view depth generation using heterogeneous cameras *(Shin)*

COIMG-445   Deep convolutional neural networks for the classification of snapshot mosaic hyperspectral imagery *(Fotiadou)*

COIMG-446   Space-variant smoothing in median-regularized reconstruction for transmission tomography *(Jung)*

COIMG-447   A viewing direction control camera without mechanical motion based on computational imaging *(Teraya)*

COIMG-448   The human sclera and pupil as the calibration targets *(Choi)*

DPMI-075   A Canon hack development kit implementation of time domain continuous imaging *(Long)*

DPMI-076   Advanced HDR fusion method for image sensor with variable pixel exposure *(Uvarov)*

IPAS-087   Search the optimal border for combination of image pairs using neural networks *(Semenishchev)*

IPAS-211   Feature representation learning by rank ordered autoencoder for multi-camera person re-identification *(Makov)*

IPAS-213   Change detection from remote sensing images based on fractional integral and improved FCM *(Wang)*

IPAS-214	Non-blind image deconvolution using a sampling without replacement (Han)
IPAS-215	Alpha-rooting method of gray-scale image enhancement in the quaternion frequency domain (Grigoryan)
IPAS-217	What makes HDR the contents more realistic? Peak-luminance enhancement using the loading effect for OLED displays (Woo)
IQSP-236	Solid-mottle method for measuring in laser-printers (Ko)
IQSP-248	Estimation and compensation of reconstructed image in digital holographic display (Kim)
MOBMU-307	Automated segmentation of ophthalmological OCT images (Müller)
MOBMU-309	Concept for software-based configuration of the organizational and technical security of a company of arbitrary size (Möller)
MOBMU-310	Facilitated polling approach for SMS and IP messaging applications (Mahadik)
MOBMU-311	A multi-platform characterization of delays inherent in Message Queue Telemetry Transport (MQTT) communications. (Bendele)
MOBMU-312	Semi-automatic generation of multilingual lecture notes – Wikipedia books on different subjects in various languages (Creutzburg)
MOBMU-313	The strange world of keyloggers – An overview (Creutzburg)
MOBMU-314	The study of algorithms reducing the level of out-of-band radiation and inter carrier interference of the OFDM signal (Fedosov)
MOBMU-315	Two-tier state-machine programming for messaging applications (Morales)
SD&A-376	Analysis of retinal images for retinal projection type super multi-view 3D head-mounted display (Emoto)
SD&A-377	*A new design and algorithm for lenticular lenses display (de la Barré)*

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8:50 am

COLOR-054	Extraordinary perceptual color stability in low cost, real time color image compression inspired by structure tensor analysis (Lebowsky)
HVEI-146	Comparison of visual discomfort and visual fatigue between HMD and smartphone (Suk)
IMAWM-166	Analytics for body worn cameras (Invited) (Fan)
IMSE-185	Octagonal CMOS image sensor for endoscopic applications (Reis)
VDA-386	Declarative guide creation (Cottam)

9:10 am

3DIPM-001	A 3D mesh image quality metric based on features fusion (Chetouani)
COLOR-055	Sky color enhancement of photographic images (Zeng)
ERVR-098	VR journeys from the dark ages to a bright future (Dawe)
HVEI-147	Measuring visually induced motion sickness using wearable devices (Liu)
IMSE-186	Optimization of CMOS image sensor utilizing variable temporal multi-sampling partial transfer technique to achieve full-frame high dynamic range with superior low light and stop motion capability (Kabir)
VDA-387	Visual-interactive semi-supervised labeling of human motion capture data (Bernard)

9:30 am

3DIPM-002	3D blind mesh quality assessment index (Nouri)
COLOR-056	A novel colour hessian and its applications (Tahery)
HVEI-148	Developmental changes in ambient and focal visual processing strategies. (Krishna)
IMAWM-167	Click-based interactive segmentation with graph cut (Tai)
IMSE-187	A lateral electric field charge modulator with bipolar-gates for time-resolved imaging (Morikawa)
VDA-388	Visual-interactive creation and validation of text clustering workflows to explore document collections (Ruppert)

9:50 am

3DIPM-003	A magnifier on accurate depth jumps (Hach)
COLOR-057	A color image model with applications to denoising (Fuller)
HVEI-149	Gaze-contingent center-surround fusion of infrared images to facilitate visual search for human targets (JIST-first) (Glaholt)
IMAWM-168	Drone Detection by acoustic signature identification (Bernardini)

IMSE-188   A 128x128, 34μm pitch, 8.9mW, 190mK NETD, TECless Uncooled IR bolometer image sensor with columnwise processing *(Alacoque)*

VDA-389   AssisTag: Seamless integration of content-based and keyword-based image exploration for category search (JIST-first) *(Mizuno)*

10:10 am

ERVR-099   The Qlik Environment *(Margolis)*

HVEI-150   Evaluation and prediction of evoked emotions induced by image manipulations *(Yuan)*

IMAWM-169   Aesthetics of fashion photographs: Effect on user preferences *(Li)*

10:50 am

3DIPM-004   3D microscopic image construction using high dynamic range imaging *(Zheng)*

COLOR-058   Addressing the colorimetric redundancy in 11-ink color separation *(Nyström)*

ERVR-103   The Reality Wall: The aesthetics of reality disambiguation in AR/VR *(Lichty)*

IMAWM-170   Local boosted features for illumination invariant face recognition *(Essa)*

IMSE-189   Residual bulk image characterization using photon transfer techniques *(Crisp)*

VDA-390   Megacity: A collaborative virtual reality environment for emergency response, training, and decision making *(Sharma)*

11:00 am

HVEI-151   Measurement problems and measurement strategies for capturing the rich experience of art (Invited) *(Carbon)*

11:10 am

3DIPM-005   Digitized 3D mesh segmentation based on curvature analysis *(Gauthier)*

COLOR-059   Spectral band selection using a genetic algorithm based wiener filter estimation method for reconstruction of munsell spectral data *(Gouton)*

ERVR-104   Decoupling of real and digital content in projection based augmented reality systems using time multiplexed image capture (JIST-first) *(Soomro)*

IMAWM-171   High precision 3D reconstruction of the human face *(Wang)*

IMSE-190   RTS and photon shot noise reduction based on maximum likelihood estimate with multi-aperture optics and semi-photon-counting-level CMOS image sensors *(Ishida)*

VDA-391   Display systems for visualization and simulation in virtual environments *(Wischgoll)*

11:30 am

3DIPM-006   Small scale surface profile recovery using a tunable lens based system *(Angot-Petit)*

COLOR-060   Illumination and reflectance spectra separation of hyperspectral image data under multiple illumination conditions *(Chen)*

ERVR-100   A survey: Tools for human motion synthesis *(Yan)*

HVEI-152   The gist of beauty: An investigation of aesthetic perception in rapidly presented images (Invited) *(Mullin)*

IMAWM-172   Chromatic domain phase features with gradient and texture for efficient human detection *(Ragb)*

IMSE-191   Linearity analysis of a CMOS image sensor *(Wang)*

VDA-392   Ray traced volume clipping using multi-hit BVH Traversal *(Zellmann)*

11:50 am

COLOR-061   Multispectral face recognition using hybrid feature *(Gouton)*

ERVR-101   Exploring body gestures as natural user interface for flying in a virtual reality game with Kinect *(Tong)*

IMAWM-173   A real-time smile elegance detection system: A feature-level fusion and ranking SVM based approach *(Lin)*

IMSE-196   Automotive imaging *(Denny)*

VDA-393   Effectiveness of feature-driven storytelling in 3D time-varying data visualization (JIST-first) *(Lu)*

12:00 pm

HVEI-153   Gaze patterns in art viewing and their dependency on expertise and image characteristics (Invited) *(Fedorovskaya)*

12:10 pm

ERVR-102   Soft robotic glove for kinesthetic haptic feedback in virtual reality environments *(Jadhav)*

2:00 pm

3DIPM007   A comparison of stereo matching algorithms on multi-core digital signal processor platform *(Menant)*

COLOR-062   Interactive Workshop: How can color imaging provide us with powerful insights? *(Lebowsky)*

HVEI-154   Imaging human vision: An artistic perspective (Invited) *(Pepperell)*

IMAWM-174   MU, the ultra mobile visual analytic sensor for toys and IOTs *(Yu)*

IMSE-192   FPGA platform for testing a real-time tone-mapping algorithm based on a Mantissa-exponent representation *(Shahnovich)*

VDA-394   A visual and statistical benchmark of graph sampling methods *(Zhang)*

2:20 pm

3DIPM-008   Viewing angle enhancement of a real-time integral imaging system using multi-directional projections and GPU parallel processing *(Alam)*

IMAWM-175   An imaging approach to online progressive addition lens retrieval *(Li)*

IMSE-194   Fast, low-complex, non-contact motion encoder based on the NSIP concept *(Astrom)*

VDA-395   Inferring partial orders of nodes for hierarchical network layout (JIST-first) *(Wu)*

2:30 pm

HVEI-155   Art training matters: Enhancement of spatial cognition and brain connectivity (Invited) *(Likova)*

2:40 pm

IMAWM-176   Are mobile phones changing the order behavior and content for printed photo products? *(Fageth)*

IMSE-195   In the quest of vision-sensors-on-chip: Pre-processing sensors for data reduction *(Rodríguez-Vázquez)*

VDA-396   Closest point sparse octree for surface flow visualization *(Kim)*

3:00 pm

HVEI-156   Trading conversations between science and art: When musical improvisation enters the dialogue on stage (Invited) *(Lopez-Gonzalez)*

IMAWM-177   Texture re-rendering tool for re-mixing indoor scene images *(Liu)*

VDA-397   Accelerating advection via approximate block exterior flow maps *(Bleile)*