electronic IMAGING 2024
JANUARY

PAPER SCHEDULE BY DAY/TIME
as of Friday, January 19

Monday January 22

8:50 AM

(3DIA-100)	JIST-first: Camera Motion Estimation Method Using Depth-Normalized Criterion (Lee)	Grand Peninsula F **PROC / MCV**
(COIMG-117)	KEYNOTE: Image Restoration Through Inversion by Direct Iteration (InDI) (Delbracio)	Grand Peninsula C **MCV**
(IQSP-256)	KEYNOTE: Image Information Metrics from Slanted Edges: a Toolkit of Metrics to Aid Object Recognition, Machine Vision, and Artificial Intelligence Systems (Koren)	Grand Peninsula D **DNN / MCV**
(MLSI-293)	Probabilistic and Deterministic Inversions of Radiographic Data (Nadiga)	Grand Peninsula A **MED**
(MWSF-329)	DeepSync: Affine Transform Recovery via Convolutional Neural Networks for Watermark Synchronization (Chachlakis)	Grand Peninsula G **DNN**

9:05 AM

(SDA-344)	Optical Aberration Analysis of Light Field Displays: A Calibration Approach for Enhanced Performance (Zhang)	Grand Peninsula E **AR/VR**

9:10 AM

(3DIA-101)	A VGA Light-Tracing Time-of-Flight CMOS Image Sensor with Multi-Tap Pixel for Long-Range Outdoor Operations (Mars)	Grand Peninsula F
(MLSI-294)	Neural Network-based Analysis of Polychromatic PSFs for Wavelength-Specific Extraction (Shin)	Grand Peninsula A **DNN**

9:15 AM

(MWSF-330)	Captchas on Darknet Marketplaces: Overview and Automated Solvers (Yannikos)	Grand Peninsula G

9:20 AM

(COIMG-118)	Provable Probabilistic Imaging Using Score-Based Generative Priors (Sun)	Grand Peninsula C **DNN**

9:25 AM

(SDA-345)	Vergence-accommodation Conflict: Accommodation-enabled vs. Accommodation-invariant Near-eye Displays (Sahin)	Grand Peninsula E **AR/VR**

9:30 AM

(3DIA-102)	Extending Lidar Depth Range Using Stereo Estimation on Intensity Data (Taneski)	Grand Peninsula F **PROC**
(MLSI-295)	Density Reconstruction from Noisy Radiographs Using an Attention-based Transformer Network (Serino)	Grand Peninsula A **DNN / MED / MCV**

9:40 AM

(COIMG-119)	Transformers for Microscopy Slide Image Segmentation of Invasive Melanoma (Wang)	Grand Peninsula C **PROC / MED / MCV**
(MWSF-331)	Novel Watermarking and Scrambling for Convolution Neural Network Weights (Poddar)	Grand Peninsula G **DNN**

9:45 AM

(SDA-366)	Can Aliens See in 3D? (Woods)	Grand Peninsula E

9:50 AM

(3DIA-103)	A Deep Learning Based Light Field Image Compression as Pseudo Video Sequences with Additional in-loop Filtering (Takhtardeshir)	Grand Peninsula F **PROC / DNN**
(IQSP-257)	ISP Tuning for Improved Image Quality in Machine Vision (Geever)	Grand Peninsula D
(MLSI-296)	Parameter Estimation Using Physics-based Statistical Machine Learning for Radiography (De)	Grand Peninsula A **DNN / MED**

10:00 AM

(COIMG-120)	Generative Plug-and-Play: Posterior Sampling for Inverse Problems (Buzzard)	Grand Peninsula C

10:10 AM

(MLSI-297)	Scatter Removal in Dynamic X-Ray Tomography Using Robust Features (Gautam)	Grand Peninsula A

10:40 AM

(3DIA-104)	Data Augmentation Based on Depth Information for Neural Radiance Fields (Khosroshahi)	Grand Peninsula F **DNN / MCV**
(AVM-107)	Evaluation of Signal and Noise Metrics of High Dynamic Range Image Sensors by IEEE P2020 Methodology (Skorka)	Grand Peninsula D **HDR**
(COIMG-121)	KEYNOTE: Efficient Neural Scene Representation, Rendering, and Generation (Wetzstein)	Grand Peninsula C **DNN / MCV**
(HVEI-200)	KEYNOTE: S(t)imulating Art and Science: György Kepes and the Concept of "Interseeing" (Orosz)	Grand Peninsula B
(MLSI-298)	Supervised Reconstruction for Silhouette Tomography (Bell)	Grand Peninsula A **MED**
(MWSF-332)	One Detector to Rule Them All? On the Robustness and Generalizability of Current State-of-the-Art Deepfake Detection Methods (Frick)	Grand Peninsula G **DNN / MCV**
(SDA-346)	4k Stereoscopic Visualization of Robotic Microsurgery in Vascularized Free Tissue Transfer for Head and Neck Reconstruction (Ilgner)	Grand Peninsula E **MED**

PAPER SCHEDULE BY DAY/TIME

11:00 AM

(3DIA-105) N-DEPTH: Neural Depth Encoding for Compression-Resilient 3D Transmission (Siemonsma) — Grand Peninsula F **DNN**

(MLSI-299) Breast Ultrasound Report Generation using LangChain (Huh) — Grand Peninsula A **DNN / MED**

(SDA-347) Manipulating Viewing Distance and Camera Toe-in in a Stereoscopic Remote Vision System (O'Keef) — Grand Peninsula E

11:05 AM

(MWSF-333) Improving Video Deepfake Detection: A DCT-Based Approach with Patch-Level Analysis (Guarnera) — Grand Peninsula G **PROC / DNN / MCV**

11:10 AM

(AVM-108) Measurement of Noise Equivalent Quanta (NEQ) Using the Deadleaves Technique (Jenkin) — Grand Peninsula D

(COIMG-122) Dark Secrets of Computational Imaging (Waller) — Grand Peninsula C

11:20 AM

(MLSI-300) Swap-Net: A Memory-Efficient 2.5D Cascade Network for 3D Image Reconstruction (Xu) — Grand Peninsula A **DNN / MCV**

(SDA-348) KEYNOTE: The Waking Dream: Next Steps Toward Immersion Entertainment (Parry) — Grand Peninsula E

11:30 AM

(AVM-109) Measuring Natural Scenes SFR of Automotive Fisheye Cameras (Jakab) — Grand Peninsula D **PROC**

(COIMG-123) Super Resolution in Heterogeneous Array Cameras under Coherent and Partially Coherent Illumination: A Generative AI Approach (Figueroa) — Grand Peninsula C **DNN**

(MWSF-334) Contribution of Residual Signals to the Detection of Face Swapping in Deepfake Videos (Tesse) — Grand Peninsula G **DNN / MCV**

11:40 AM

(HVEI-201) Beyond Space and Time: Analysis of the Arcane Perceptual & Cognitive Effects in Ivan Vukadinov's Art at the Vatican Museums (Likova) — Grand Peninsula B

(MLSI-301) Using Neural Networks for Compact Representation of Features with Singular Points in Projections of Surfaces on Radiographic Plane (Korobkin) — Grand Peninsula A **DNN / MED**

11:50 AM

(AVM-110) An Integrated and Fully Automated Test Solution for Automotive Cameras of Ultrawide Angle of View (Wang) — Grand Peninsula D

(COIMG-124) Diffractive Processing of Visual Information (Ozcan) — Grand Peninsula C

11:55 AM

(MWSF-335) Efficient Temporally-Aware Deepfake Detection using H.264 Motion Vectors (Grönquist) — Grand Peninsula G **PROC / DNN / MCV**

12:10 PM

(IQSP-258) Resolution and Noise Trade-off Analysis in Single-Photon Pulse LiDAR (Zhang) — Grand Peninsula D **AR/VR**

(COIMG-125) Physics-informed Generative Models for Imaging and Photonic Design (Tayyab) — Grand Peninsula C **DNN**

2:00 PM
SYMP WIDE — PLENARY: Seeing and Feeling in Robot-Assisted Surgery (Okamura) — Grand Peninsula D

3:30 PM
SYMP WIDE — Highlights 2024 — Grand Peninsula D

(COIMG-126) Considerations for Materials Design from the Latent Space (Simmons) — Grand Peninsula C

(HVEI-202) Michelangelo's Cryptic Self-Portraiture in the Sistine Chapel (Tyler) — Grand Peninsula D

3:50 PM

(COIMG-127) Methodology for Estimation of Intrinsic Dimensions and State Variables of Microstructures (Shah) — Grand Peninsula C

3:55 PM

(HVEI-203) Categorizing Art Viewing Behavior Using Fuzzy Logic (Fedorovskaya) — Grand Peninsula D

4:10 PM

(COIMG-128) Persistent Homology for Microstructure Manifold Construction (Mason) — Grand Peninsula C

4:20 PM

(HVEI-204) You're in the Picture: Revisiting the Robustness of Perspective (Kubovy) — Grand Peninsula D

4:30 PM

(COIMG-129) Dissipative Lagrangian Neural Networks for Materials Imaging and Simulation (Sundararaghavan) — Grand Peninsula C **DNN**

4:40 PM

(HVEI-205) Surreal Artist as Visual Neuroscientist: Analysis of Selected Works by Rene Magritte (Hamer) — Grand Peninsula D

5:00 PM
SYMP WIDE — Symposium Reception — The Grove

6:00 PM
SYMP WIDE — FILM: Interthinking Art + Science — Grand Peninsula D

Tuesday January 23

8:45 AM
XR — AI-mediated 3D Video Conferencing with Real-time 2D-to-3D Face Lifting (Nagano) — Grand Peninsula D

8:50 AM

(AVM-111) Multi-Modal Pedestrian Detection via Dual-Regressor and Object-Based Training for One-Stage Object Detection Network (Wanchaitanawong) — Grand Peninsula E **DNN / MCV**

(COIMG-130) Mathematical Nuances of Gaussian-Process-Driven Autonomous Experimentation (Noack) — Grand Peninsula C

(HPCI-183) KEYNOTE High Performance Imaging Applications: At the Intersection of HPC and AI (Wahib) — Grand Peninsula F **DNN**

(HVEI-206) Entropy Ordered Shapes as Bivariate Glyphs (Holliman) — Grand Peninsula A **PROC**

PAPER SCHEDULE BY DAY/TIME

(IPAS-244)	X-ray Image Denoising for Baggage Screening Using Learning Based Methods (Sekhar)	Harbour B **DNN / MCV**
(IQSP-262)	Focal Talk: Project Paris Insight: Methodology (Macudzinski)	Grand Peninsula B
(MWSF-336)	Analyzing Quantitative Detectors for Content-Adaptive Steganography (Kaziakhmedov)	Grand Peninsula G

9:10 AM

(AVM-112)	Exploring Object Detection and Image Classification Tasks for Niche Use Case in Naturalistic Driving Studies (Peruski)	Grand Peninsula E **PROC / MCV**
(COIMG-131)	Reinforcement Learning for Metals Powder Bed Fusion (Neopane)	Grand Peninsula C **DNN**
(HVEI-207)	Colour Perception and Aperture Sampling (Restrepo (Palacios))	Grand Peninsula A
(IPAS-245)	Image Restoration via Collaborative Filtering and Deep Learning (Xing)	Harbour B **DNN / MCV**

9:15 AM
XR

	Privacy-preserving Visual Sensing with Applications in XR (David-John)	Grand Peninsula D
(MWSF-337)	Secure Payload Scaling for Source Adaptive Payload Allocation (Dworetzky)	Grand Peninsula G

9:20 AM

(IQSP-259)	Benchmarking Motion Blur of Video-Frame-Interpolated Hybrid EVS+CIS against conventional CIS (Rana)	Grand Peninsula B

9:30 AM

(AVM-113)	Efficient Fault Tolerant Architecture for Neural Network Compute (Jagannathan)	Grand Peninsula E **DNN**
(COIMG-132)	Evaluation of Information Content in 2D and 3D Microstructural Characterization of Brush Particle-Based Hybrid Materials (Abdullah)	Grand Peninsula C
(HVEI-208)	Perception of Tactile Attributes of Colored Texture Images (Rabbanifar)	Grand Peninsula A
(IPAS-246)	Towards Realistic Landmark-Guided Facial Video Inpainting Based on GANs (Lohesara)	Harbour B **DNN / MCV**

9:40 AM

(IQSP-260)	Evaluating Camera Performance in Face-Present Scenes with Diverse Skin Tones (Borek)	Grand Peninsula B
(MWSF-338)	Prompting Steganography: A New Paradigm (Wu)	Grand Peninsula G **PROC**

9:45 AM
XR

	The Perfect 3D Shot: AI-driven Techniques for Stereoscopic Image Capture and Conversion (Fattal)	Grand Peninsula D

9:50 AM

(AVM-365)	Urban Scene Reconstruction Based on Neural Rendering (Shen)	Grand Peninsula E
(COIMG-133)	Semantic Segmentation and Anomaly Identification of Binder Jet Powder Bed Images (Gourley)	Grand Peninsula C **MCV**
(HVEI-209)	Spatiotemporal Contrast Sensitivity Functions: Predictions for the Critical Flicker Frequency (Bozorgian)	Grand Peninsula A **PROC**

10:00 AM

(IQSP-261)	From Video Conferences to DSLRs: An In-depth Texture Evaluation with Realistic Mannequins (Ventura)	Grand Peninsula B

10:40 AM

(COIMG-134)	KEYNOTE: Quantitative Secondary Electron Yield Mapping in Ion-beam Microscopy (Goyal)	Grand Peninsula C
(HPCI-184)	High-performance Data Management for Computational Pathology (Leng)	Grand Peninsula F **MED**
(HVEI-210)	KEYNOTE: Design and Reality of the HDR Imaging Ecosystem (Atkins)	Grand Peninsula A **HDR**
(IPAS-247)	Predicting the Impact of Synthetic Data on High-confidence Infrared Image Detection with Latent Space Feature Vectors (Vaughan)	Harbour B **DNN / MCV**
(IQSP-263)	A Novel Deep Learning-Based Anomaly Detection Pipeline Optimized for Dark Blemish Pattern of Image Sensor (Lee)	Grand Peninsula B **DNN**
(MOBMU-311)	ACES Workflows in Epic Unreal 5 (Hasche)	Grand Peninsula E **HDR**
(MWSF-339)	Prediction of Flipped Bits in Robust Image Hashes by Machine Learning (Bunzel)	Grand Peninsula G **DNN**

10:45 AM
XR

	Volumetric Video Technology in Sports and Entertainment: Current Applications and Future Prospects (Wakozono)	Grand Peninsula D

11:00 AM

(IPAS-248)	Examining the Effects of Compression on Deep Learning Remote Photoplethysmography (Sporrer)	Harbour B **DNN / MED**
(IQSP-265)	No-Reference Color Dot Artifact Assessment for Remosaiced Images (Han)	Grand Peninsula B **DNN**
(MOBMU-312)	Color Calibration for Multicolored Barcodes Using Smartphones (Bugert)	Grand Peninsula E

11:05 AM

(MWSF-340)	Efficient Hash Lookup for PhotoDNA (Steinebach)	Grand Peninsula G

11:10 AM

(MLSI-302)	Local Entropy Key Points for Materials Science Image Collation (Varley)	Grand Peninsula C
(HPCI-185)	Alleviating Tiling Effect by Random Walk Sliding Window in High-resolution Histological Whole Slide Image Synthesis (Bao)	Grand Peninsula F **MCV**

KEY TO VIRTUAL TRACKS AND PUBLISHED PAPERS

Papers with the following designation are available for download on the IS&T Digital Library:
JIST-first @ library.imaging.org/jist
JPI-first @ library.imaging.org/jpi
PROC @ library.imaging.org/ei

Virtual Tracks Key
Papers from across the conferences that are related to the following categories are designated as noted.

AR/VR = AR/VR and Simulate Environments
DNN = DNNS/Machine Learning
HDR = High Dynamic Range
MCV = Machine/Computer Vision
MED = Medical

PAPER SCHEDULE BY DAY/TIME

11:15 AM
(XR) Interacting with XR — Grand Peninsula D and Regency

11:20 AM
(HPCI-186) Scalable Analysis of Giga-pixel WSI Images (Dash) — Grand Peninsula F

(HVEI-211) JPI-first: The Impact of Adaptation Time in High Dynamic Range Luminance Transitions (Zuena) — Grand Peninsula A — PROC / HDR

(IPAS-249) Coverage Optimization for Training Data Enhancement of Ill-performing Classes (Park) — Harbour B — DNN

(IQSP-266) Focal Talk: Android Camera Apps: Designing in a Sea of Thousands of Cameras (Portmann) — Grand Peninsula B

(IMAGE-238) Adapt to Distill or Distill to Adapt (Thomas) — Grand Peninsula E — MCV

(IPAS-250) Lensless Phase Microscopy Imaging (Shevkunov) — Harbour B

11:30 AM
(MLSI-303) Combining Multimodal Fatigue Fracture Surface Image for Analysis with a CNN (Jones) — Grand Peninsula C — DNN / MCV

11:40 AM
(HVEI-212) Modeling Lightness and Color Perception of High Dynamic Range Stimuli (Rudd) — Grand Peninsula A — HDR

(IMAGE-239) Deep Learning-Based Defect Detection and Segmentation for Wood Plank Surfaces with Real-Time Tracking (Mohsin) — Grand Peninsula E — DNN / MCV

(HPCI-187) Back-Projection Optimization: The Key to Tomographic Imaging (Chen) — Grand Peninsula F — MED

(IPAS-251) Spectral Rendering: From Input to Rendering Process (Kim) — Harbour B

11:50 AM
(MLSI-304) A Lightweight Transformer for Faster and Robust EBSD Data Collection (Dong) — Grand Peninsula C — DNN

12:00 PM
(IMAGE-240) Motion-based Domain Randomization for Detecting Honeybees Inside a Hive (Ho) — Grand Peninsula E — MCV

(HPCI-188) Accelerated Laminographic Image Reconstruction Using GPUs (Ma) — Grand Peninsula F

(IPAS-367) Depth-of-Field Guided Rendering for Light-Field Displays (Akbar) — Harbour B

12:10 PM
(COIMG-135) Biomedical Ultrasound Computed Tomography Using Neural Full Waveform Inversion (Zeng) — Grand Peninsula C — MED / MCV

2:00 PM
SYMP WIDE PLENARY: Neural Radiance Fields (Barron) — Grand Peninsula D

3:30 PM
(AVM-114) Fusing Segmentation and Domain-knowledge Model to Extract Intersection Topologies from Aerial/terrestrial Orthographic Images (Vijverberg) — Grand Peninsula B — MCV

(COIMG-136) Automated, High-Throughput X-ray CT Characterization of Additively Manufactured Parts Using Deep Learning Based Algorithms (Ziabari) — Grand Peninsula C — DNN

(CVAA-174) Computational Estimation of Head Pose and Gender Through Large Corpora of Fine-art Portraits (Unlu) — Harbour B — MCV

(HPCI-189) Focal Talk: A Visual Cortex for Array Cameras (Jones Brady) — Grand Peninsula F

(HVEI-213) Perception in Mixed Reality Environments (Rogowitz) — Grand Peninsula A — AR/VR

(MLSI-305) Recovering a Molecule's 3D Dynamics from Liquid-phase Electron Microscopy Movies (Ye) — Grand Peninsula E

(MWSF-341) A Novel Dataset for Non-Destructive Inspection of Handwritten Documents (Breci) — Grand Peninsula G — PROC / MCV

(MOBMU-313) Generating Rich Media Posters for Interactive Hiking Trails to Promote Sustainable Tourism (Hasche) — Harbour A

(XR) The Time for Immersive 6DoF Content is Now (Lempitsky) — Grand Peninsula D

3:50 PM
(AVM-115) Optimizing Ego Vehicle Trajectory Prediction: The Graph Enhancement Approach (Sharma) — Grand Peninsula B — PROC / DNN

(COIMG-137) KEYNOTE: Understanding Microstructural Evolution in Additively Manufactured Materials by 3D X-ray Imaging (Sinclair) — Grand Peninsula C

(CVAA-175) TextAlles: Color Manipulations in the Latent Space of StyleGAN3 (Schaerf) — Harbour B — DNN / MCV

(HVEI-214) Egocentric Boundaries on Distinguishing Colliding and Non-Colliding Pedestrians while Walking in a Virtual Environment (Hwang) — Grand Peninsula A — PROC / MED / AR/VR

(MLSI-306) A Fully Differentiable Hydrodynamics Framework: Challenging Traditional ML for Optimization in Hydrodynamics (Lim) — Grand Peninsula E — DNN

(MOBMU-314) Driver Monitoring System Using Deep Learning Techniques (Ibrahim) — Harbour A — DNN

3:55 PM
(MWSF-342) DeepMammo: Deep Learning Algorithm for Digital Mammogram Source Identification (Mohammadi) — Grand Peninsula G — PROC / DNN / MED

4:00 PM
(XR) Shipwreck Imaging for XR Applications (Woods) — Grand Peninsula D

4:10 PM
(AVM-116) An Approach to Recreate Large Virtual Environments for Use in Road Traffic Research (Miller) — Grand Peninsula B — AR/VR

(CVAA-176) Distant Viewing Light Analysis of Figurative Paintings Using Spherical Harmonics (Ballesteros) — Harbour B

(HPCI-190) Focal Talk: The Image Systems Engineering Toolbox (Wandell) — Grand Peninsula F

(HVEI-215) Digital Rear-view Mirrors with Augmented Reality in Comparison with Traditional Rear-View Mirrors (Zhang) — Grand Peninsula A — AR/VR

(MLSI-307) Unpaired Deep Learning for Pharmacokinetic Parameter Estimation from Dynamic Contrast-Enhanced MRI (Oh) — Grand Peninsula E — DNN / MED

(MOBMU-315) Impact of Elon Musk and Bill Gates Tweets on Tesla and Microsoft Stock Prices (Kochneva) — Harbour A

PAPER SCHEDULE BY DAY/TIME

4:20 PM

(COIMG-139)	Engineering Temporally Integrated Images for In Situ Monitoring and Analysis of Laser-Based Powder Bed Fusion Additive Manufacturing (Snow)	Grand Peninsula C
(MWSF-343)	Sovereign Document Verification by Smartphones (Berchtold)	Grand Peninsula G

4:30 PM

(CVAA-177)	Towards Artist Recognition Based on Material Rendering. A Case Study for Recognition of Rembrandt and Van Dyck (Huang)	Harbour B
(IQSP-267)	Quality of Experience of Virtual Reality-Based Communication Applications (Farias)	Grand Peninsula A **AR/VR**
(MLSI-308)	Applying Machine Learning to Detect Anomalies in Additive Manufacturing (Tronsen)	Grand Peninsula E **DNN**
(MOBMU-316)	Prototypical Implementation of an Accessible Vocabulary Trainer (Knobelsdorf)	Harbour A
(XR)	Perspective-Correct VR Passthrough (Kuo)	Grand Peninsula D

4:40 PM

(COIMG-140)	Benefit of X-ray Imaging to Improve Additive Manufacturing (Obaton)	Grand Peninsula C

4:50 PM

(CVAA-178)	The Use of Transfer Learning for the Analysis of Paintings by Raphael (Ugail)	Harbour B **DNN / MCV**
(HPCI-191)	Taking Pictures of Planetary Interiors Using Powerful Computers (Olugboji)	Grand Peninsula F
	HVEI Poster Previews	Peninsula A
(MLSI-309)	What's Wrong with End-to-end Deep Learning Methods for Phase Retrieval? (Zhang)	Grand Peninsula E **DNN**
(MOBMU-317)	JIST-first: Development and Implementation of an Augmented Reality Thunderstorm Simulation for General Aviation Weather Theory Training (Wang)	Harbour A **PROC / AR/VR**

5:00 PM

(COIMG-141)	Model-based Deep Learning with a CNN Prior for Sparse-view Cone-beam CT Reconstruction of Additively Manufactured Objects (Pramanik)	Grand Peninsula C **DNN**
(XR)	Group Discussion— Imaging for XR 2025	Grand Peninsula D

5:10 PM

(CVAA-179)	Vision Transformers and Synthetic Image Augmentation in Art Authentication (Schaerf)	Harbour B **DNN / MCV**

5:30 PM

SYMP WIDE	Interactive Paper Poster Session, Demonstration Session, and Exhibit Happy Hour	Regency
(COIMG-161)	Detection of Multiple Fluorescent Dyes Using Liquid-Crystal Variable Retarder and Sparse Modeling (Fujiwara)	Regency **PROC**
(COIMG-162)	Open Set Domain Adaptation for Image Classification with Multiple Unknown Labels Using Unsupervised Clustering in a Target Domain (Nishihara)	Regency
(HVEI-234)	Perceptual Experiment for Searching the Spatial Frequency Threshold Depending on Pixel Design (Yeom)	Regency **PROC**

(HVEI-235)	Effect of Brightness and Size on Display Flicker Perception: Comparison with Flicker Indices (Kim)	Regency **PROC**
(HVEI-236)	Heaven on Earth Map: "As Above, So Below." (Couch)	Regency
(HVEI-237)	User Performance and Quality of Experience for a Remote-controlled Lab-based Moving Platform (El Ouardi)	Regency
(IPAS-252)	Automatic Reading Order Sequencing: A Novel Reading Order Generator for Text-Based Documents (Murshed)	Regency **PROC**
(IPAS-253)	Data and Label Graph Fusion for Semi-supervised Learning: Application to Image Categorization (Baradaaji)	Regency **PROC**
(IPAS-254)	Novel Image Super-Resolution and Denoising Using Implicit Tensor-Product B-Spline (Horváth)	Regency **PROC**
(IPAS-255)	Scalable and Efficient Orchestration of Machine Learning Workloads on DSPs with Multi-level Memory Architecture (Sequeira)	Regency
(IMAGE-241)	Self-Attention Enhanced Recognition: A Unified Model for Handwriting and Scene-Text Recognition with Improved Inference (Patel)	Regency **PROC**
(IMAGE-242)	Generalizing Handwriting and Scene-Text Detection in Images (Kim)	Regency **PROC**
(IMAGE-243)	Neuro-Symbolic Ensembles for Assistance at the Edge (Price)	Regency
(ISS-292)	Magic Lantern as a Platform for Digital Photography Research (Eberhart)	Regency
(MLSI-310)	Segmentation of Starch Granules in Microscopic Images Using a U-Net Model (Jin)	Regency
(MOBMU-325)	AI-based Cybersecurity Management Consulting - A New Disruptive Technology for the Future (Schwarz)	Regency
(MOBMU-326)	Vulnerability Management Using Open-Source Tools (Shivananjappa)	Regency
(MOBMU-327)	Contribution of Machine Learning in the Field of Renewable Energy (Posashkova)	Regency
(MOBMU-328)	OSINT-Based Email Investigation (Mhatre)	Regency
(VDA-363)	Interactive High-dimensional Audiovisual Feature Analysis of Live Song Concert Videos (Diehl)	Regency
(VDA-364)	Data Analysis and Visualization of Crime Data (Sharma)	Regency **PROC**

Wednesday January 24

8:50 AM

(COLOR-163)	Experimental Study on Reducing Wavelength Dependency of Spatial Resolution Characteristics of a Digital Camera by MTF Correction (Ando)	Grand Peninsula A **PROC**
(HPCI-192)	KEYNOTE: Scientific Machine Learning for Computational Wave Imaging Problems: from Carbon Zero Emissions to Breast Cancer Detection (Lin)	Grand Peninsula F **DNN**
(HVEI-216)	Study on the Relationship Between Quality and Acceptability Annoyance (AccAnn) of UGC Videos (David)	Grand Peninsula D
(ISS-280)	Comparison of SFR and Edge Artifacts Between Single Photodiode and Split Photodiode Pixels in HDR Image Sensors (Li)	Grand Peninsula B **HDR**
(MOBMU-318)	OSINT for Critical Infrastructure Protection – Electricity Sector (Ecevit)	Grand Peninsula G
(SDA-349)	The Effect of Stereoscopic Depth Distortion on the Near Oculomotor Response (Seemiller)	Grand Peninsula E
(VDA-356)	KEYNOTE: Toward the Use of Immersive Technologies for Interactive Visualization (Wischgoll)	Harbour A **AR/VR**

9:10 AM

(COLOR-164)	Double Binnable LMS and RGBW Color Filter Arrays (Singh)	Grand Peninsula A
(COIMG-142)	Leveraging Pixel Value Certainty in Pixel-Shift and Other Multi-Shot Super-Resolution Processing (Dietz)	Grand Peninsula C
(HVEI-217)	Comparison of Subjective Methodologies for Local Perception of Distortion in Videos and Impact on Objective Metrics Resolving Power (Pastor)	Grand Peninsula D
(ISS-281)	Modeling and Reducing Energy Consumption of Computational Image Sensors: A Case Study on Gaze Tracking (Zhu)	Grand Peninsula B
(MOBMU-319)	Automated Tools for Cloud Security Testing (Ghazizadeh)	Grand Peninsula G
(SDA-350)	Automatic Stereograph Feature Detection (Routhier)	Grand Peninsula E

9:30 AM

(COLOR-165)	Camera Color Correction Using Splines (Suominen)	Grand Peninsula A
(COIMG-143)	Multimodal Deep Learning Approach for Dynamic Sampling with Automatic Feature Selection in Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry Imaging (Helminiak)	Grand Peninsula C **PROC / DNN**
(HVEI-218)	Advancing Video-Wise Just Noticeable Difference (VW-JND): Innovative Strategies for Dataset Collection, Procedure Optimization, and Comparative Analysis of Video Quality Metrics (Zhu)	Grand Peninsula D
(ISS-282)	Single Slope Single Ramp Column ADC with Digital CDS for CMOS Image Sensors (Santos)	Grand Peninsula B
(MOBMU-320)	Sanitization Tool for Compromised Social Media Account after Recovery and Its Aftermath (Tapara)	Grand Peninsula G **DNN**
(SDA-351)	Successful One Man, Low Cost, 3D CGI Feature Film Conversion (Criado)	Grand Peninsula E

(VDA-357)	JIST-first: Kiviat Defense: An Empirical Evaluation of Visual Encoding Effectiveness in Multivariate Data Similarity Detection (Mantovani)	Harbour A **PROC**
(HPCI-193)	Automatic Optimization for Fast Convolution for SIMD Architecture (Chen)	Grand Peninsula F

9:50 AM

(COLOR-166)	Color Calibration Methods for OLED Displays (Ashraf)	Grand Peninsula A
(COIMG-144)	Gradient-Based Image Visualization for Noisy LWIR Image (Nakano)	Grand Peninsula C **PROC / DNN**
(HVEI-219)	Metric Thresholds for Acceptance and Annoyance of User Generated Video Content (Ak)	Grand Peninsula D
(ISS-283)	Intracell Capacitances in Pixel-Level Hybrid Bond Image Sensor Cells (Axelrad)	Grand Peninsula B **PROC**
(MOBMU-321)	Financial Security Management: A Comprehensive Study of Cryptocurrency Forensics (Gandhi)	Grand Peninsula G
(SDA-352)	What Do We Know About Apple's New Spatial Video Format? (Woods)	Grand Peninsula E
(HPCI-194)	JIST-first: Digital Modeling on Large Kernel Metamaterial Neural Network (Liu)	Grand Peninsula F **PROC / DNN**

10:40 AM

(COLOR-167)	Characterisation of Color Enhancing Screen Printing Technique with RGBW Interference Pigments (Pranovich)	Grand Peninsula A
(COIMG-145)	KEYNOTE: Breaking Boundaries in AM: The Dynamic Duo of Process Development and Closed Loop Control in Laser Powder Bed Fusion (Saharan)	Grand Peninsula C
(HPCI-195)	Facilitating Efficient Scientific Data Streams through High-End Data Transfer Nodes (Bicer)	Grand Peninsula F
(HVEI-220)	KEYNOTE: Quality Assessment in Contest: The QoE Way Towards Sustainable Media Consumption (Le Callet)	Grand Peninsula D
(ISS-284)	KEYNOTE: Passing the Visual Turing Test with Holographic Displays (Kuo)	Grand Peninsula B
(IRIACV-276)	Synthetic Data Generation for AI-based Machine Vision Applications (Seiler)	Grand Peninsula G **DNN / MCV**
	SD&A Discussion Forum: 3D Video Streaming—Solutions and Opportunities (Woods)	Grand Peninsula E
(VDA-358)	One Model that Fits Them All: Psychometrics with Generalized Linear Mixed Effects Models (Ju)	Harbour A **DNN**

11:00 AM

(COLOR-170)	Investigating Consistency of Color Appearance Using Different Reproduction Approaches (Zunjarrao)	Grand Peninsula A
(HPCI-196)	High-performance Data Loader for Large-scale Data Processing (Martinez-Noriega)	Grand Peninsula F
(IRIACV-277)	Unsupervised PCB Anomaly Segmentation with Foundational Models (Ho)	Grand Peninsula G **DNN / MCV**
(VDA-359)	Creating Visual Persona Profiles in Telegram Using NLP (Choi)	Harbour A

11:10 AM

(COIMG-138) Multimodal Registration and Fusion of In Situ and Ex Situ Process Monitoring Data: A Case Study in Laser Powder Bed Fusion (Donegan) — Grand Peninsula C

11:20 AM

(COLOR-168) Equalization of Appearance Using Individualized Unique Hues (Shen) — Grand Peninsula A **PROC**

(HPCI-197) Asynchronous Tensor Decomposition Applied in High Performance Image Processing (Zhou) — Grand Peninsula F

(HVEI-221) Color Perception-Driven Energy Optimization for Virtual Reality: Displays and Image Encoding (Zhu) — Grand Peninsula D **AR/VR**

(ISS-285) Adaptive Bit Depth Control for Neural Network Quantization (Seo) — Grand Peninsula B **DNN**

(IRIACV-278) Real-time Cattle Intake Monitoring Using Stereo Vision (Rao) — Grand Peninsula G **MCV**

(VDA-360) Evaluating the Recommendations of LLMs to Teach a Visualization Technique Using Bloom's Taxonomy (Joshi) — Harbour A **DNN**

(VDA-361) Interactive Media Planning Data Visualization (Ljubojevic) — Harbour A

11:30 AM

(COIMG-147) Generative Denoising Models for Material Science Applications (Fernandez-Zelaia) — Grand Peninsula C **DNN**

11:40 AM

(COLOR-169) A Method for Estimating Spectral Reflectance from Camera Responses Using Local Optimal Dataset and Neural Network (Tominaga) — Grand Peninsula A **DNN**

(HVEI-222) Study on Effect of Display Layout for Web Conferencing Services on Subjective Evaluation Stability (Kawashima) — Grand Peninsula D

(ISS-286) Joint Design of Camera Spectral Sensitivity and Color Correction Matrix with Noise Consideration (Yu) — Grand Peninsula B

(IRIACV-279) Mobile 3D Mapping of Erdstall Facilities (Edlinger) — Grand Peninsula G **PROC**

(SDA-353) Comparative Analysis of User Experience in Virtual Reality (VR) and Mixed Reality (MR) Systems Using Eye-Tracking Measurements (Banchi) — Grand Peninsula E **PROC / AR/VR**

11:50 AM

(COIMG-148) On the Development of Acoustic Melt Pool Monitoring Techniques Assisted by High-speed Synchrotron X-rays (Stobbe) — Grand Peninsula C

12:00 PM

(HVEI-223) Background- and Ambient-aware Image Visibility Enhancement for Transparent Displays (Ryu) — Grand Peninsula D

(SDA-354) Virtual Reality (VR) Space for Radiation Oncology Education and Collaborative Learning (Sandhu) — Grand Peninsula E **MED / AR/VR**

(VDA-362) RAIV: Researchable Archives for Interactive Visualizations (Price) — Harbour A **PROC**

12:10 PM

(COIMG-149) Classification of Melt Pool Boundaries and Defects through Dual-energy X-ray CT of Crept Additively Manufactured Parts (Rahman) — Grand Peninsula C

12:30 PM

(COIMG-368) 3D Printing Images Defect Detection and Classification Supported by Generative AI Models (Peles) — Grand Peninsula C

2:00 PM

SYMP WIDE PLENARY: Imaging the Universe: NASA Space Telescopes from James Webb to Nancy Grace Roman and Beyond (Howard) — Grand Peninsula D

3:30 PM

(COLOR-173) JIST-first: Spectral Estimation: Its Behaviour as a SAT and Implementation in Colour Management (Habib) — Grand Peninsula A **PROC**

(COIMG-150) JIST-first: Computational Image Formation: Simulators in the Deep Learning Era (Chan) — Grand Peninsula C **PROC / DNN**

(IQSP-268) Evaluation of Subjective Video Quality of Television Displays (Pei) — Grand Peninsula D **PROC**

(ISS-287) Simulation of Indirect Time of Flight Pixel Using High-frequency Operation Low-voltage Trench Gates (Lopes) — Grand Peninsula B

(MOBMU-322) Automatic Deep Neural Network Model Surgery for Embedded Devices (Agarwal) — Grand Peninsula G **DNN / MED**

(SDA-355) VR Visualization of Avian-Human Perspectives for Co-Design Practices supporting Empathy Building and Perspective Shifts (Simpson) — Grand Peninsula E **AR/VR**

(HPCI-198) Rapid and Scalable Training for Ultra-Long Sequence Vision Transformer for Imaging Applications (Wang) — Grand Peninsula F **DNN / MCV**

3:50 PM

(COLOR-172) JIST-first: Spatio-Temporal Retinex-Inspired Envelopes with Anisotropic Diffusion (Sagvold) — Grand Peninsula A **PROC**

(COIMG-151) Beyond RISC - Next-generation Compute Architecture for Computational Imaging (Goma) — Grand Peninsula C

(IQSP-269) Quantified Impact of Key System Parameters on the Diffraction Quality in Displays (Kwon) — Grand Peninsula D

(ISS-288) A Dynamic-Range Extension Technique with Linear-Logarithmic Response for Short-Pulse Time-of-Flight Image Sensors (Okuyama) — Grand Peninsula B **HDR**

(MOBMU-323) Probabilistic Time Series Forecasting with Transformer Models (Bornstädt) — Grand Peninsula G **DNN**

(ERVR-180) JIST-first: Spatial Analysis and Visual Communication of Emergency Information through Augmented Reality (Sharma) — Grand Peninsula E **PROC / AR/VR**

KEY TO VIRTUAL TRACKS AND PUBLISHED PAPERS

Papers with the following designation are available for download on the IS&T Digital Library:
JIST-first @ library.imaging.org/jist
JPI-first @ library.imaging.org/jpi
PROC @ library.imaging.org/ei

Virtual Tracks Key
Papers from across the conferences that are related to the following categories are designated as noted.

AR/VR = AR/VR and Simulate Environments
DNN = DNNS/Machine Learning
HDR = High Dynamic Range
MCV = Machine/Computer Vision
MED = Medical

(HPCI-199)	Efficient Distributed Sequence Parallelism for Transformer-based Image Segmentation (Lyngaas)	Grand Peninsula F **DNN / MCV**

4:10 PM

(COIMG-152)	PSF Engineering for Edge Sensing (Antipa)	Grand Peninsula C
(COLOR-171)	Visual Assimilation Illusions: Perceptions or Optics? (McCann)	Grand Peninsula A
(HVEI-224)	Adapting Pretrained Networks for Image Quality Assessment on High Dynamic Range Displays (Chubarau)	Grand Peninsula D **HDR / DNN**
(ISS-289)	Joint Parameter Estimation for Event-based Vision Sensor Characterization (Mou)	Grand Peninsula B
(MOBMU-324)	Review of ChatGPT's Domain-Tailoring Techniques (Ahmed)	Grand Peninsula G **DNN**
(ERVR-181)	Real-time Stereoscopic Image-parallel Path Tracing (Leria)	Grand Peninsula E **PROC**

4:30 PM

(COIMG-153)	Reconstruction of Phase and Temperature Maps from Energy-resolved Neutron Imaging (Tremsin)	Grand Peninsula C **MCV**
(HVEI-225)	Image Quality Assessment across Viewing Distances: A Comparison Study of CSF-based and Rescaling-based Metrics (Hammou)	Grand Peninsula D
(ISS-290)	Dynamic Low Bit-Depth Quanta Video Imaging with Recurrent Restoration (Chennuri)	Grand Peninsula B
(ERVR-182)	Interactive Aviation Maintenance Classroom (Starr)	Grand Peninsula E **PROC / AR/VR**

4:50 PM

(COIMG-154)	Bio-Inspired Methods for Efficient Visual Sensing (Alexander)	Grand Peninsula C

5:10 PM

(COIMG-155)	Mobile Aware Computational Imaging (Li)	Grand Peninsula C

5:40 PM

	Panel Discussion: The Future of Computational Imaging	Grand Peninsula C **DNN / MCV**

Thursday January 25

9:00 AM

(HVEI-226)	KEYNOTE: From Neurons to Pixels, to Neurons Again (Patney)	Grand Peninsula A **DNN**

9:20 AM

(COIMG-156)	Accurate Efficient Multispectral Spatiotemporal Image Reconstruction Using Neural Field Representations (Lozenski)	Grand Peninsula C **DNN / MCV**
(IQSP-270)	Lens Flare Measurement for RGB Black-box Camera (Chanas)	Grand Peninsula B

9:40 AM

(COIMG-157)	Neural Deconvolution and Rendering for Synthetic Aperture Sonar (Jayasuriya)	Grand Peninsula C **MCV**
(HVEI-227)	Focal Talk: Comprehensive Insights into Psychological Image Quality: Addressing Ecological Validity and Emotional Content (Leszczuk)	Grand Peninsula A **DNN**
(IQSP-271)	Recommendations for the Detection and Analysis of the ISO 12233:2023 e-SFR Slanted Star (Kerr)	Grand Peninsula B

10:00 AM

(COIMG-158)	Implicit Neural Representation for Tomographic Imaging (Sun)	Grand Peninsula C **MED / MCV**
(HVEI-228)	One Number to Describe Them All (Janowski)	Grand Peninsula A
(IQSP-272)	Advancing Hyperspectral Imaging Endoscopes (HySE): A Comprehensive Performance Evaluation Approach (Mazdeyasna)	Grand Peninsula B **MED**

10:40 AM

(COIMG-159)	Implicit Representation for Motion-Resolved Computed Tomography (Gupta)	Grand Peninsula C **MED / MCV**
(HVEI-229)	Aesthetics and Entropy. IV. Image Composition and Content (Sahyun)	Grand Peninsula A
(IQSP-273)	Luminance and Color Accuracy of Prosumer and Mobile Phone Cameras for High Dynamic Range Imaging in Cultural Heritage Documentation (Humenuck)	Grand Peninsula B **HDR**

11:00 AM

(COIMG-160)	Maximum Likelihood-based Phase-Retrieval Using Fresnel Propagation Forward Models with Optional Constraints (Mohan)	Grand Peninsula C
(HVEI-230)	Analysis of User Preferences for Film Grain Noise in Images and Video Sequences (Guo)	Grand Peninsula A
(IQSP-274)	Assessment of Dynamic Range and Noise in a Natural-scene Image (Jeon)	Grand Peninsula B **HDR**

11:20 AM

(HVEI-231)	JPI-first: Mid-level Characteristics of Drawings Made by Observers with Aphantasia (Balas)	Grand Peninsula A **PROC / MED**
(IQSP-275)	Objective Color Characterization of HDR Videos Captured by Smartphones: Laboratory Setups and Analysis Framework (Tigranyan)	Grand Peninsula B **HDR**

11:40 AM

(HVEI-232)	Towards Enhancing Ecological Validity in QoE User Studies (Subramanian)	Grand Peninsula A

12:00 PM

(HVEI-233)	How AI Image Synthesis Changes the Role of Vision Science in Imaging Applications (Daly)	Grand Peninsula A **DNN / MCV**