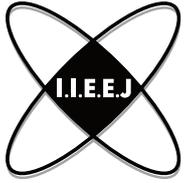


Final Program



The 9th IEEEJ International Conference on Image Electronics and Visual Computing

IEVC2026

Hiroshima University Kasumi Campus, Hiroshima, Japan

March 16-19, 2026

Timetable

Time	Main Room(304)	Presentation Room 1 (302)	Presentation Room 2 (303)	Poster Room (404)
March 16				
12:00	Registration (~15:00)			
13:00	Opening			
13:30	Keynote 1			
	break			
14:45		Session 1: Image Analysis	Session 2: 3D Image Processing	
March 17				
8:30	Registration (~15:00)			
9:00		Session 3: Visualization	Session 4: Coding	
	break			
10:55	Poster 1 Fast-Forward			
11:25				Poster 1 Poster Presentation
	break			
13:50	Keynote 2			
	break			
15:05		Session 5: Recognition	Session 6: Artificial Intelligence	
March 18				
9:00	Registration (~12:00)			
9:20	Keynote 3			
10:20	Group Photo			
	break			
10:40	Poster 2 Fast-Forward			
11:10				Poster 2 Poster Presentation
13:00	Excursion (Short trip to Miyajima)			
18:00	Banquet (Edion Peace Wing Hiroshima)			
March 19				
9:30		Session 7: Animation and Rendering	Session 8: VR, AR and MR	
11:30	Closing			

Monday, March 16

13:00-13:30 Opening

Main Room (304)

13:30-14:30 Keynote 1

Main Room (304)

Chair: Masashi Baba (Yasuda Women's University)

Educational and Research Applications of Generative AI-Assisted Development of Various Computer Graphics Programs

Tomoyuki Nishita (Professor Emeritus of the University of Tokyo and Hiroshima Shudo University)

14:45-16:25 Session 1: Image Analysis

Presentation Room 1 (302)

Chair: Kenji Mizutani (Tokai University)

- S1-1 **Analyzing Images Shared on Social Media During Disasters Using Location Mention**
Toshihiro Rokuse, Keisuke Utsu and Osamu Uchida
- S1-2 **Evaluation of Growth Conditions in Lemna minor using Chlorophyll Fluorescence Analysis**
Moeri Okuda, Ryogo Taniguchi and Shinsaku Hiura
- S1-3 **Comparison of the Methods based on Image Processing and Deep Learning for People Counting**
Nobuhiko Mukai, Mirai Amo and Youngha Chang
- S1-4 (moved to Session 5)
- S1-5 **Web Image Collection and LLM-Based Labeling to Provide Dynamic References for Visual Inspection of Drug Packaging**
Yona Zakaria, Chouman Hussein, Rui Ishiyama, Eiki Ishidera, Tomokazu Matsui, Hirohiko Suwa and Keiichi Yasumoto
- S1-6 **Method for Quantifying Cooperation Scores in Tent Dismantling Operations**
Kotaro Yamatogi, Koji Kinoshita, Tsuyoshi Hatori, Atsushi Sugita, Masaharu Isshiki and Yoshinobu Higami

14:45-16:45 Session 2: 3D Image Processing

Presentation Room 2 (303)

Chair: Seishi Takamura (Hosei University)

- S2-1 **Directional Weight-Aware Scaling Iterative Closest Point (DWA-SICP) for Point Cloud Registration**
Xin Lu, Akio Kimura, Mengbo You and Kouichi Konno
- S2-2 **Cross-Attention over Depth Tokens Enables Local Depth Spatial Reasoning for RGB-D Fusion**
Hiroo Tsuji
- S2-3 **A GPU-Based Virtual CT Scan System for Data Augmentation**
Takeru Akase, Toru Higaki, Tomohisa Manabe and Shinya Matsutomo
- S2-4 **Estimating Depth in Omnidirectional Images for a Mixed Reality Remote Teaching Support System**
Ryotaro Hoshi, Masaki Ishii, Teppei Fukuda, Hidekatsu Ito and Kohji Dohsaka
- S2-5 **Sketch-Based 3D Anime-Style Character Generation with Geometry Guidance**
Kai Niu, Bofei Huang and Haoran Xie
- S2-6 **Frontal Face Generation from Multi-view Images via 3D Face Reconstruction**
Morikaze Ichino, Toru Higaki, Bisser Raytchev, Yanlei Gu and Yuko Nakamura

Tuesday, March 17

9:00-10:40 Session 3: Visualization

Presentation Room 1 (302)

Chair: Hironobu Abe (Tokyo Denki University)

- S3-1 **Quantifying Commuting Burden through Spatial Analysis of Person Trip Data: A Case Study from Tokyo Suburbs**
Yuta Azuma and Kayoko Yamamoto

- S3-2 **Smoldering Simulation of Incense Burning Considering Ash Deformation**
Reio Echigo, Makoto Fujisawa and Masahiko Mikawa
- S3-3 **A Five-Degree-of-Freedom Robotic Arm Simulator for Digital Twin Based on Forward and Inverse Kinematics in Virtual Reality Environment**
Rintaro Waki, Taichi Kitano, Tomohisa Manabe, Toru Higaki and Shinya Matsutomo
- S3-4 **Effects of Graphic Recording Layout Styles on Information Comprehension**
Rin Kawahisa and Sho Ooi
- S3-5 **Effects of Gaze Visualization on Dart-Throwing Accuracy**
Shun Ninomiya and Mie Sato

9:00-10:40 Session 4: Coding *Presentation Room 2 (303)*

Chair: Hiroshi Watanabe (Waseda University)

- S4-1 **NeRV360: Neural Representation for 360-Degree Videos with a Viewport Decoder**
Daichi Arai, Kyohei Unno, Yasuko Sugito and Yuichi Kusakabe
- S4-2 **Pixel-Wise Reference Voting-Based Optimization for VVC Intra Coding**
Takumi Mashino and Seishi Takamura
- S4-3 **Flow Residual Segmentation and Generative Reconstruction for Motion-Aware Video Coding**
Ziyue Zeng, Yui Tatsumi and Hiroshi Watanabe
- S4-4 **Gaussian Filtering to Improve Object Detection Accuracy in Coded Video**
Kota Otsuki and Koyo Nitta
- S4-5 **Interactive Cross-Period Component Annotation for Oracle Bone Characters**
Haoran Zhuo, Xiaoxuan Xie and Haoran Xie

10:55-12:55 Poster Session 1

[10:55-11:25] Fast-Forward *Main Room (304)*

[11:25-12:55] Poster Presentation *Poster Room (404)*

Chair: Yuriko Takeshima (Tokyo University of Technology)

- P1-1 **Preliminary Study on Privacy Protection for Synthetic Data in Touch Dynamics**
Riku Hasegawa and Yasushi Yamazaki
- P1-2 **Design and Implementation of an AR Shooting Game System Integrating Body Movements and Voice Input**
Riko Suwabe, Masasuke Yasumoto and Keisuke Utsu
- P1-3 **Modulated Reality (MoR) Using Depth Map from Generative AI**
Shinki Harada, Kazutake Uehira, Masahiro Suzuki and Hideaki Takada
- P1-4 **Optical Characteristics and Systemization of Personal Glasses-Free 3D Display Using Visual Perception and Retroreflective Sheet**
Kaoruko Yuge and Hideaki Takada
- P1-5 **VR Training System for Handball Goalkeepers**
Rikuto Kikuchi, Masasuke Yasumoto and Keisuke Utsu
- L1-1 **Controlling lighting to create an online live viewing experience**
Misaki Matsumura, Runa Inagaki and Kiyoshi Tanaka
- L1-2 **An automatic hair parts segmentation method for 2D illustrations for 2D animation production Using Mask2Former**
Hironobu Abe and Huadong Zhu
- L1-3 **A Computational Method to Design Forced-Perspective Buildings**
Sarika Watanabe and Tsukasa Fukusato
- L1-4 **Proposal for a Unity-Based Simulator to Predict Accident Avoidance**
Yasuhiro Kawanishi, Ryuto Masuda and Kenji Mizutani
- L1-5 **On Detection of Varroa Mite Using Image Inpainting with U-Net**
Haruki Ogimura, Naoya Tsuruta and Madoka Hasegawa
- L1-6 **Preliminary Investigations toward Driver-Oriented Saliency Map Computation Based on Deep Neural Networks with Pedestrian Category Awareness**

- Naoya Morioka and Yohei Nakada
- L1-7 **A Study on Dairy Cow Posture Estimation Using Deep Learning with ResNet**
Batchimeg Bayaraa, Kazuya Nogami, Naoya Tsuruta, Madoka Hasegawa, Atsushi Ito and Yoshikazu Nagao
- L1-8 **Improving Aortic Segmentation in CT via a Classifier-Guided Spatial-Feature 2.5D Network: A Preliminary Validation**
Zuoyuan Zhao, Toru Higaki, Bisser Raytchev, Yanlei Gu and Wataru Fukumoto
- L1-9 **Optimizing Additional Weight for Free-Formed Marching Rifles**
Haruki Yasui and Tsukasa Fukusato
- L1-10 **Proposal for Immersive Deep-Sea VR Experiences to Reduce Stress**
Senshu Kato, Masaki Yoshimura, Masahiro Yamamoto, Yuto Igarashi and Kenji Mizutani
- L1-11 **Anime Line Art Colorization with Pre-training using 2.5D Models**
Rei Iwasaki, Akinobu Maejima, Seitaro Shinagawa and Tsukasa Fukusato
- L1-12 **Measurement-Based Digital Twin of a Shot-Blasting Machine Using a Rotating Chamber Testbed**
Genki Koshimizu and Hironobu Abe
- L1-13 **An Audio-Based Anomaly Detection for Engine Motoring Tests in Assembly Lines**
Toru Higaki, Atsuyoshi Fukunaga, Nozomi Kageyama and Hiroshi Nagira
- L1-14 **An Analysis of Feature Extractors for Unsupervised Anomaly Detection**
Tatsuya Mori, Nanaka Ikeda and Makoto Sasaki
- L1-15 **Study of Intrinsic Calibration of Astronomical Telescope Using Gaia Catalogue**
Haruya Matsuo, Ayami Yamakita and Hideaki Maehara
- L1-16 **Automatic Road Area Detection on Highways at Night**
Izumi Hirahara and Hitoshi Saji
- L1-17 **Analysis of Preceding Vehicle Motion Using Drive Recorder Images**
Chiharu Watanabe and Hitoshi Saji
- L1-18 **Drone Video and Point Cloud Alignment for Riverbank Erosion Detection**
Temma Hosokawa and Hitoshi Saji
- L1-19 **Public Release of a Nationwide Dataset on Disaster Population Exposure and Visualization Using a Web GIS**
Keisuke Utsu and Osamu Uchida
- L1-20 **Direct-Global Separation with Arbitrary Scales from Novel Viewpoints**
Kengo Matsufuji, Michitaka Yoshida, Ryo Kawahara and Takahiro Okabe
- L1-21 **Comparative Visualization of Screenplay-Based Emotion Estimation and Viewer Emotions During Film Viewing**
Iori Nakamoto, Yuriko Takeshima and Kai Lenz
- L1-22 **Interactive Electric Field Cross-Section Visualization via VR and its Real-Time Performance Evaluation**
Taichi Kitano, Rintaro Waki, Tomohisa Manabe, Toru Higaki and Shinya Matsutomo

13:50-14:50 Keynote 2

Main Room (304)

Chair: Naoki Kobayashi (Saitama Medical University)

From Image Formation to Video Playback: Signal Processing for Color Electronic Paper

Wen-Chung Kao (Research Chair Professor and Dean with the Department of Electrical Engineering, National Taiwan Normal University)

15:05-17:25 Session 5: Recognition

Presentation Room 1 (302)

Chair: Koyo Nitta (Aizu University)

- S5-1 **Improving Semi-Supervised Contrastive Learning via Entropy-Weighted Confidence Integration of Anchor-Positive Pairs**
Shogo Nakayama and Masahiro Okuda
- S5-2 **Quantifying and Inducing Shape Bias in CNNs via Max-Pool Dilation**
Takito Sawada, Akinori Iwata and Masahiro Okuda
- S5-3 **Integrated RGB-Thermographic Vision System for Individual Calf Identification and Health Monitoring**
Aung Si Thu Moe, Pyke Tin, Masaru Aikawa, Kazuyuki Honkawa and Thi Thi Zin
- S5-4 **Improving LiDAR SLAM with Local Feature-Based Point Cloud Augmentation**
Tatsuki Uchida and Munetoshi Iwakiri

- S5-5 **Image Scene-Adaptive Hierarchical Object Detection Method Using Sequence Control and Adaptive Reconstructed Image Generation Units**
Ryoga Sugiuchi and Tetsuya Matsumura
- S5-6 **TABS-UNet: Task-Aware Band Selection for Lightweight Hyperspectral Road Scene Segmentation**
Nguyen Hai Duong, Daisuke Miyazaki and Chao Wang
- S1-4 **Application of Counter-Malaria Techniques using UAV Aerial Imagery: A Case Study of the Osaka Expo**
Ishido Daichi, Kim Juhoe and Hasegawa Katsuya

15:05-17:05 Session 6: Artificial Intelligence

Presentation Room 2 (303)

Chair: Madoka Hasegawa (Utsunomiya University)

- S6-1 **Deep Learning Based Image Quality Assessment for CT Images**
Kenshiro Kaji, Toru Higaki, Raytchev Bisser Roumenov, Yanlei Gu and Yuko Nakamura
- S6-2 **Pruning-Aware CUR decomposition for ViT Model Approximation**
Suguru Mori and Kyoko Sudo
- S6-3 **Proposal of a Lateral Emergency Avoidance Simulator for Cooperative Strategy-Based Reinforcement Learning**
Ryuto Masuda, Yasuhiro Kawanishi and Kenji Mizutani
- S6-4 **Sketch-based Rust Texture Generation Using Diffusion Model**
Yongming Zhang, Tianyu Zhang, Kazunori Miyata and Haoran Xie
- S6-5 **Accurate and Efficient Surface Reconstruction from Point Clouds via Geometry-Aware Local Adaptation**
Eito Ogawa, Taiga Hayami and Hiroshi Watanabe
- S6-6 **A Method for Classifying Annotation Difficulty in Whole Slide Images**
Nana Takano, Satoshi Nishiguchi and Masahiro Toyoura

Wednesday, March 18

9:20-10:20 Keynote 3

Main Room (304)

Chair: Kiyoshi Tanaka (Shinshu University)

Recent Advances in HDR Image Reconstruction

KokSheik Wong (Professor in the School of Information Technology at Monash University Malaysia)

10:20-10:30 Group Photo

Main Room (304)

10:40-12:40 Poster Session 2

[10:40-11:10] Fast-Forward

Main Room (304)

[11:10-12:40] Poster Presentation

Poster Room (404)

Chair: Kiyoshi Tanaka (Otsuma Women's University)

- P2-1 **The Effects of Conversational Avatar Appearance and Voice Volume on Perceived Distance in Virtual Reality**
Kenji Mizutani, Hiroyuki Nagata, Seika Obayasi and Kentaro Tazawa
- P2-2 **AIoU: An Adaptive Bounding Box Loss with an Edge Alignment Penalty**
Wenhui Chen, Ziyao Lin, Xinyu Jiang and Chi Man Vong
- P2-3 **Effect of HMD Frame Rate Reduction on Attentional Orienting in a Driving Simulator**
Sora Maehara, Wataru Hashimoto, Yasuharu Mizutani and Satoshi Nishiguchi
- P2-4 **Assessing Surgeons' Physiological Fatigue During Robot-Assisted Surgery Tasks Using a Three-Dimensional Visualization System**
Hiroki Yamazaki, Takao Yamashita and Naoki Kobayashi
- L2-1 **Coded Imaging with Reflectance Separation for Light Transport Acquisition**
Sosuke Kawano, Michitaka Yoshida, Ryo Kawahara and Takahiro Okabe

- L2-2 **Specular, Diffuse, and Global Separation via Polarized-Pattern Projection**
Kae Matsuguchi, Michitaka Yoshida, Ryo Kawahara and Takahiro Okabe
- L2-3 **Joint Optimization of Illumination and Fluorescence Spectral Recovery**
Ryohei Kumagai, Michitaka Yoshida, Ryo Kawahara and Takahiro Okabe
- L2-4 **Study on Quantitative Analysis of Relaxation Effects of Picture Book Live**
Mitsuki Hara and Sho Ooi
- L2-5 **A Method for Personalized Fashion Image Generation Using LoRA**
Zihan Wang and Hironobu Abe
- L2-6 **Reduction of Aliasing in Medical Volume Rendering for Realistic Visualization**
Noeru Shimada, Toru Higaki, Bisser Raytchev, Yanlei Gu and Wataru Fukumoto
- L2-7 **Easy4DView: A Browser-Based Interactive 4D Volume Visualization Tool**
Hiroyuki Kubo, Shi Baolai, Takuya Funatomi, Kaya Kanemaru, Kazuhiro Yoshimi, Atsushi Hamada and Shunji Kotsuki
- L2-8 **Visualizing Emotions in Speech Using Landscape Images for Self-Reflection**
Momo Doteguchi and Kiyoshi Tanaka
- L2-9 **A Hybrid Workflow for Anime Facial Expression Synthesis via Part Editing and Image-to-Image Redrawing**
Sho Haraguchi, Ryosuke Higasayama, Shintaro Horikoshi and Hideki Todo
- L2-10 **Learning-Based Specular-Diffuse Separation from Event Sequence and Image**
Shotaro Yamamoto, Michitaka Yoshida, Ryo Kawahara and Takahiro Okabe
- L2-11 **Overlaying Geographic Information on Aerial Video**
Wakana Shimoda and Hitoshi Saji
- L2-12 **Multi-Frame Blind Deconvolution for Iris Recognition**
Yuka Ogino, Rikuto Otsuka, Yuho Shoji, Takahiro Toizumi, Rui Ishiyama and Atsushi Ito
- L2-13 **Counterfactual Injection to Improve State-Consistent Action Selection**
Arif Emre Bahar and Hironobu Abe
- L2-14 **An Attempt of Color Scheme Search for Pseudo-isochromatic Plates Using Multi-objective Evolutionary Computation**
Kazuki Shiraishi, Kiyoshi Tanaka, Aguirre Hernan, Yoshiki Tanaka, Sho Yokoyama and Kazuo Ichikawa
- L2-15 **Effect of Target Placement Configuration on Accuracy in 3D Point Cloud Distortion Correction**
Shunki Miyano, Hibiki Murano, Munetoshi Iwakiri and Kiyoshi Tanaka
- L2-16 **Extraction of Cataractous Opacity Regions Using flattening Correction in Fused Retroillumination Images**
Hikaru Sugimoto, Kiyoshi Tanaka, Yoshiki Tanaka, Sho Yokoyama, Kei Ichikawa and Kazuo Ichikawa
- L2-17 **Can Video Enhancement Influence Heart Rate Variability?**
Youta Noboru and Yuko Ozasa
- L2-18 **Generation of Wide-Angle Images with Barrel Distortion from Perspective Projection Images**
Masashi Baba
- L2-19 **5G Signal Detection from Spectrogram Images Using YOLOv8**
Takumi Sonehara, Oscar Lasierra, Kiyoshi Tanaka and Anna Umbert
- L2-20 **Fluorescent Novel-View Synthesis under Novel Light Source Colors via 3DGS**
Lin Shi, Michitaka Yoshida, Ryo Kawahara and Takahiro Okabe
- L2-21 **OshiFit: Study on Proposal System with "Oshi-katsu" based on Individual Characteristics Predicted by One's Own Avatar**
Gen Imai and Sho Ooi
- L2-22 **To Yo/U Too: An Action Role Playing Game That Studies The Player-Game Relationship And Its Connection To Player Psychological Well-Being**
Roche Andre Cadelina and Sho Ooi
- L2-23 **Effectiveness of Combined Flick Gestures and Device Motion for User Authentication**
Yusuke Sumiyoshi and Yasushi Yamazaki

13:00-18:00 Excursion

Short trip to Miyajima

18:00-20:00 Banquet

Edion Peace Wing Hiroshima

Thursday, March 19

9:30-11:30 Session 7: Animation and Rendering

Presentation Room 1 (302)

Chair: Makoto Fujisawa (University of Tsukuba)

- S7-1 **An Efficient Method for Sound Propagation/Refraction with Water Surface Based on Gaussian Beam Tracing**
Masato Nishida, Makoto Fujisawa and Masahiko Mikawa
- S7-2 **Optimizing Terrain Shapes for Generating Desired Water Flows**
Yuki Kimura, Syuhei Sato and Yoshinori Dobashi
- S7-3 **Sketch-Guided 3D Tree Voxel Generation Using Latent Diffusion Model**
Ryuichi Miyauchi, Hao Jin and Haoran Xie
- S7-4 **Fast Rendering of Spotlight Beams with Complex Light Distributions**
Sogo Inagaki and Yoshinori Dobashi
- S7-5 **Dual Camera Screen Space Reflections**
Xinyu Du and Suguru Saito
- S7-6 **Dynamic Rendering Control Method in Distributed Rendering for Multiple Users in Shared Virtual Space**
Asahi Yamada and Suguru Saito

9:30-11:30 Session 8: VR, AR and MR

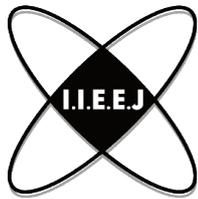
Presentation Room 2 (303)

Chair: Sho Ooi (Osaka Institute of Technology)

- S8-1 **Immersive Virtual Reality Flood Survival Training: Enhancing Survival Skills through Simulation**
Kemachart Kemavuthanon and Osamu Uchida
- S8-2 **Usability Evaluation of Presentation and Graph Creating Tool using AR**
Kaoru Mitsuhashi, Iwao Sekita and Hiroshi Takeshita
- S8-3 **An Augmented Reality-Based Disaster Information Visualization System for Foreign Tourists in Japan: Design and Usability Evaluation**
Gowit Chanaken, Keisuke Utsu and Osamu Uchida
- S8-4 **Investigation of Weight Illusion Induced by Multisensory Integration in a Virtual Reality Environment**
Takahisa Toyama and Kenji Mizutani
- S8-5 **Effects of Observation Distance and Impact Sound Frequency Variations on Weight Perception in Virtual Reality**
Tomoya Ishige, Shunya Matsumoto and Kenji Mizutani
- S8-6 **Effective Visual Feedback in Natural Virtual Grasping for Complex Tasks**
Kazuki Narita and Mie Sato

11:30-12:00 Closing

Main Room (304)



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