



# Session Schedule

## Virtual (JST, UTC+09:00)

**Fri Feb 27, 2026**

	Room 1	Room 2	Room 3
01:00 PM └ 02:30 PM	Computer Vision and Learning <27PM1-R1>	Nonlinear Dynamics and Control Systems <27PM1-R2>	No Session
02:40 PM └ 04:10 PM	Speech Processing I <27PM2-R1>	Optical and Wireless Communications <27PM2-R2>	No Session



2026 RISP International Workshop on Nonlinear Circuits, Communications and Signal Processing

February 27 – March 2, 2026, Hilton Waikiki Beach Hotel, Honolulu, Hawaii, U.S.A. and Virtual

## Onsite (HST, UTC-10:00)

**Sat Feb 28, 2026**

	Room 1	Room 2	Room 3
09:00 AM └ 10:30 AM	Computer Vision & Image Processing I <28AM1-R1>	Medical Applications I <28AM1-R2>	Artificial Intelligence I <28AM1-R3>
10:50 AM └ 12:20 PM	Computer Vision & Image Processing II <28AM2-R1>	Medical Applications II <28AM2-R2>	Artificial Intelligence II <28AM2-R3>
01:30 PM └ 03:00 PM	Computer Vision & Image Processing III <28PM1-R1>	Medical Applications III <28PM1-R2>	Artificial Intelligence III <28PM1-R3>
03:20 PM └ 04:50 PM	Computer Vision & Image Processing IV <28PM2-R1>	Medical Applications IV <28PM2-R2>	Artificial Intelligence IV <28PM2-R3>

**Sun Mar 1, 2026**

	Room 1	Room 2	Room 3
09:00 AM └ 10:30 AM	Computer Vision & Image Processing V <01AM1-R1>	Circuit Design and Analysis I <01AM1-R2>	Artificial Intelligence V <01AM1-R3>
10:50 AM └ 12:20 PM	Computer Vision & Image Processing VI <01AM2-R1>	Circuit Design and Analysis II <01AM2-R2>	Nonlinear Dynamics I <01AM2-R3>
01:30 PM └ 03:00 PM	Speech Processing <01PM1-R1>	Circuit Design and Analysis III <01PM1-R2>	Nonlinear Dynamics II <01PM1-R3>
03:20 PM └ 04:50 PM	Wireless Communications I <01PM2-R1>	Information Security I <01PM2-R2>	Nonlinear Dynamics III <01PM2-R3>



**Mon Mar 2, 2026**

	Room 1	Room 2	Room 3
09:00 AM └ 10:30 AM	Wireless Communications II <02AM1-R1>	Information Security II <02AM1-R2>	No Session
10:50 AM └ 12:20 PM	Estimation, Detection & Sensing I <02AM2-R1>	Information Security III <02AM2-R2>	No Session
01:30 PM └ 03:00 PM	Estimation, Detection & Sensing II <02PM1-R1>	Intelligent Transport Sensing <02PM1-R2>	No Session
03:20 PM └ 04:32 PM	Estimation, Detection & Sensing III <02PM2-R1>	Signal Processing & Architectures <02PM2-R2>	No Session



## 27PM1-R1: Computer Vision and Learning [Virtual]

Date : Fri Feb 27 01:00 PM – 02:30 PM (UTC+09:00)

Place: Room 1 (Virtual)

Chair: TBA

27PM1-R1-1	<b>Cutting Point Detection Algorithm for Tomato Leaf-Cutting Operations Based on Image Processing Method</b>	1
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Go Moriwaki (Tokushima University), Hiroshi Suzuki (Tokushima University),  
Takahiro Kitajima (Tokushima University), Takashi Yasuno (Tokushima University)

27PM1-R1-2	<b>Secure and Confidential BP Learning Using a Distributed Processing System</b>	5
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Hirofumi Miyajima (Nagasaki University)

27PM1-R1-3	<b>Efficient Patch Tokenization in Vision Transformers for Improving Shading Estimation in a Low-Data Regime</b>	9
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Hiroo Tsuji (Otemon Gakuin University)

27PM1-R1-4	<b>Estimation Model for Temperature and Humidity Spatial Distribution in Greenhouse by Multi-Layer Perceptron</b>	13
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Mikuri Mago (Tokushima University), Hiroshi Suzuki (Tokushima University),  
Takashi Yasuno (Tokushima University), Takahiro Kitajima

27PM1-R1-5	<b>Extending MQEA/I to Multi/Many-Objective Optimization Problem: A Case of the Traveling Salesman Problem</b>	17
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Shoma Kuguyama (Prefectural University of Kumamoto), Yoshifumi Moriyama  
(Prefectural University of Kumamoto), Ichiro Iimura (Prefectural University of Kumamoto), Shigeru Nakayama (Kagoshima University)



## 27PM1-R2: Nonlinear Dynamics and Control Systems [Virtual]

Date : Fri Feb 27 01:00 PM – 02:30 PM (UTC+09:00)

Place: Room 2 (Virtual)

Chair: TBA

27PM1-R2-1	<b>Changing Attractors Using Synchronization in Chaotic Circuits with Unidirectional Coupling</b>	21
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Kohei Suzue (Tokushima University), Yoko Uwate (Tokushima University), Yoshifumi Nishio (Tokushima University)

27PM1-R2-2	<b>Driving Posture Angle Control for Mobile Robot Platform Driven by Four Omni-wheels</b>	25
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Tatsuya Ueyama (Tokushima University), Hiroshi Suzuki (Tokushima University), Takahiro Kitajima (Tokushima University), Akinobu Kuwahara (Tokushima University), Takashi Yasuno (Tokushima University)

27PM1-R2-3	<b>Human-following Control Algorithm of Mobile Robot Cart for Agricultural Work Support</b>	29
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Kokoro Akashi (Tokushima University), Hiroshi Suzuki (Tokushima University), Takahiro Kitajima (Tokushima University), Akinobu Kuwahara (Tokushima University), Takashi Yasuno (Tokushima University)

27PM1-R2-4	<b>SLAM-Based Autonomous Navigation for Agricultural Support Mobile Robot Cart in Horticulture Greenhouse</b>	33
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Bangyang Wu (Tokushima University), Hiroshi Suzuki (Tokushima University), Takahiro Kitajima (Tokushima University), Takashi Yasuno (Tokushima University)



## 27PM2-R1: Speech Processing I [Virtual]

Date : Fri Feb 27 02:40 PM – 04:10 PM (UTC+09:00)

Place: Room 1 (Virtual)

Chair: TBA

27PM2-R1-1	<b>Comprehensive Evaluation of VAD-based and STM-Based Speech Detection Under Heavy Noise Conditions</b>	37
	Nguyen Van Dinh (Japan Advanced Institute of Science and Technology), Nhu Quynh Tran (Japan Advanced Institute of Science and Technology), Quoc-Huy Nguyen (Japan Advanced Institute of Science and Technology), Masashi Unoki (Japan Advanced Institute of Science and Technology)	
27PM2-R1-2	<b>Spatially-Regularized Switching Independent Vector Analysis with Iterative Source Steering</b>	41
	Haonan Dong (Waseda University), Wei Liu (Wuhan University), Xuemai Xie (Waseda University), Shoji Makino (Waseda University)	
27PM2-R1-3	<b>On Joint Switching Dereverberation and Spatially-Regularized Independent Vector Analysis</b>	45
	Guangming Zheng (Waseda University), Wei Liu (Wuhan University), Changda Chen (Waseda University), Shoji Makino (Waseda University)	
27PM2-R1-4	<b>Quantifying the Contribution of WORLD Vocoder Features to Bone-Conducted Speech Enhancement</b>	49
	Imam Nurul Hukmi (Japan Advanced Institute of Science and Technology), Quoc-Huy Nguyen (Japan Advanced Institute of Science and Technology), Masashi Unoki (Japan Advanced Institute of Science and Technology)	
27PM2-R1-5	<b>How Much Data Is Enough? Fine-Tuning Large Pretrained ASR Models for Burmese Language</b>	53
	Khine Zar Thwe (Otemae University), Eri Maegawa (Otemae University)	

## 27PM2-R2: Optical and Wireless Communications [Virtual]

Date : Fri Feb 27 02:40 PM – 04:10 PM (UTC+09:00)

Place: Room 2 (Virtual)

Chair: TBA

27PM2-R2-1	<b>Design of Share Frame for VN-CodeSK Illumination-Light Communication System Using (2, 2) Threshold Secret Sharing Scheme</b>	57
	Junya Yada (Ibaraki University), Yusuke Kozawa (Ibaraki University), Hiromasa Habuchi (Ibaraki University)	
27PM2-R2-2	<b>Theoretical Analysis of Frame Synchronization Performance for Shortened Frame PPM in Optical Wireless Transmission</b>	61
	Narumi Hamano (Ibaraki University), Yusuke Kozawa (Ibaraki University), Habuchi Hiromasa (Ibaraki University)	
27PM2-R2-3	<b>Study on Performance Evaluation of 2D-PPM-OCDMA System Using 2D Optical ZCZ Sequences</b>	65
	Yasuaki Ohira (Kagoshima University), Takahiro Matsumoto (Kagoshima University), Hideyuki Torii (Kanagawa Institute of Technology), Yuta Ida (Yamaguchi University)	
27PM2-R2-4	<b>A Study on Power Consumption of WLANs Using Target Wake Time</b>	69
	Shinichi Baba (Daiichi Institute of Technology), Takahiro Matsumoto (Kagoshima University), Yasuaki Ohira (Kagoshima University)	
27PM2-R2-5	<b>SDM-GSM Transmissions and Channel Ranking QRM-MLD for HTRCI-MIMO/OFDM Systems</b>	73
	Daito Shimizu (Yamaguchi University), Yuta Ida (Yamaguchi University), Yasuaki Ohira (Kagoshima University), Sho Kuroda (FX Systems Corporation), Takahiro Matsumoto (Kagoshima University)	

## 28AM1-R1: Computer Vision & Image Processing I

Date : Sat Feb 28 09:00 AM – 10:30 AM (UTC-10:00)

Place: Room 1

Chair: TBA

28AM1-R1-1	<b>Performance Analysis of Secure Content-Based Image Retrieval Scheme</b>	77
	Shinya Kawakami (Tokyo Denki University), Shigeo Wada (Tokyo Denki University)	
28AM1-R1-2	<b>A Study on Compressed Object Detection Models for Feature-Extractable CMOS Image Sensor</b>	81
	Ryoya Iegaki (Ritsumeikan University), Keiichiro Kuroda (Ritsumeikan University), Yu Osuka (Ritsumeikan University), Ryuichi Ujiie (Nissinbo Micro Devices), Hideki Shima (Nissinbo Micro Devices), Kota Yoshida (Ritsumeikan University), Shunsuke Okura (Ritsumeikan University)	
28AM1-R1-3	<b>A Study on a Novel CNN Model Specialized for Generating Seeds in Graph Cut Segmentation</b>	85
	Saya Kumagai (Tamagawa University), Tsuyoshi Otake (Tamagawa University), Hisashi Aomori (Chukyo University), Masatoshi Sato (Tamagawa University)	
28AM1-R1-4	<b>AI-Based Dynamic Viewpoint Optimization and Camera Control for Autonomous Sports Broadcasting Systems</b>	89
	Masahiro Wada (Konan University)	
28AM1-R1-5	<b>AKAZE-score-guided LO-MLESAC for robust outlier removal in high-precision image matching</b>	90
	Mashiro Shimada (Meiji University), Hiroyuki Kamata (Meiji University)	

## 28AM1-R2: Medical Applications I

Date : Sat Feb 28 09:00 AM – 10:30 AM (UTC-10:00)

Place: Room 2

Chair: TBA

28AM1-R2-1	<b>Basic study of swallowing evaluation system by Electromyography, Swallowing sound, and ultrasonic pulse Doppler waveform</b>	94
	Kaoru Miyano (Toyo University), Motoki Arakawa (Toyo University), Shuya Shida (Toyo University), Rui Takahashi (Toyo University), Yutaka Suzuki (Toyo University)	
28AM1-R2-2	<b>Accuracy Validation of Backscattering Coefficient Estimation by High-Frequency Annular Array Probe</b>	98
	Jungtaek Choi (Grad. School of Sci. and Eng., Chiba Univ.), Jonathan Mamou (Weill Cornell Medicine), Jeffrey A. Ketterling (Weill Cornell Medicine), Cameron Hoerig (Weill Cornell Medicine), Shinnosuke Hirata (Center for Frontier Medical Engineering), Kenji Yoshida (Center for Frontier Medical Engineering), Tadashi Yamaguchi (Center for Frontier Medical Engineering)	
28AM1-R2-3	<b>Automatic Chewing Ability Assessment Using Temporal Pooling of Self-Supervised Learning Features</b>	102
	Ryo Ushijima (Shizuoka University), Mineka Yoshikawa (Hiroshima University), Masafumi Nishida (Shizuoka University), Masafumi Nishimura (Shizuoka University, Aichi Sangyo University)	
28AM1-R2-4	<b>A Study on ECG Artifact Removal Methods for EEG Measurements Using the Balanced balanced non-cephalic reference</b>	106
	Natsumi Watanabe (Kogakuin University), Hiroshi Arao (Taisho University), Shugo Suwazono (Center for Clinical Neuroscience, National Hospital Organization Okinawa National Hospital), Akio Kimura (Digital Medic, Inc), Hirotoshi Asano (Kogakuin University)	
28AM1-R2-5	<b>Effects of Avatar Gendered Appearance on Interpersonal Communication in Virtual Reality</b>	110
	Taisei Nitta (Kogakuin University), Daiki Koga (Kogakuin University), Junko Ichino (Waseda University), Masahiro Ide (TIS Co., Ltd., Tokyo City University), Hirotoshi Asano (Kogakuin University)	

## 28AM1-R3: Artificial Intelligence I

Date : Sat Feb 28 09:00 AM – 10:30 AM (UTC-10:00)

Place: Room 3

Chair: TBA

28AM1-R3-1	<b>A Communication Network Model with Physical Parameters for Shortest Path Routing Algorithm</b>	114
	Akira Matsuno (Chukyo University), Kaito Kato (Chukyo University), Takayuki Kimura (Tokyo City University), Takuji Kousaka (Chukyo University)	
28AM1-R3-2	<b>A Study on Band Division Scheme Parameters for Millimeter-Wave Received Power Prediction using LSTM</b>	118
	Ryo Ito (Meiji University), Kohei Ohno (Meiji University), Yuuki Matsuda (Meiji University), Takato Yamazaki (Meiji University)	
28AM1-R3-3	<b>Comparative Evaluation of Machine Learning based Positioning Using UWB Experimental Modules</b>	122
	Takumi Sugii (Meiji University), Ohno Kohei (Meiji University)	
28AM1-R3-4	<b>Deadline-Aware Resource Allocation with TBS-Based Disturbance Compensation in Cellular Networks</b>	126
	Yasuto Oshima (Nippon Institute of Technology), Misato Ogura (Nippon Institute of Technology), Eri Hosonuma (Nippon Institute of Technology), Nobuhiko Itoh (Nippon Institute of Technology)	
28AM1-R3-5	<b>Applying Generative Image Transmission Method Based on Semantic Information to Video Transmission</b>	130
	Eri Hosonuma (Nippon Institute of Technology), Yukito Okeda (Nippon Institute of Technology), Yuta Yamazaki (Nippon Institute of Technology), Nobuhiko Itoh (Nippon Institute of Technology)	



## 28AM2-R1: Computer Vision & Image Processing II

Date : Sat Feb 28 10:50 AM – 12:20 PM (UTC-10:00)

Place: Room 1

Chair: TBA

28AM2-R1-1	<b>Automatic Ball Position Estimation and Bird's-Eye View Generation from Billiard Table Images</b>	134
	Sora Saito (NIT, Suzuka College), Chihiro Ikuta (NIT, Suzuka College)	
28AM2-R1-2	<b>Visualization of Exercise Analysis System Based on 3D Pose Estimation</b>	138
	Keito Deura (Tokyo Denki University), Shigeo Wada (Tokyo Denki University)	
28AM2-R1-3	<b>Adaptive Power Line Detection Method Using Background Features for Automatic Wire Removal in Landscape Images</b>	142
	Toma Saito (Kogakuin University), Kazunori Uruma (Kogakuin University)	
28AM2-R1-4	<b>Video Analysis of Children's Body Motion Patterns for Attention Estimation in Classrooms</b>	146
	Ami Sato (Tamagawa University), Takashi Omori (Tamagawa University), Masatoshi Sato (Tamagawa University)	
28AM2-R1-5	<b>Bicycle Theft Detection and Alert System Based on Suspicious Behavior Modeling</b>	150
	Mizuki Tsukada (Kanagawa Institute of Technology), Yasuhiro Sudo (Kanagawa Institute of Technology), Hiroshi Tanaka (Kanagawa Institute of Technology)	

## 28AM2-R2: Medical Applications II

Date : Sat Feb 28 10:50 AM – 12:20 PM (UTC-10:00)

Place: Room 2

Chair: TBA

28AM2-R2-1	<b>Emergence of Diverse Ripple-Firing Patterns via Synaptic Coupling Modulation in a Hippocampal CA1 Neural Circuit Model</b>	154
	Yuta Ishihara (Kagawa University), Yuto Tomohara (Kagawa University), Ken'ichi Fujimoto (Kagawa University), Hiroshi Murai (Yamaguchi University), Junko Ishikawa (Yamaguchi University), Dai Mitsushima (Yamaguchi University)	
28AM2-R2-2	<b>Effects of Differences in Tomato Brix Levels on Subjective Evaluation and Biological Indicators</b>	158
	Emiko Yasuno (National Institute of Technology, Anan College), Ryuzaburo Sugino (National Institute of Technology, Anan College), Koji Fukuda (National Institute of Technology, Anan College)	
28AM2-R2-3	<b>Effects of Microplastic Accumulation on Hepatic Immune Function and Inflammation</b>	162
	Hayato Ikeda (Keio University), Yasue Mitsukura (Keio University)	
28AM2-R2-4	<b>Feature Extraction for Estimating Blood Noradrenaline Fluctuations Using EEG</b>	166
	Yuhei Suzuki (Keio University), Yasue Mitsukura (Keio University)	
28AM2-R2-5	<b>Feature Extraction for Individual Differences Using Hand Gesture Recognition</b>	170
	Koki Hinaiji (Takushoku University), Yihsin Ho (Takushoku University), Eri Sato Shimokawara (Tokyo Metropolitan University), Hiroki Shibata (Tokyo Metropolitan University), Takenori Obo (Tokyo Metropolitan University), Ichiro Kobayashi (Takushoku University)	

## 28AM2-R3: Artificial Intelligence II

Date : Sat Feb 28 10:50 AM – 12:20 PM (UTC-10:00)

Place: Room 3

Chair: TBA

28AM2-R3-1	<b>Development of Cooperative AI Agents for Improving the Efficiency of Household Tasks</b>	174
	Kota Kawagoe (Kanagawa Institute of Technology), Yasuhiro Sudo (Kanagawa Institute of Technology)	
28AM2-R3-2	<b>Edge Collaborative Learning of Neural Networks via Partial Model Fusion and Adaptive Memory for Evolving Tasks</b>	178
	Gebreegziabher Hagos Berhe (Hokkaido University), Fumiya Arai (Hokkaido University), Takao Marukame (Hokkaido University), Tetsuya Asai (Hokkaido University), Kota Ando (Hokkaido University)	
28AM2-R3-3	<b>Evolutionary Topology and Parameter Synthesis of Resonant Converters Using a Hybrid Algorithm</b>	182
	Naoki Fukuda (Chiba University), Yinchen Xie (Chiba University), Kien Nguyen (Chiba University), Hiroo Sekiya (Chiba University)	
28AM2-R3-4	<b>Evaluating the Suitability of Genetic Algorithms for Reconstructing Established Kissing Numbers and Searching High-Dimensional Configurations</b>	186
	Eito Shimoda (National Institute of Technology, Suzuka College), Chihiro Ikuta (National Institute of Technology, Suzuka College)	
28AM2-R3-5	<b>Estimation of Intensity Distribution of Each Radioisotope in Soil Using ML-EM Method</b>	190
	Kanata Nokubo (Kagawa University), Ken'ichi Fujimoto (Kagawa University), Minoru Sakama (Tokushima University), Kazumasa Inoue (Tokyo Metropolitan University), Masahiro Fukushi (Tsukuba International University)	



## 28PM1-R1: Computer Vision & Image Processing III

Date : Sat Feb 28 01:30 PM – 03:00 PM (UTC-10:00)

Place: Room 1

Chair: TBA

28PM1-R1-1	<b>Computer Vision-Based Size Estimation for a Sweet Potato Classification Support System</b>	192
	Yasuteru Hosokawa (Shikoku University)	
28PM1-R1-2	<b>Designing Privacy-Latency Trade-offs for JPEG XS EtC in the DWT Domain</b>	196
	Takayuki Nakachi (University of the Ryukyus), Park Cheolhwan (University of the Ryukyus), Yasuhisa Kato (Miharu Communications Inc.), Mitsuru Maruyama (Kanagawa Institute of Technology)	
28PM1-R1-3	<b>Development of an Automated Frost Detection Camera System for Carrot Cultivation Using Mini Pipe Houses</b>	200
	Haruto Kusaka (National Institute of Technology, Anan College), Susumu Yoshida (National Institute of Technology, Anan College), Junji Fukumi (National Institute of Technology, Anan College)	
28PM1-R1-4	<b>Enhancing Visual Quality and Throughput with Inverse Frames in Display-Camera Visible Light Communications</b>	201
	Chieri Okawa (Nagoya University), Hiraku Okada (Meijo University), Tadahiro Wada (Shizuoka University), Shan Lu (Nagoya University), Takaya Yamazato (Nagoya University)	
28PM1-R1-5	<b>Estimating Intermediate Alcohol Intoxication States from Paired Facial Images</b>	205
	Toshihiro Tsukagoshi (Shizuoka University), Masanori Matsuda (Sapporo Breweries Limited), Kei Asada (Sapporo Breweries Limited), Yoshitaka Yamamoto (Shizuoka University), Masafumi Nishimura (Shizuoka University, Aichi Sangyo University)	

## 28PM1-R2: Medical Applications III

Date : Sat Feb 28 01:30 PM – 03:00 PM (UTC-10:00)

Place: Room 2

Chair: TBA

28PM1-R2-1

### Hybrid Sensing Method for Long-Term Bowel Sound Monitoring

209

Yuto Iseki (Tokyo University of Science), Yusuke Yamanoi (Tokyo University of Science), Osamu Sakata (Tokyo University of Science)

28PM1-R2-2

### Proposal of a Method for Cleansing Mislabeled Data in Pattern Classification

213

Yuto Tomohara (Kagawa University), Yuta Ishihara (Kagawa University), Ken'ichi Fujimoto (Kagawa University), Hiroshi Murai (Yamaguchi University), Junko Ishikawa (Yamaguchi University), Dai Mitsushima (Yamaguchi University)

28PM1-R2-3

### Performance evaluation of a classifier using LSTM autoencoder for ECG waveforms measured through cloth

217

Ishii Yuuma (Tokyo Denki University), Yoshitaka Ito (Hokkaido University of Science), Iori Kudo (Tokyo Denki University), Akinori Ueno (Tokyo Denki University), Masaharu Adachi (Tokyo Denki University)

28PM1-R2-4

### Prediction of Nasal Skin Temperature Fluctuations Using Reservoir Computing

221

Amana Tsurumaki (Kogakuin University), Eri Ioka (Shibaura Institute of Technology), Hirotoshi Asano (Kogakuin University)

28PM1-R2-5

### Pathophysiological Classification Using Patients' Subjective Pain Expressions

225

Zhiyang Qi (The University of Electro-Communications), Yuji Nozaki (The University of Electro-Communications), Ryota Abe (The University of Electro-Communications), Haruka Matsukura (The University of Electro-Communications), Kazutoshi Fujibayashi (Juntendo University), Toshio Naito (Juntendo University), Maki Sakamoto (The University of Electro-Communications)

## 28PM1-R3: Artificial Intelligence III

Date : Sat Feb 28 01:30 PM – 03:00 PM (UTC-10:00)

Place: Room 3

Chair: TBA

28PM1-R3-1

### **Investigation the Suitability of Acoustic Vehicle Alerting System (AVAS) Sounds Using Subjective Evaluation of Actual Vehicle Driving Sounds and Artificial Steady Driving Sounds**

229

Mika Sakakibara (Hiroshima City University), Shunsuke Ishimitsu (Hiroshima City University), Satoshi Fujikawa (Mazda Motor Corporation), Kyoaki Iwata (Mazda Motor Corporation), Masakazu Kikuchi (Mazda Motor Corporation), Mitsunori Matsumoto (Mazda Motor Corporation), Shingo Kodama (Mazda Motor Corporation), Hirotugu Inaki (Mazda Motor Corporation), Yasunori Mitsuda (Procyon Studio Co., Ltd)

28PM1-R3-2

### **Gait transitions in quantized-state central pattern generators with sigma-delta modulation**

233

Takumi Yoshioka (Kagawa University), Kentaro Takeda (Kagawa University)

28PM1-R3-3

### **Impact of Feedback Control Interval on Deadline-Aware MBR-Based Resource Management in Mobile Networks**

237

Eiji Watanabe (Nippon Institute of Technology), Eri Hosonuma (Nippon Institute of Technology), Nobuhiko Itoh (Nippon Institute of Technology)

28PM1-R3-4

### **A Comparative Study of Single and Hierarchical RNNs for Melody Generation from Chord Progressions**

241

Ruri Motoyama (Ritsumeikan University)



## 28PM2-R1: Computer Vision & Image Processing IV

Date : Sat Feb 28 03:20 PM – 04:50 PM (UTC-10:00)

Place: Room 1

Chair: TBA

28PM2-R1-1	<b>Fast Image Reconstruction Using Parametric Steffensen's Method With Regularization</b>	245
	Tomoki Oyama (Kagawa University), Ken'ichi Fujimoto (Kagawa University), Yuichi Tanji (Kagawa University)	
28PM2-R1-2	<b>Feature Point Selection for Visual SLAM on Unreached Celestial Bodies via Integration of Global Suppression and Local Grid Search</b>	248
	Haruki Omori (Meiji University), Hiroyuki Kamata (Meiji University)	
28PM2-R1-3	<b>Super-Resolution Time-Frequency Analysis of Non-Stationary Sounds Using Shannon Wavelet-Based Superlet Transform</b>	252
	Tomoyuki Hakozaki (Hiroshima City University), Hiroki Suganuma (Hiroshima City University, Komatsu), Shunsuke Ishimitsu (Hiroshima City University)	
28PM2-R1-4	<b>HDR Reconstruction from a Single LDR Image via GAN-based Adaptive Tone Curve Estimation</b>	256
	Tomoya Yoshida (Kogakuin University), Kazunori Uruma (Kogakuin University), Ryohei Sasaki (Tokyo University of Technology)	
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	Shogo Osaki (Tamagawa University), Taishi Iriyama (Saitama University), Masatoshi Sato (Tamagawa University), Hisashi Aomori (Chukyo University), Tsuyoshi Otake (Tamagawa University)	



## 28PM2-R2: Medical Applications IV

Date : Sat Feb 28 03:20 PM – 04:50 PM (UTC-10:00)

Place: Room 2

Chair: TBA

28PM2-R2-1	<b>Robust Time-Aligned Signal Extraction for Improved Multimodal Data in Pneumonia Diagnosis</b>	264
	Takuto Miya (Tokyo University of Science), Ryota Sasaki (Tokyo University of Science), Ahmad Akmal Aminuddin Mohd Kamal (Tokyo University of Science), Masaya Fujisawa (Tokyo University of Science), Kazuki Taoka (The University of Tokyo)	
28PM2-R2-2	<b>Semi-Supervised Real-World Adaptation for Swallowing Sound Detection</b>	268
	Toshihiro Tsukagoshi (Shizuoka University), Masafumi Nishida (Shizuoka University), Masafumi Nishimura (Shizuoka University, Aichi Sangyo University)	
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	Takuto Torigai (Kindai University), Takeshi Kumaki (Ritsumeikan University), Kyosuke Kageyama (Kindai University)	
28PM2-R2-4	<b>The Effects of Biofeedback-Based Acoustic Mindfulness during Autonomous Driving</b>	276
	Chisato Fukuda (Hiroshima City University), Kizuna Sudo (Hiroshima City University), Shunsuke Ishimitsu (Hiroshima City University)	
28PM2-R2-5	<b>Ultrasonic Tongue Motion Image Analysis as a Fundamental Technology for Swallowing Function Assessment</b>	280
	Ayano Yoshiyasu (Tokyo University of Science), Yusuke Yamanoi (Toyo University), Yutaka Suzuki (Tokyo University of Science), Osamu Sakata (Tokyo University of Science)	

## 28PM2-R3: Artificial Intelligence IV

Date : Sat Feb 28 03:20 PM – 04:50 PM (UTC-10:00)

Place: Room 3

Chair: TBA

28PM2-R3-1	<b>Mental-State Estimation Using Multi-FPGA SNN Based on Liquid State Machine</b>	284
	Haruto Ota (Chiba University), Ryuji Nagazawa (Chiba University), Kien Nguyen (Chiba University), Nobuyoshi Komuro (Chiba University), Hiroo Sekiya (Chiba University)	
28PM2-R3-2	<b>Nonlinearity Compensation for Optical SSB Transmission Using Frequency Domain Artificial Neural Networks</b>	288
	Jun Yokoyama (Meiji University), Shoma Kanaya (Meiji University), Kodai Watanabe (Meiji University), Moriya Nakamura (Meiji University)	
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Chair: TBA

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Chair: TBA

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Kana Kubota (Department of Electrical Engineering, Tokyo University of Science), Dai Kojima (Department of Electrical Engineering, Tokyo University of Science), Hiroyuki Yasuda (International Research Center for Neurointelligence, The University of Tokyo), Song-Ju Kim (SOBIN Institute LLC.), Ryosuke Isogai (Seiko Future Creation Inc.), Yoshifumi Yoshida (Seiko Future Creation Inc.), Jin Nakazato (Department of Electrical Engineering, Tokyo University of Science), Maki Arai (Shibaura Institute of Technology), Mikio Hasegawa (Department of Electrical Engineering, Tokyo University of Science)



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## 01PM1-R2: Circuit Design and Analysis III

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Place: Room 2

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Place: Room 3

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Place: Room 1

Chair: TBA

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Place: Room 2

Chair: TBA

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Date : Mon Mar 02 10:50 AM – 12:20 PM (UTC-10:00)

Place: Room 1

Chair: TBA

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Place: Room 2

Chair: TBA

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Date : Mon Mar 02 01:30 PM – 03:00 PM (UTC-10:00)

Place: Room 1

Chair: TBA

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Date : Mon Mar 02 01:30 PM – 03:00 PM (UTC-10:00)

Place: Room 2

Chair: TBA

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