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\* The Program is used for CECNet 2024 Academic Exchange Only

# Part I Conference Schedule Summary

Tuesday, November 5, 2024 / Japan Standard Time (UTC+9)

Time	Schedule	Location/Link
14:00-20:00	Physical Registration	In front of Meeting Room 501 at Kunibiki Messe
15:00-17:00	MS Teams Testing	<a href="http://www.academicconf.com/teamslink?confname=cecnet2024">http://www.academicconf.com/teamslink?confname=cecnet2024</a>

## Notice (for offline participants):

\* Please show us your name or paper ID for registration.

\* Please pick up all the conference materials at the registration desk (Name Card, Conference Program, Lunch & Dinner Tickets, etc.).

Wednesday, November 6, 2024 / Japan Standard Time (UTC+9)

Location: Meeting Room 401 (Morning Session), 403 (Afternoon Session), Kunibiki Messe

MS Teams Link: <http://www.academicconf.com/teamslink?confname=cecnet2024>

09:00-09:05	<b>Welcome Speech</b> <i>Prof. Qixin Guo, Saga University, Japan</i>
09:05-09:45	<b>Keynote Speech 1: Overview of Electromagnetic Selective Structures</b> <i>Prof. Zhongxiang Shen, Yangtze Delta Region Academy of Beijing Institute of Technology (Jiaxing), China</i>
09:45-10:25	<b>Keynote Speech 2: Enhancing Robustness in Deep Learning: A Universal Mechanism for Adversarial Example Detection in Multiple Types Data</b> <i>Prof. Han-Chieh Chao, Department of Electrical Engineering, National Dong Hwa University</i>
10:25-10:55	<b>Group Photo &amp; TEA BREAK</b>
10:55-11:35	<b>Keynote Speech 3(Online): Trustworthy AI Aiding Clinical Diagnosis in Real World</b> <i>Prof. Qin Zhang, Institute of Nuclear and New Energy Technology and Department of Computer Science and Technology, Tsinghua University, China</i>
11:35-11:55	<b>Invited Speech 1: Defective Workpiece Sorting Robots Incorporating a Teaching Points Generator and a CNN for Defect Detection</b> <i>Prof. Fusaomi Nagata, Department of Mechanical Engineering, Faculty of Engineering, Sanyo-Onoda City University, Japan</i>
11:55-12:15	<b>Invited Speech 2: Improving 6G Network Reliability: Experimental Advances in mmWave Backhaul for NLOS Conditions</b> <i>Prof. Larbi Talbi, Department of Computer Science and Engineering (DCSE), University of Quebec, Canada</i>

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12:15-12:30      **Poster Presentations (Meeting Room 401)**

12:30-14:00      **LUNCH BREAK (Meeting Room 401)**

14:00-16:45      **Oral Session 1: Systems Science and Information Communication**

18:00-19:00      **DINNER (Meeting Room 403)**

**Thursday, November 7, 2024 / Japan Standard Time (UTC+9)**

**Location: Meeting Room 403**

*MS Teams Link:* <http://www.academicconf.com/teamslink?confname=cecnet2024>

09:00-12:10      **Oral Session 2: Internet Technology and Signal Processing**

12:10-14:00      **LUNCH BREAK (Meeting Room 403)**

14:00-18:00      **Free Activities**

18:30-20:30      **DINNER BANQUET**

**Location: YUUSHIEN Garden in Daikonshima**

**Friday, November 8, 2024 / Japan Standard Time (UTC+9)**

09:00              **Set off from Kunibiki Messe**

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09:00-16:00      **One Day Field Visit in Matsue City: Matsue Castle, Horikawa Sightseeing Boat, Matsue Vogel Park**

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# Part II Keynote Speeches

## Keynote Speech 1: Overview of Electromagnetic Selective Structures



*Prof. Zhongxiang Shen*

*Yangtze Delta Region Academy of Beijing Institute of Technology (Jiaxing), China*

**Biography:** Zhongxiang Shen received the B. Eng. degree from the University of Electronic Science and Technology of China, Chengdu, China, in 1987, the M. S. degree from Southeast University, Nanjing, China, in 1990, and the PhD degree from the University of Waterloo, Waterloo, Ontario, Canada, in 1997, all in electrical engineering. From 1990 to 1994, he was with Nanjing University of Aeronautics and Astronautics, China. He was with Com Dev Ltd., Cambridge, Canada, as an Advanced Member of Technical Staff in 1997. He spent six months each in 1998, first with the Gordon McKay Laboratory, Harvard University, Cambridge, MA, and then with the Radiation Laboratory, the University of Michigan, Ann Arbor, MI, as a Postdoctoral Fellow. From Jan. 1999 to December 2023, he was a faculty member (Assistant Professor, Associate Professor and Full Professor) of Nanyang Technological University, Singapore. He is now a Strategic Scientist at Yangtze Delta Region Academy of Beijing Institute of Technology, Jiaxing, Zhejiang, China. Dr. Shen served as the Chair of the IEEE MTT/AP Singapore Chapter in 2009. From Jan. 2010 to Aug. 2014, he was the Chair of IEEE AP-S Chapter Activities Committee. From July 2014 to December 2018, he served as the Secretary of IEEE AP-S. He was an elected AdCom member of the IEEE AP-S from Jan. 2017 to Dec. 2019. He served as an Associate Editor of the IEEE Transactions on Antennas and Propagation from July 2016 to July 2022. From Jan. 2021 to Dec. 2023, he is a Distinguished Lecturer of the IEEE AP-S. Prof. Shen is currently the Editor-in-Chief of IEEE Open Journal of Antennas and Propagation. Prof. Shen is an IEEE Fellow. His research interests include small and planar antennas for various wireless communication systems, analysis and design of frequency-selective structures and absorbers, hybrid numerical techniques for modeling RF/microwave components and antennas. He has authored more than 240 journal papers (among them 180 were published in IEEE Journals) and also presented nearly 200 papers at international conferences.

**Abstract:** In this talk, we intend to provide a brief overview of electromagnetic selective surfaces/structures (EMSS). According to the properties of an incident electromagnetic wave, EMSS can be divided into four categories: frequency-selective structure (FSS), polarization-selective surface (PSS), angle-selective surface (ASS), and energy-selective surface (ESS). Recent developments and advances in the design of EMSS will also be briefly introduced. Finally, future opportunities in the areas of the design and analysis of EMSS will be suggested.

## Keynote Speech 2: Enhancing Robustness in Deep Learning: A Universal Mechanism for Adversarial Example Detection in Multiple Types Data



*Prof. Han-Chieh Chao*

*Department of Electrical Engineering, National Dong Hwa University*

**Biography:** Han-Chieh Chao received his M.S. and Ph.D. degrees in Electrical Engineering from Purdue University, West Lafayette, Indiana, in 1989 and 1993, respectively. He is currently a professor with the Department of Electrical Engineering, National Dong Hwa University, where he also serves as president. He is also with the Department of Computer Science and Information Engineering, National Ilan University, Taiwan. He was the Director of the Computer Center for Ministry of Education Taiwan from September 2008 to July 2010. His research interests include IPv6, Cross-Layer Design, Cloud Computing, IoT, and 5G Mobile Networks. He has authored or co-authored 4 books and has published about 400 refereed professional research papers. He has completed more than 150 MSEE thesis students and 11 Ph.D. students. Dr. Chao has been invited frequently to give talks at national and international conferences and research organizations. He serves as the Editor-in-Chief for the IET Networks, the Journal of Internet Technology, the International Journal of Internet Protocol Technology, and the International Journal of Ad Hoc and Ubiquitous Computing. He is a Fellow of IET (IEE) and a Chartered Fellow of the British Computer Society. Due to Dr. Chao's contribution of suburban ICT education, he has been awarded the US President's Lifetime Achievement Award and International Albert Schweitzer Foundation Human Contribution Award in 2016.

**Abstract:** Deep Neural Networks (DNNs) models are vulnerable to adversarial example(AE). For examples, Self-driving cars: Causing the traffic accident of self-driving cars, let voice assistant executing the wrong order or spread malicious speech through textual filter bot. We therefore proposed an AE detection method based on Poisson distribution. In the experiment, we demonstrated the generalization ability of our method. The experimental results show that our method is not limited to specific data. Also our method can effectively detect attacks with small perturbation degrees. In the future we will try to detect different, including those specifically designed to circumvent defense method.

## Keynote Speech 3: Trustworthy AI Aiding Clinical Diagnosis in Real World



*Prof. Qin Zhang*

*Institute of Nuclear and New Energy Technology and  
Department of Computer Science and Technology, Tsinghua  
University, China*

**Biography:** Qin Zhang graduated from Tsinghua University, Beijing, China, with BS., MS. and Ph.D. Degrees in nuclear engineering in 1982, 1984 and 1989 respectively. He was a visiting scholar with University of Tennessee, Knoxville, TN, USA, and University of California, Los Angeles, CA, USA, from 1987 to 1989, working on system reliability engineering and intelligent fault diagnoses. He is a professor of Institute of Nuclear and New Energy Technology and Department of Computer Science and Technology, Tsinghua University, emeritus member of China Association for Science and Technology, member of International Nuclear Energy Academy, fellow of China Association for Artificial Intelligence (CAAI) and director of the specialized committee for causality and uncertainty in AI of CAAI, consultant of the specialized committee for wise medical care of CAAI, Chief scientist of Beijing Yutong Intelligence Technology corp., Ltd. He is the former vice president of China Association for Science and Technology, and the standing member of the 13th CPPCC. He originally developed a new AI model called Dynamic Uncertain Causality Graph for fault diagnoses and disease diagnoses. The DUCG medical system has been applied in 4 districts and a county in China for a few years, covering 46 chief complaints such as headache, dizziness, joint pain, etc., including 1500 diseases. More than 2 million cases have been diagnosed with only 17 mistakes identified. All the mistakes were traced and corrected without further mistake reports about them.

**Abstract:** Medical AI needs to be trustable. However, the current AI such as Deep Learning and Large Language Models is black-box without explainability. DUCG (Dynamic Uncertain Causality Graph) is a newly developed trustworthy medical AI for clinical diagnosis in general practice and beyond. It graphically represents the medical knowledge and makes probabilistic reasoning with explainability, transparency and inherent invariance in different application scenarios. It is causality-driven instead of data-driven, so that it does not have problems such as data collecting, labeling, training, hallucination, generalization, privacy, bias, high cost and high energy consumption, etc. Cooperated with clinical experts deeply, 46 chief complaint models covering more than 1,500 diseases have been constructed and applied in the real-world in China. 41 models are retrospectively verified by third-party grade IIIA (the highest grade in China) hospitals. The verified diagnostic precisions of the 41 models are no less than 95%, in which the precision for every disease including the uncommon one is no less than 80%. More than 2 million real diagnosis cases have been performed, in which the prospective study was executed to some extent. So far, 17 cases have been identified as incorrect. The mistakes in DUCG were traced and corrected. These mistakes have not been reported since the corrections. Statistics show that DUCG can improve the ability of general practitioners to diagnose diseases several times more than without DUCG. The chief complaints are: dizziness, headache, nasal congestion (including runny nose), nosebleeds, sore throat (including dry

throat, itching, and foreign body sensation), jaundice, swallowing difficulties, cyanosis, coughing and sputum production, difficulty breathing (including chest tightness and shortness of breath), neck and back pain, hemoptysis, lymphadenopathy, chest pain, palpitations, vomiting blood, joint pain, nausea and vomiting, menstrual reduction or amenorrhea, limb numbness, edema, bloody stools, constipation, vulvar itching, abnormal vaginal secretions, vaginal bleeding, rash, fever, anemia, obesity, weight loss, children's fever, abdominal pain, diarrhea, fainting. bloating, oliguria or anuria, lower urinary tract symptoms (frequent urination, urgency, painful urination, gross hematuria, difficulty urinating, polyuria, leakage), lumps A diagnostic model was constructed and tested for more than 70 chief complaint symptoms, including acid reflux, heartburn, belching, ear symptoms (including ear pain, tinnitus, and deafness), scrotal pain, insomnia (including difficulty falling asleep, easy awakening, and early awakening), eye pain, redness, and tearing (including eye pain, redness, tearing, dryness, itching, swelling, and foreign body sensation), visual dysfunction (including visual abnormalities, visual field defects, visual distortion, color vision changes, flash sensation, diplopia, strabismus, and floaters), toothache.

**Keywords:** Trustworthy, Causality, Diagnosis, Explainability, Probabilistic Reasoning.

**Reference:**

Zhan Zhang, Qin Zhang, et al. Methodology and real-world applications of dynamic uncertain causality graph for clinical diagnosis with explainability and invariance, *Artificial Intelligence Review*, (2024) 57:151, DOI: 10.1007/s10462-024-10763-w.

## Invited Speech 1: Defective Workpiece Sorting Robots Incorporating a Teaching Points Generator and a CNN for Defect Detection

*Prof. Fusaomi Nagata, Department of Mechanical Engineering, Faculty of Engineering, Sanyo-Onoda City University, Japan*

**Abstract:** What we like to present is two points. One is the automatic teaching point generation for an industrial robot considering undesirable misalignment between robot and work coordinate systems. When a peg-in-hole task with little clearance is tried to be automated by an industrial robot, there is a problem due to the misalignment between robot and work coordinate systems. Such a misalignment, for example, sometimes occurs caused by over and under tightening of screws and bolts used to fix a robot and jigs on a working table, and tends to cause serious troubles such as breakage of workpieces and end-effectors. To cope with the problem, we have developed an application software on Python that automatically generates compensated teaching points for picking and placing only by giving the four corner positions on a working table. The other is the defective workpiece sorting robot incorporated with a Convolutional Neural Network (CNN) model. Generally, the functionality of the standard teaching interface provided by a robot maker seems to be limited to only the playback-type position control. Also, the extension of the functionality tends to be not easy for users and require much cost. To support the enhancement of the functionality, we have already proposed the Hyper Cutter Location Source (HCLS) data-based robotic interface. The HCLS data interface allows users to build a defective workpiece sorting system by multiple industrial robots incorporated with a CNN model for defect detection. The robots can collaboratively handle a single camera while targeting the sorting of industrial workpieces provided by a manufacturer. The effectiveness and usefulness of the proposed system implementing the introduced two functions are demonstrated through cooperative peg-in-hole tasks using two small-sized industrial robots MG400s as shown in Fig. 1.

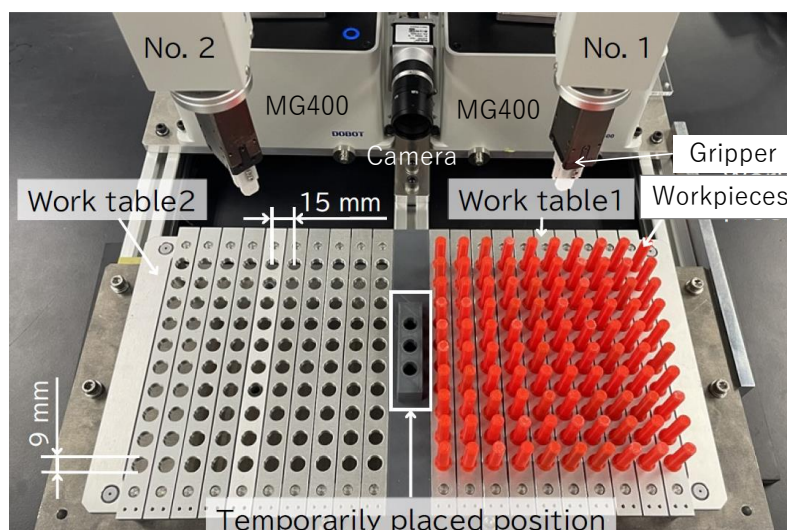


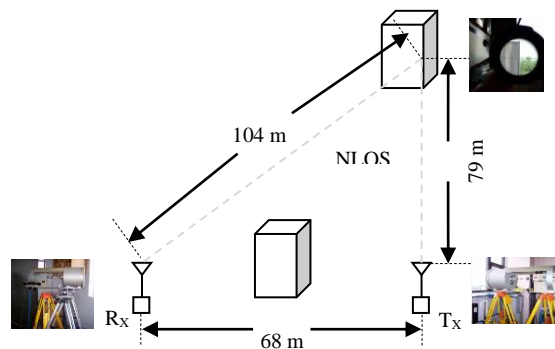
Fig. 1 Experimental setup for peg-in-hole task using two robots MG400s.



## Invited Speech 2: Improving 6G Network Reliability: Experimental Advances in mmWave Backhaul for NLOS Conditions

*Prof. Larbi Talbi, Department of Computer Science and Engineering (DCSE), University of Quebec, Canada*

**Abstract:** With the advent of 6G networks, the demand for high-speed, high-capacity wireless communication has never been greater. One of the critical components of 6G infrastructure is the backhaul network, which connects base stations to the core network. Millimeter wave (mmWave) technology, operating in the 30-300 GHz frequency range, offers a promising solution due to its vast available spectrum. However, mmWave signals suffer from high path loss and are significantly attenuated in non-line-of-sight (NLOS) scenarios. This experimental research proposes a new strategy to enhance mmWave backhaul coverage in NLOS conditions, thereby improving the overall performance and reliability of 6G networks. Fig. 1 shows the layout of the scenario and the measurement setup.



*Fig. 1. Schematic diagram of the experimental setup.*

# Part III Poster Session

## Materials Provided by the Conference Organizer:

- ✧ X Racks & Base Fabric Canvases
- ✧ Adhesive Tapes or Clamps

## Materials Provided by the Presenters:

- ✧ Home-made Posters
- ✧ Posters printed by CECNet 2024 Committee

## Requirements for the Posters:

- ✧ Materials: not limited, can be posted on the Canvases
- ✧ Size: W1200\*H2100
- ✧ Horizontal Head: please make the conference name 'CNT 2024' and the paper number 'CNT\*\*\*\*' as the head of the poster in order to make all the posters unified.



## Poster Presentations

**Time: 12:15-12:30 Wednesday, November 6, 2024**

**Conference Room: Meeting Room 401**

### [List of Posters](#)

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CNT3554	<b>Design and Simulation of Ultra-Wideband Antenna for Wireless Applications as Reference Antenna in the Anechoic Chamber</b> <i>Mr. Chu-Chun Hsu, Lunghwa University of Science and Technology</i>
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# Part IV Oral Presentations

## General Guidelines

- ✚ All presentation times are shown in **Japan Standard Time (UTC+9)**;
- ✚ Duration for Invited Oral Presentation: 20 Minutes of Presentation including 3-5 Minutes of Q&A;
- ✚ Duration for Regular Oral Presentation: 15 Minutes of Presentation including 2-3 Minutes of Q&A;
- ✚ All presenters are requested to reach the Session Room 15 minutes prior to the schedule time and complete their presentation on time;
- ✚ Presenters should prepare Power Pointer or PDF Files for Presentation with Paper ID (CNT\*\*\*\*) marked in the last page;
- ✚ Signed and stamped presentation certificate would be issued after presentation.

## Offline Oral Presentation Guidelines

### **Devices Provided by the Conference Organizer:**

- ✚ Laptops (with MS-Office & Adobe Reader)
- ✚ Projectors & Screen, Laser Sticks, Microphones
- ✚ Please send us the PowerPoint once it is ready and have the PPT back up in a U-disk. For presenters who do not send the PowerPoint, please save it in the laptop of the corresponding session 15 mins in advance. Kindly tell the Session Chair (before the start of your session) that you are presenter.

## Online Oral Presentation Guidelines

- ✚ Online Oral Presentation will be conducted via Microsoft Teams Meeting.
- ✚ If a presenter is not able to show up via Teams, the session chair/conference secretary will play the pre-recorded video presentation during his/her scheduled presentation time. If listeners have questions about the presentation, please contact the conference secretary to forward the questions.

## Best Oral Presentations Selection Guidelines

### **Selection Criteria:**

ONE best presentation will be selected from EACH session based on the following criteria:

- ✓ Research Quality
- ✓ Presentation Performance
- ✓ Presentation Language
- ✓ Interaction with Listeners
- ✓ PowerPoint Design
- ✓ Effective Communications

### **Selectin Procedure:**

- ✓ An assessment sheet will be delivered to listeners before the session.
- ✓ Write the numbers of two best presentations and submit the filled assessment sheet (with the

listener's name and signature) to the Session Chair before the session termination.

- ✓ The Session Chair will count the votes for each presentation and name the winner based on the maximal number of votes. The Session Chair has three votes but can use only one in favor of his/her own presentation (if any). To avoid any conflict of interests, only registered listeners are entitled to vote.

**Best Oral Presentations Award:**

- ✓ This award consists of free registration to the next conference CECNet 2025 and a certificate.
- ✓ The awards will be announced at the official website after the conference.

[Assessment Sheet Sample](#)

**CECNet 2024 Oral Presentation Assessment**

Dear participants,

After carefully listening to the presentations of this session, please kindly recommend two excellent Oral Presentations with reference to the following evaluation criteria.

The Session Chair will count the votes from each presentation and select ONE Best Oral Presentation in this session. If there is a tie, the Session Chair will make the final decision.

The winner will be announced at the official website after the conference.

**You can refer to the following Criteria:**

Items	Assessment
Content	Right, Logical, Original, Well-Structured
Language	Standard, Clear, Fluent, Natural
Performance	Spirited Appearance, Dress Appropriately, Behaves Naturally
PPT	Layout, Structure, Typeset, Animation, Multimedia
Reaction	Build a Good Atmosphere, Speech Time Control Properly

**Please write down paper ID and give reasons for your recommendation:**

Paper ID	Reasons

Evaluated by: \_\_\_\_\_ (Paper ID: \_\_\_\_\_)

**Note: When the session finished, please fill it out and give it to the Session Chair so that the Best Oral Presentation in this session can be selected.**

## Session 1: Systems Science and Information Communication

**Time:** Wednesday, November 6, 2024

**Location:** Meeting Room 403, Kunibiki Messe

**Session Chair:** Prof. Joanna Studzińska, Kozminski University, Poland

**Online Room Link:** <http://www.academicconf.com/teamslink?confname=cecnet2024>

14:00-14:15	CNT3511	<b>Artificial Intelligence in Civil Procedure in Europe - Some Perspectives</b> <i>Prof. Joanna Studzińska, Kozminski University, Poland</i>
14:15-14:30	CNT3452	<b>Mobile Learning for the Enhancement of Social Inclusiveness for Students in Open Distance e-Learning Institutions in Developing Countries</b> <i>Dr. Petra le Roux, School of Computing, University of South Africa (UNISA), South Africa</i>
14:30-14:45	CNT3547	<b>Towards Quantum Telecommunications: Point of View of the Implementation Task of the Experimental Quantum Key Distribution Backbone Deployment Project</b> <i>Ms. Inara Opmane, Institute of Mathematics and Computer Science of University of Latvia, Latvia</i>
14:45-15:00	CNT3548	<b>The Intelligence of Places: Towards Healthy, More Inclusive, Sustainable and Resilient Urban Environments</b> <i>Prof. Stéphane Roche, Institut en Environnement, Développement et Société (EDS), Université Laval, Canada</i>
15:00-15:15	CNT3532	<b>Effects of Work Support System for Construction Machine Work</b> <i>Prof. Hironao Yamada, Department of Mechanical Engineering, Gifu University, Japan</i>
15:15-15:30	<b>Coffee Break</b>	
15:30-15:45	CNT3530	<b>Nanometer Optical Metrology</b> <i>Dr. Joerg Bischoff, Osires Optical Engineering Ilmenau, Germany</i>
15:45-16:00	CNT3525	<b>The Concept of Using UAVs in Logistics</b> <i>Ms. Patrycja Guzaneck, Doctoral School, Military University of Technology, Poland</i>
16:00-16:15	CNT3523	<b>Broadband and Firm Entries in Lithuania</b> <i>Dr. Kirill Sarachuk, BTU Cottbus-Senftenberg, Germany</i>
16:15-16:30	CNT3556	<b>Asymmetric Transport in Sonic Valley Hall Insulators</b> <i>Dr. Hai Yang, School of Physics Science and Technology, Kunming University, China</i>
16:30-16:45	CNT3451 (Online)	<b>LLMs based Multi-modal Location Recommendation for Smart Building</b> <i>Dr. Hang Liu, Research &amp; Development Group, Hitachi, Ltd., Japan</i>

## Session 2: Internet Technology and Signal Processing

**Time:** Thursday, November 7, 2024

**Location:** Meeting Room 403, Kunibiki Messe

**Session Chair:** Prof. Zhongxiang Shen, Yangtze Delta Region Academy of Beijing Institute of Technology (Jiaxing), China

**Online Room Link:** <http://www.academicconf.com/teamslink?confname=cecnet2024>

09:00-09:20	CNT3544 (Invited)	<b>Recent Advances in Integrated-optic Signal Processing Devices Based on Optical Fourier Transform</b> <i>Prof. Koichi Takiguchi, Department of Electrical and Electronic Engineering, Ritsumeikan University, Japan</i>
09:20-09:40	CNT3432 (Invited) (Online)	<b>Real-sample Analysis Using Organic Transistor-based Chemical Sensors</b> <i>Prof. Tsuyoshi Minami, Institute of Industrial Science, The University of Tokyo, Japan</i>
09:40-09:55	CNT3549	<b>A 25Gb/s Low-noise Fast-settling Burst-mode Optical Receiver Front End in 40nm CMOS</b> <i>Dr. Yizhou Zhao, Institute of RF and OE-ICs, Southeast University, China</i>
09:55-10:10	CNT3499	<b>Leveraging ESP32 and Azure for IoT-Enhanced Remote FPGA Debugging with Power-Efficient Environmental Monitoring</b> <i>Dr. Yifan Yang, Inter-University Institute for High Energies, Université libre de Bruxelles, Belgium</i>
10:10-10:25	CNT3550	<b>A 28-Gbaud PAM4 Modulator Driver in 40-nm CMOS Technology</b> <i>Dr. Chenghao Wu, Institute of RF and OE - ICs, Southeast University, China</i>
10:25-10:40	<b>Coffee Break</b>	
10:40-10:55	CNT3514	<b>Single-input Multi-output High Conversion Ratio Hybrid Structure Buck-boost DC-DC Converter for Energy Harvesting</b> <i>Dr. Guojun Su, Guangxi Key Laboratory of Precision Navigation Technology and Applications, Guilin University of Electronic Technology, China</i>
10:55-11:10	CNT3522 (Online)	<b>A High Gain X-band Horn Antenna Array with Wide-angle Beam Steering in E-plane</b> <i>Ms. Thi Huong Ngo, Viettel High Technology Industry Corporation, Vietnam</i>
11:10-11:25	CNT3551	<b>A Low-mismatch 20GS/s 5-bit Flash ADC in 90nm SiGe BiCMOS Technology</b> <i>Dr. Yinghao Chen, Institute of RF and OE-ICs, Southeast University, China</i>
11:25-11:40	CNT3491	<b>MiniMALTA3, a Monolithic Active Pixel Sensor with Fast Timing Tagging Below 1 ns</b> <i>Dr. Marcos Vazquez Nuñez, Universitat de Valencia, Spain</i>
11:40-11:55	CNT3581	<b>Development of an Outdoor Autonomous Travel Robot Using Graph-based Segmentation and Deep Learning</b> <i>Ms. Koyama Kako, Graduate School of Engineering, Kyushu Institute of Technology, Japan</i>

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11:55-12:10

CNT3541  
(Online)

**Performance Analysis of the Sidelink Broadcast Channel for  
5G NR Systems in the Unlicensed Band**  
*Dr. Igor Serunin, LG Electronics Russia R&D Lab, St. Petersburg, Russia*  
*cLG Electronics, South Korea*

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# Part V Conference Venue

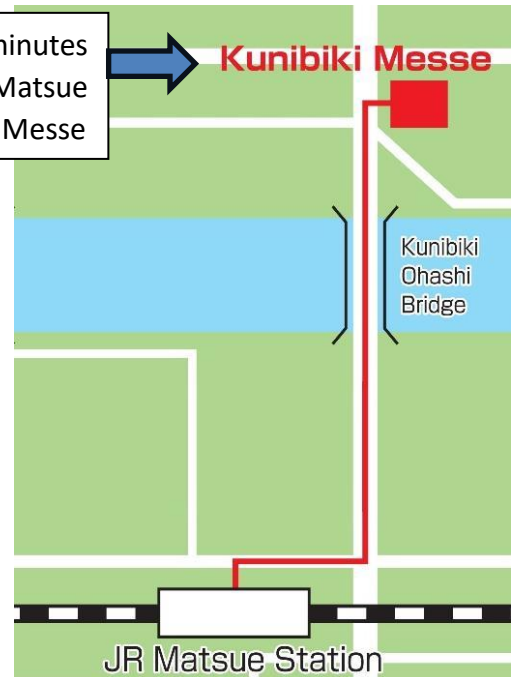
## **Kunibiki Messe** **(Shimane Prefectural Convention Center)**

The biggest convention center in Shimane prefecture, Kunibiki Messe, is located in the center of Matsue City. There are Exhibition Hall (4,018 sqm), Multipurpose Hall (686 sqm), International Conference Hall (510 sheets), and 19 meeting rooms.

Free Wi-Fi is available in building.



It takes only 7 minutes on foot from JR Matsue Station to Kunibiki Messe



### **Kunibiki Messe**

**Address:** 1-2-1 Gakuen Minami Matsue City, Shimane, JAPAN 690-0826

**Tel:** +81+852-24-1111

**Fax:** +81+852-22-9219

**E-mail:** kunibiki@kunibikimesse.jp





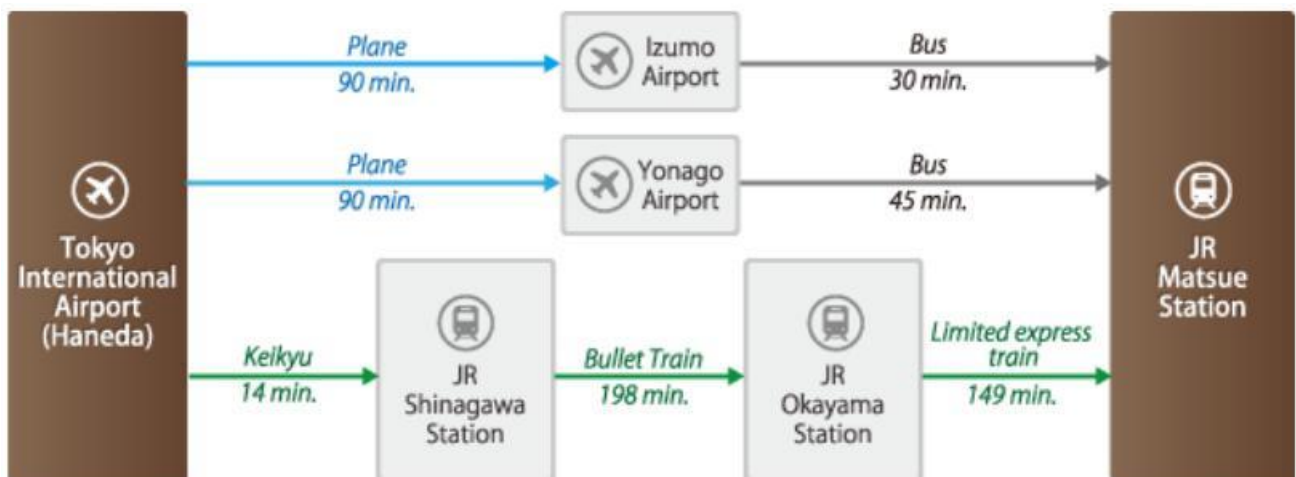
**Access to JR Matsue Station:**



**1. From Narita International Airport**



**2. From Tokyo International Airport**



**3. From Kansai International Airport**



# Part VI Acknowledgements

On behalf of the CECNet 2024 Organizing Committee, we would like to take this opportunity to express our sincere gratitude to our participants. We would also like to express our acknowledgements to the Technical Program Committee members who have given their professional guidance and valuable advice as reviewers. For those who contribute to the success of the conference organization without listing the name below, we would love to say thanks as well.

## CECNet 2024 Technical Program Committee

### Conference General Chair

Prof. Qixin Guo, Saga University, Japan

### Technical Program Committee (TPC) Chair

Prof. Shin-ichi Nishida, Saga University, Japan

### Technical Program Committee

Prof. Zhihua Zhang, Kansai University of International Studies, Japan

Prof. Mesut Güneş, Communication and Networked Systems, Institute for Intelligent Cooperating Systems, Otto-von-Guericke-University Magdeburg, Germany

Prof. Minghan Wei, Florida Atlantic University, USA

Prof. Bin Xue, National University of Defense Technology, China

Prof. Chunbiao Li, Nanjing University of Information Science and Technology, China

Prof. Lu Leng, Nanchang Hangkong University, China

Prof. Tao Zhang, University of Science and Technology, China

Prof. Vijayakumar Varadarajan, University of New South Wales, Australia

Prof. Jonny Paul Zavala De Paz, Universidad Politécnica de Querétaro, Mexico

Prof. Tarik A. Rashid, Computer Science and Engineering, University of Kurdistan Hewler, Iraq

Assoc. Prof. Chao Zhang, Shanxi University, China

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