

# CONFERENCE PROGRAM

- 2025 6th International Conference on Information Technology and Education Technology (ITET 2025)
- 2025 10th International Conference on Multimedia Systems and Signal Processing (ICMSSP 2025)

Fukui, Japan | May 9-11, 2025 | UTC+9

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# GENERAL INFORMATION

## ◆ A Conference Venue

### University of Fukui, Japan

Venue: [Bunkyo Campus] 3-9-1 Bunkyo, Fukui-shi, Fukui 910-8507, Japan



### Transportation

- Tokyo – Komatsu (1 hour by air)
- Tokyo – Fukui (3 hours and a half by train)
- Nagoya – Fukui (1 hour and 40 minutes by train / 2 hours and 50 minutes by bus)
- Osaka – Fukui (1 hour and 50 minutes by train / 3 hours and a half by bus)
- Komatsu – Fukui (1 hour by shuttle bus)



## ◆ B Onsite Registration

Go to the registration desk → Inform the staff of your paper ID → Sign-in → Claim your conference kit.

## ◆ C Devices Provided by the Organizer

Laptops (with MS-Office & Adobe Reader) / Projectors & Screen / Laser Sticks

## ◆ D Materials Provided by the Presenter

Oral Session: Slides (pptx or pdf version). Format 16:9 is preferred.

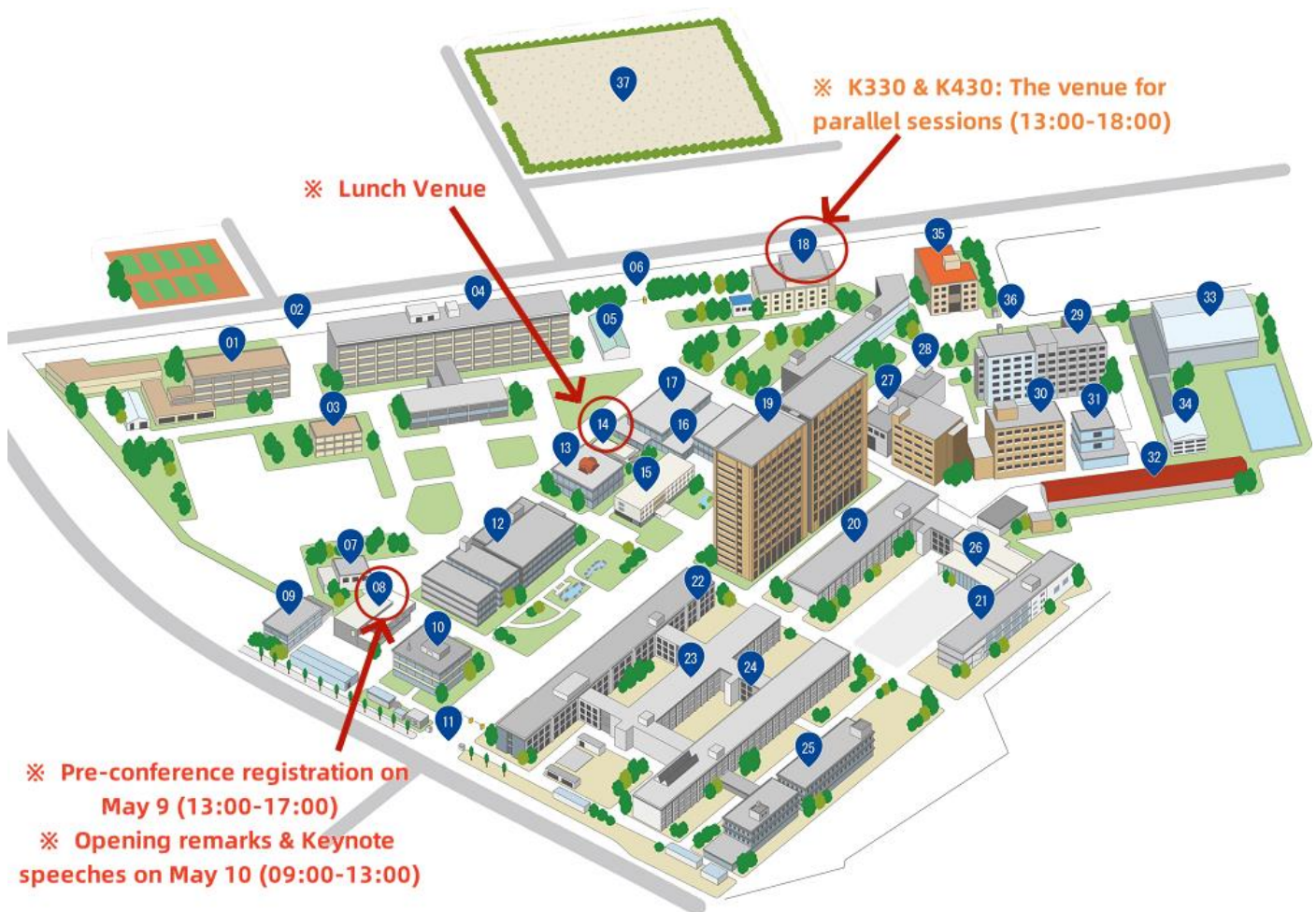
## ◆ E Duration of Each Presentation

Onsite/Online Oral Session: 15min apiece, include 13 min for presentation, 2min for Q&A.

## ◆ F Notice

\* Please wear your delegate badge (name tag) for all the conference activities. Lending your participant card to others is not allowed.

※ Please take good care of your valuables at any time during the conference. The conference organizer does not assume any responsibility for the loss of personal belongings of the participants during conference day.



#### Academy Hall (Building 8):


- ※ Pre-conference registration on May 9 (13:00-17:00)
- ※ Opening remarks & Keynote speeches on May 10 (09:00-13:00)

#### Lecture Hall (Building 18):

- ※ K330 & K430: The venue for parallel sessions (13:00-18:00)

#### Food Services and Stores (Building 14):

- ※ Lunch Venue

| ◆ G Zoom Meeting ID  |               |   |   |
|--|---------------|---|---|
| Room   | Meeting ID    | Meeting Link  |   |
| <br><a href="#">Zoom Download</a> | 864 4875 2379 | <a href="https://us02web.zoom.us/j/86448752379">https://us02web.zoom.us/j/86448752379</a> | ✧ Guide for new users: <a href="#">here</a><br>✧ Conference Banner: <a href="#">here</a><br>✧ Zoom Background: <a href="#">here</a><br>We suggest you to download the Zoom platform in advance. |

**Note:**

1. We recommend that you install the Zoom platform on your computer. New Zoom users can skip the registration step and enter the meeting ID directly to participate the online session.
2. Prior to the formal conference, presenter shall join the test room to make sure everything is on the right track.
3. Please rename your Zoom Screen Name in below format before entering meeting room.

**About Online Presentation**

1. Every presenter has 15 minutes, including Q & A;
2. The best presentation certificate and all authors' presentation certificates will be sent after conference by email;
3. We'll record the whole conference. If you do mind, please inform us in advance. We'll stop to record during your presentation time.

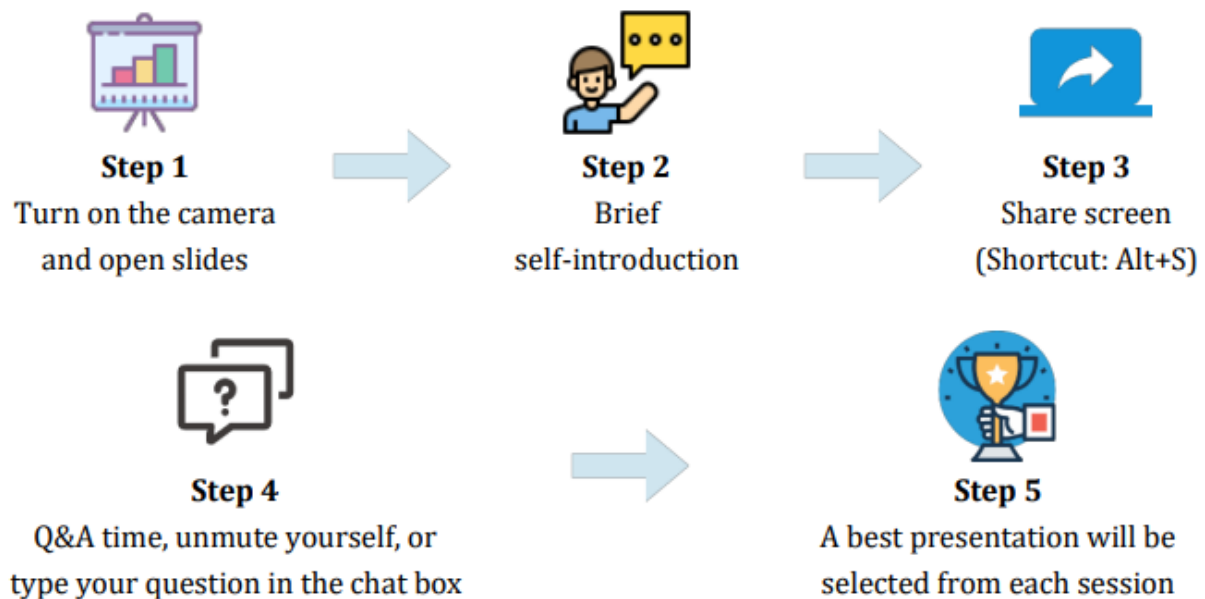
**Name Setting:**

Keynote Speaker: KN-Name

Author: Paper ID-Name

Committee: Position-Name

Delegate: Delegate-Name

**Presentation Process by Zoom Meeting**

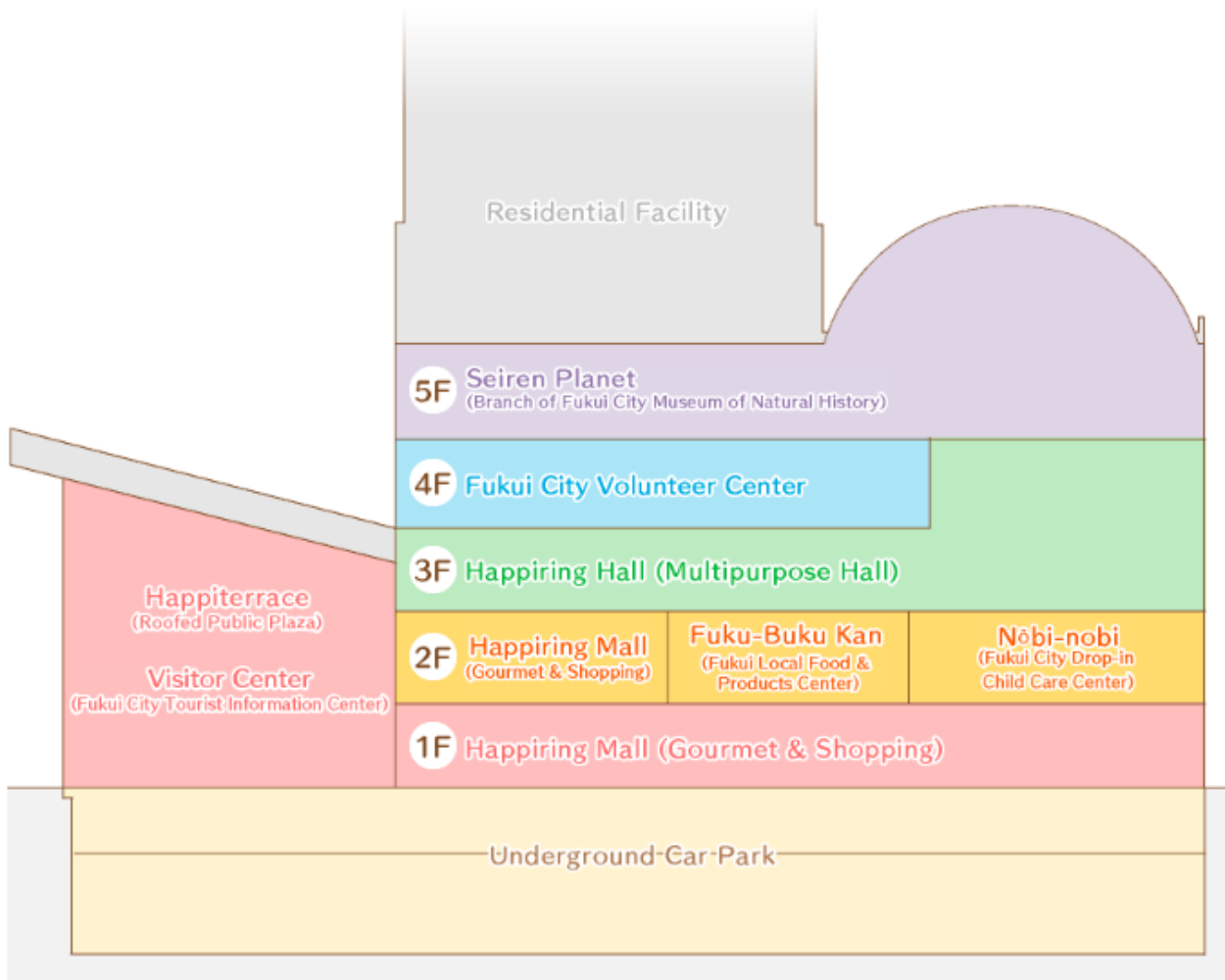
## ◆ H Dinner Venue

**Fuku-Buku Kan**

For access, it is on the 2F floor of "Happiring" near JR Fukui Station. "Happiring" will be opened at JR Fukui Station West Square.

<https://www.happiring.com/english/>

## Floor Map



## WELCOME MESSAGE

Dear All,

We are pleased to welcome you to the joint conference of 2025 6th International Conference on Information Technology and Education Technology (ITET 2025) and 2025 10th International Conference on Multimedia Systems and Signal Processing (ICMSSP 2025), to be held in Fukui, Japan during May 9-11, 2025. The conferences are co-sponsored by University of Fukui, Japan, with patrons of Okayama University, Shonan Institute of Technology, Yamaguchi University, etc.

The annual international conference is aimed to bring together the researchers, experts, and scholars around the world to exchange their research results and address open issues in related fields. We hope these conferences would be able to achieve its objective in providing an effective forum for academician, researchers, and practitioners to advancing knowledge, research, and technology in related fields.

This year's program will consist of 4 keynote speeches from Prof. Wen-Huang Cheng (IEEE FELLOW, NATIONAL TAIWAN UNIVERSITY, TAIWAN), Prof. Kenji Yamanishi (TOKYO UNIVERSITY, JAPAN), Prof. Akinori Ito (TOHOKU UNIVERSITY, JAPAN), Prof. Li-fang Zhang (THE UNIVERSITY OF HONG KONG, HONG KONG), another 3 onsite oral sessions and 1 online oral session.

It is pleasing to note that the agenda of this conference covers a wide range of interesting topics related to all theoretical and practical aspects, but not limited to information technology, education technology, multimedia systems, signal processing, etc.

Last but not least, our deepest gratitude goes to the Advisory Board, Organizing Committee, International Scientific Committee, institutions, and volunteer who have directly and indirectly supported the success of this seminar. Wish you a very productive conference with exciting and encouraging discussions and exchange of knowledge so that together we can anticipate a future of ground-breaking knowledge, research, and technology.

Finally, we wish you a very successful conference! Hope you will enjoy your stay to Fukui, Japan.

Conference Organizing Committee

### ORGANIZING SECRETARIAT:

- ITET 2025
- Ms. Teri Zhang
- Email: [itet-conf@outlook.com](mailto:itet-conf@outlook.com)
- ICMSSP 2025
- Ms. Rachel Cao
- Email: [icmssp@126.com](mailto:icmssp@126.com)

# CONFERENCE COMMITTEE

(in no particular order)

## ITET 2025 Organizing Committees:

### Conference Advisory Committees

**Wen-Chung Kao**, *National Taiwan Normal University, Taiwan*

**Wen-Huang Cheng**, *National Taiwan University, Taiwan*

**B (Bedir) Tekinerdogan**, *Information Technology group at Wageningen University, The Netherlands*

### Conference General Chairs

**Nobuo Funabiki**, *Okayama University, Japan*

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**Maritza Arones**, Universidad Nacional "San Luis Gonzaga", Peru

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**Maritza Arones**, *Universidad Nacional "San Luis Gonzaga", Peru*

**Ajay Anil Gurjar**, *Sipna College of Engineering and Technology, India*

**Amitava Chatterjee**, *Jadavpur University, India*

## AGENDA OVERVIEW

| May 9, 2025   Friday (UTC+9) |   |                           |
|------------------------------|---|---------------------------|
| 13:00~17:00                  | Onsite Registration for ALL offline attendees | Academy Hall (Building 8) |
| 14:30~16:00                  | Zoom Pre-test for ALL Online Attendees        | See page 13               |

| May 10, 2025   Saturday (UTC+9)  |  |  |
|--|--|--|
| <b>Academy Hall (Building 8)   Zoom Room: <a href="https://join.zoom.us/j/86448752379">864 4875 2379</a></b> |  |  |
| 08.30-09:00  | On-site Registration & Materials Collection  |  |
| Chairman: <b>Tomoya Kawakami</b> , <i>University of Fukui, Japan</i>   |  |  |
| 09:00-09:10  | Welcome Address  | <b>Tomoya Kawakami</b><br><i>University of Fukui, Japan</i>  |
| 09:10-09:50  | Keynote Speech   | <b>Kenji Yamanishi</b> , Tokyo University, Japan<br><i>Speech Title: Designing Optimal Latent Space toward Knowledge Extrapolation</i>   |
| 09:50-10:30  | Keynote Speech   | <b>Akinori Ito</b> , Tohoku University, Japan<br><i>Speech Title: Human-machine communication towards first-person AI</i>  |
| 10:30-11:00  | Group Photo & Morning Break  |  |
| 11:00-11:40  | Keynote Speech   | <b>Wen-Huang Cheng</b> , National Taiwan University, Taiwan<br><i>Speech Title: The New Era of AI Agents</i>   |
| 11:40-12:20  | Keynote Speech   | <b>Li-fang Zhang</b> , The University Of Hong Kong, Hong Kong<br><i>Speech Title: Nurturing Successful Intellectual Styles for Effective Education Technology and Learner Growth</i> |
| 12:20-13:30  | Lunchtime < Food Services and Stores-Building 14 >   |  |
| <b>Onsite Sessions</b>   |  |  |
| 13:30-15:40  | <b>(Lecture Hall K330: Building 18)</b>  |  |
|  | <b>Onsite Session 1: Multi Modal Learning and Optimization of Teaching Strategies</b><br>Invited Talk-ET523, ET5001, ET5005, ET504-A, ET507-A, ET513-A, ET505, ET524 |  |
|  | <b>(Lecture Hall K430: Building 18)</b>  |  |
|  | <b>Onsite Session 2: AI based Multimodal Data Analysis and Image Processing</b><br>ET708, ET705, ET706-A, ET707-A, ET7003, ET710, ET7002, ET702                      |  |
| 15:40-16:00  | Coffee Break   |  |
| 16:00-18:00  | <b>(Lecture Hall K430: Building 18)</b>  |  |

|             |  |
|-------------|--|
|             | <b>Onsite Session 3: Application of Artificial Intelligence in the Education System</b><br>ET5002, ET520, ET521, ET526, ET529, ET534, ET535, ET537 |
| 18:30-20:30 | <b>Dinner Time</b> < Fuku-Buku Kan >   |

### May 10, 2025 | Saturday (UTC+9)

**Zoom Room:** [864 4875 2379](https://us02web.zoom.us/j/86448752379) or **Link:** <https://us02web.zoom.us/j/86448752379>

|   |   |
|---|---|
| 13:30-15:30   | <b>Online Session: Digital Image Analysis and Multimedia Information Education</b><br>ET517, ET712, ET525, ET530, ET536, ET709, ET711, ET714, ET703 |
| <p><b>Note:</b><br/>The meeting room will open 30 minutes earlier than scheduled. Please enter your room 10-15 minutes early.</p> <p><b>NO-SHOW POLICY</b> Papers unrepresented at the conference, without prior written approval by the Conference Technical Program Chair, will be removed from the final conference proceedings before uploading to journals. No refund will be approved to authors of those papers.</p> |   |

## Zoom Pre-test for All Online Attendees

\*Participants who are going to do an online presentation are required to join the Zoom pre-test on May 9 (UTC+9). Duration: 3 minutes apiece. Free to leave after you finish the rehearsal.

1. We recommend to install the Zoom platform beforehand. New users can login the Zoom meeting without registration.
2. Please set your display name before joining the online meeting. For instance,

### ◆ Name Setting

Keynote Speaker: Keynote-Name

Author: Paper ID-Name < ET001\_Name >

Committee: Position-Name

Delegate: Delegate-Name < Delegate\_Name >

|                    |   |  |
|--------------------|---|--|
| May 9, 2025        |   | Zoom Room: <a href="https://us02web.zoom.us/j/86448752379">864 4875 2379</a> |
| <b>14:30-16:00</b> |   |  |
| 14:30-15:30        | ET517, ET525, ET530, ET536, ET709, ET711, ET712, ET714, ET703   |  |
| 15:30-16:00        | *Participants who are unavailable during the above allocated time can join the rehearsal at 15:30-16:00 |  |

## INTRODUCTION OF KEYNOTE SPEAKER



### Speech Title: Designing Optimal Latent Space toward Knowledge Extrapolation

**Prof. Kenji Yamanishi**  
Tokyo University, Japan

Speech Time: 09:10-09:50 (May 10, 2025; UTC+9)

Venue: Academy Hall (Building 8) | Zoom Room: [864 4875 2379](https://86448752379.zoom.us/j/86448752379)

**Abstract:** Recent success of AI/machine learning technologies is largely due to the embedding of the original data into a latent space, where we can extract essential features necessary for data mining tasks such as prediction, classification, and clustering. There are critical issues 1) how should we design an optimal latent space, depending on the nature of the data? and 2) how should we utilize the latent space not only for learning in a classical sense, but also for knowledge extrapolation? This talk introduces recent advanced technologies for addressing these issues. As for 1), I show a novel methodology for optimally selecting the kind of space (Euclidean or non-Euclidean), dimensionality, and curvature for the latent space. I show that they are obtained within a unifying framework of the minimum description length (MDL) principle. As for 2), I show that a novel but reliable knowledge can be generated by modeling the embedded data with Gaussian mixture model and then manipulating it adequately on the basis of the MDL principle. Both 1) and 2) are widely applicable to the areas including graph mining and generative AI.

**Kenji Yamanishi** is a professor in the Graduate School of Information and Technology at the University of Tokyo. He received the degree of doctor engineering from the University of Tokyo, 1992. He used to work for NEC Corporation from 1987 to 2008, and his final position was a fellow. He joined the University of Tokyo in 2009, and was an associate dean of the graduate school (2019-2021). His current research interests include information-theoretic machine learning, data mining, and computational ophthalmology. Specifically, he is a pioneer of learning theory based on the minimum description length (MDL) principle. He has also contributed to the area of anomaly/change detection and text mining with their applications to industries. He has been working as an area chair or a regular or senior program committee member of ACM SIGKDD (Knowledge Discovery and Data Mining) for years, an associate editor of KAIS (Knowledge and Information Systems) and IJDSA (International Journal of Data Science and Analytics), an editorial board member of Entropy, and a honorary chair of WITMSE (Workshop on Information Theoretic Methods for Science and Engineering). He is a fellow of IEICE (Institute of Electronics, Information and Communication Engineers) and a senior member of IEEE. He obtained several awards including IBM Faculty Awards, Fuji-Sankei Business Award, etc. He is an author of the book: "Learning with the Minimum Description Length Principle" published by Springer in 2023.

## INTRODUCTION OF KEYNOTE SPEAKER



### Speech Title: Human-machine communication towards first-person AI

**Prof. Akinori Ito**  
Tohoku University, Japan

Speech Time: 09:50-10:30 (May 10, 2025; UTC+9)

Venue: Academy Hall (Building 8) | Zoom Room: [864 4875 2379](https://86448752379.zoom.us/j/86448752379)

**Abstract:** This talk advocates for "First-Person AI," a paradigm shift from current "third-person" AI, which lacks genuine personal engagement. While LLMs excel in information processing, they fail at natural human conversation due to their lack of egocentric understanding and self-disclosure. Humans anthropomorphize AI, expecting social interaction which current AI cannot provide. To bridge this gap, First-Person AI aims to simulate human dialogue by adopting an egocentric perspective, recognizing both its own and the human interlocutor's subjective viewpoints. Key elements include establishing social relationships, adhering to social norms, fostering rapport, incorporating metacommunication, and engaging in real-time interactions. Metacommunication, providing context to communication, is vital. It involves signaling communication channels, managing conversations, and expressing understanding through verbal and non-verbal cues like tone, proxemics, and facial expressions. Effective turn-taking and incorporating paralinguistic information are also essential. Ultimately, achieving natural human-machine communication requires AI to understand and replicate the nuances of human interaction, fostering stronger social bonds by simulating egocentric behavior and incorporating metacommunication.

**Akinori Ito** is a professor at the Graduate School of Engineering, Tohoku University, specializing in spoken language processing, multimedia signal processing, and music information processing. He graduated from Tohoku University in 1986, and completed his doctoral course in Information Engineering, Graduate School of Engineering, Tohoku University in 1991, earning a Doctorate in Engineering. After working as a research associate at Tohoku University, an assistant professor at Yamagata University, and an associate professor at Tohoku University, he assumed his current position in 2010. He had served as the president of the Acoustical Society of Japan from 2019 to 2021. He is now the dean of the Graduate School of Engineering, Tohoku University.

## INTRODUCTION OF KEYNOTE SPEAKER



**Speech Title: The New Era of AI Agents**

**Prof. Wen-Huang Cheng**

(University Distinguished Chair Professor; Fellow, IEEE&IET)  
National Taiwan University, Taiwan

Speech Time: 11:00-11:40 (May 10, 2025; UTC+9)

Venue: Academy Hall (Building 8) | Zoom Room: [864 4875 2379](https://86448752379.zoom.us/j/86448752379)

**Abstract:** In recent years, AI development has progressed from the traditional "software" era into the transformative era of "large-scale AI models." During the software era, AI systems primarily relied on hardcoded rules, limiting their ability to make nuanced judgments or adapt to dynamic situations—traits inherent to human cognition. In contrast, today's large models can process unstructured inputs such as natural language and produce diverse outputs, including text, images, and more. This dynamic capability brings AI closer to human-like reasoning and sets the stage for the next evolutionary step: the era of AI Agents. AI Agents are no longer static programs governed by predefined rules. Instead, they leverage large models to continuously learn, self-improve, and flexibly adapt to evolving environments and contexts. This talk will offer an in-depth overview of the foundational technologies and application scenarios driving AI Agent development. It will also explore current trends and key challenges, providing actionable insights and inspiration for technology innovators.

**Wen-Huang Cheng** is a University Distinguished Chair Professor in the Department of Computer Science and Information Engineering at National Taiwan University and a Visiting Professor at the Korea Advanced Institute of Science and Technology (KAIST). His current research interests include multimedia, computer vision, and machine learning. He has actively participated in international events and played significant leadership roles in prestigious journals, conferences, and professional organizations. These roles include serving as Editor-in-Chief for IEEE CTSoc News on Consumer Technology, Senior Editor for IEEE Consumer Electronics Magazine (CEM), Associate Editor for IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI) and IEEE Transactions on Multimedia (TMM), General Chair for ACM MMAsia (2023), IEEE ICME (2022), and ACM ICMR (2021), Technical Program Chair for ACM MM (2025), ACM ICMR (2022), IEEE ICME (2020), IEEE VCIP (2018), Chair for IEEE CASS Multimedia Systems and Applications (MSA) technical committee, and governing board member for IAPR. He has received numerous research and service awards, including the NVIDIA Academic Grant Program Award (2025), the 2024 Best Paper Award of IEEE Consumer Electronics Magazine, the Best Paper Award at the 2021 IEEE ICME and the Outstanding Associate Editor Award of IEEE TMM (2021 and 2020, twice). He is an IEEE Fellow, IET Fellow, and ACM Distinguished Member.



## INTRODUCTION OF KEYNOTE SPEAKER



### Speech Title: Nurturing Successful Intellectual Styles for Effective Education Technology and Learner Growth

#### Prof. Li-fang Zhang

The University of Hong Kong, Hong Kong

Speech Time: 11:40-12:20 (May 10, 2025; UTC+9)

Venue: Academy Hall (Building 8) | Zoom Room: [864 4875 2379](https://join.zoom.us/j/86448752379)

**Abstract:** Intellectual styles refer to individuals' preferred methods of utilizing their abilities. In an era increasingly shaped by information technology (IT), the importance of fostering creativity and embracing diversity has grown significantly. This talk begins with a brief introduction to the field of intellectual styles, discussing their nature and significance. It then presents primary research evidence highlighting the crucial role of a diverse range of intellectual styles – particularly creativity-generating styles, referred to as “successful intellectual styles” – in online learning environments, while also considering relevant findings from offline contexts. The talk concludes by proposing practical implications of these research findings for students, educators, and IT designers, aimed at enhancing the effectiveness of educational technology and fostering student learning and development.

**Li-fang Zhang** is a Professor of Psychology and Education at The University of Hong Kong. She has (co)authored over 150 peer-reviewed journal and encyclopedic articles and published dozens of academic book chapters and books, including two monographs with Cambridge University Press. She is the editor-in-chief of the Oxford Encyclopedia of Educational Psychology and associate editor of Educational Psychology. Moreover, she serves as a consulting editor for the Journal of Educational Psychology and on several editorial boards in psychology and education.

## INTRODUCTION OF INVITED SPEAKER



### Speech Title: Intelligent Cognitive Mirroring Model to Enhance Learning Experience in Autistic Spectrum Disorder Children in Malaysia

**Dr. Chandra Reka Ramachandiran**  
Xiamen University Malaysia, Malaysia

**Abstract:** In the face of technological developments that have ignited revolutionary waves of change across many industries, the education sector has until recently remained relatively loyal to traditional methods and practices. This stoicism is, however eroding, facilitated in part by the need to rapidly embrace technology during the global Covid-19 pandemic. As such, education is now undergoing a digital transformation. Trending digital teaching technologies are enabling a new variation of learning platforms, one which serves as an enabler to introduce greater equality in the education of children with learning difficulties, particularly those with Autism Spectrum Disorder (ASD). Past researchers have emphasized that the success of a teaching and learning tool for ASD children relies primarily on the use of visual learning as it has been proven that visual thinking can be one of their key strengths. Moreover, children with autism often have faster processing capabilities, thereby opening up new avenues for the acquisition of cognitive development through appropriately designed learning platforms and pedagogies. This research aims to study the requirements by capturing the perspective of stakeholders engaged with the ASD learners. Subsequently, studying the efficacy of the proposed Intelligent Cognitive Mirroring Model (ICMM), which is an extension of the CREST model to enhance the learning experience amongst the ASD Learners. Researchers used a hybrid learning application with integrated AI technology to determine the learners learning experience. The findings suggest that the growing body of evidence that hybrid interventions specifically designed for ASD children can significantly improve the learning process and their learning experience to overcome the inherent difficulties faced by such individuals.

Dr. Chandra Reka Ramachandiran is the Head of Programme (Software Engineering) at Xiamen University Malaysia. Her research expertise spans Teaching and Learning Tools, Human-Computer Interaction, Mixed Reality, Artificial Intelligence, and Affective Engineering (Kansei Engineering).

An accomplished researcher, Dr. Chandra has presented and published extensively in renowned conferences and high-impact journals. She has successfully secured multiple national and international research grants, reflecting her strong contributions to the field. She was also awarded the prestigious JASSO Scholarship, a research collaboration between the University of Malaya and Chiba University, Japan.

Beyond research, Dr. Chandra is actively involved in the academic community, serving as a reviewer and technical committee member for numerous ACM and IEEE conferences, along with other international events. She is deeply committed to both teaching and research, continuously advancing the field of Software Engineering and Emerging Technologies.

## PARALLEL ONSITE SESSIONS

**May 10 (Saturday) 13:30-15:40**

(Lecture Hall K330: Building 18)

**Onsite Session 1: Multi Modal Learning and Optimization of Teaching Strategies**

Session Chair: Prof. José Carlos Vázquez-Parra, Tecnológico de Monterrey, México

| Time        | Paper ID | Speech Title & Presenter   |
|-------------|----------|--|
| 13:30-13:55 | ET523    | <b>Invited Talk</b><br>Intelligent Cognitive Mirroring Model to Enhance Learning Experience in Autistic Spectrum Disorder Children in Malaysia<br><b>Chandra Reka Ramachandiran</b> , Xiamen University Malaysia, Malaysia |
| 13:55-14:10 | ET5001   | Exploring Perspectives on the Use and Teaching of Artificial Intelligence Tools<br><b>José Carlos Vázquez-Parra</b> , Tecnológico de Monterrey, México   |
| 14:10-14:25 | ET5005   | Unveiling Latent Gender Biases in STEM: Engaging Engineering Students through Video-Based Discussion<br><b>Alexis P.I. Goh</b> , National Yunlin University of Science and Technology, Taiwan                              |
| 14:25-14:40 | ET504-A  | How to capture our intended learning objectives: Is natural language processing useful?<br><b>Shintaro Okazaki</b> , King's College London, UK   |
| 14:40-14:55 | ET507-A  | Improving Undergraduate Student Self-efficacy through Creating Interactive Virtual Laboratories<br><b>Manyu Li, Yu Wang</b> , University of Louisiana at Lafayette, Louisiana, United States                               |
| 14:55-15:10 | ET513-A  | Application of Virtual Reality Panorama (VR360) in Environmental Education for Elementary School Students<br><b>Wernhuar Tarng</b> , National Tsing Hua University, Taiwan   |
| 15:10-15:25 | ET505    | Transforming Embedded Systems Design Course: GenAI-empowered CDIO-based Authentic Assessment with Challenge-Based Learning<br><b>Jonathan Loo</b> , Queen Mary University of London, UK                                    |
| 15:25-15:40 | ET524    | Embedding Sustainability into Computing Curricula<br><b>Hasan Kadhem</b> , American University of Bahrain, Bahrain   |

**May 10 (Saturday) 13:30-15:30**

(Lecture Hall K430: Building 18)

**Onsite Session 2: AI based Multimodal Data Analysis and Image Processing**

Session Chair: Prof. Akinori Ito, Tohoku University, Japan

| Time        | Paper ID | Speech Title & Presenter  |
|-------------|----------|---|
| 13:30-13:45 | ET708    | Generation of Listening Motion of Embodied Conversational Agents Using Speech and Text Information<br><b>Akinori Ito</b> , Tohoku University, Japan   |
| 13:45-14:00 | ET705    | Fusion of Region-Constraint Attention and Convolution Neural Network for Blind Image Denoising<br><b>Jan-Ray Liao</b> , National Chung Hsing University, Taiwan   |
| 14:00-14:15 | ET706-A  | A DAC using Hierarchical Magic-Square Cell Assignment with Direct Element Modulation to Improve Output Linearity for Signal Processing and Sensor Applications<br><b>Yu Takeuchi</b> , Toyama Prefectural University, Japan |
| 14:15-14:30 | ET707-A  | Deep Color Image Quantization Network for Electronic Paper Displays with Color Filter Arrays<br><b>Pin-Tzu Huang</b> , National Taiwan Normal University, Taiwan  |
| 14:30-14:45 | ET7003   | Automated Food Image Labeling for E-commerce Websites: Combining Content-Based Image Retrieval and Majority Labeling<br><b>Khang Hoang Nguyen</b> , FPT University, Cantho City, Vietnam                                    |
| 14:45-15:00 | ET710    | Time Series-based Electrical Device Classification on Edge with TinyML<br><b>Tolga Reis</b> , Galatasaray University, Turkey  |
| 15:00-15:15 | ET7002   | Domain-Specific Image Captioning: Vietnamese Cuisine on the 30VNFoods Dataset<br><b>Huynh Nhu Nguyen Vu</b> , FPT University, Cantho City, Vietnam  |
| 15:15-15:30 | ET702    | Far Eastern Cultures and the Console User Interface<br><b>Antoine BOSSARD</b> , Kanagawa University, Japan  |

**May 10 (Saturday) 16:00-18:00**

(Lecture Hall K430: Building 18)

**Onsite Session 3: Application of Artificial Intelligence in the Education System**

Session Chair: Prof. Yuet Hung Cecilia CHAN, City University of Hong Kong, Hong Kong, China

| Time        | Paper ID | Speech Title & Presenter  |
|-------------|----------|---|
| 16:00-16:15 | ET5002   | Exploring Language, Society, and Culture with AI Video Creation: A Hands-On Case Study<br><b>Yuet Hung Cecilia CHAN</b> , City University of Hong Kong, Hong Kong, China  |
| 16:15-16:30 | ET535    | C3L: Class-Centric Contrastive Learning for Long-Tailed Learning<br><b>Wen-Huang Cheng</b> , National Taiwan University, Taiwan   |
| 16:30-16:45 | ET521    | Application and Distribution of Interactive HTML5 Content within Online Courses to Increase Learner Engagement<br><b>Malissa Maria Mahmud</b> , Sunway University, Malaysia   |
| 16:45-17:00 | ET526    | A Web-based Answer Platform Implementation for University Course in Flutter Programming Learning Assistant System<br><b>Soe Thandar Aung</b> , Okayama University, Japan  |
| 17:00-17:15 | ET529    | The Opportunities and Ethical Considerations of AI-Generated Art in Art Education<br><b>Lu I Hsuan</b> , Shih Hsin University, Taiwan   |
| 17:15-17:30 | ET534    | Are We AI-Ready? Unveiling the Professional Development Needs of Faculty<br><b>Wai Kei Wikie Chan</b> , The Chinese University of Hong Kong, Hong Kong, China   |
| 17:30-17:45 | ET520    | Balancing AI and Autonomy: The Role of AI in Enhancing Calculus Education<br><b>Shiau Foong Wong</b> , Sunway University, Malaysia  |
| 17:45-18:00 | ET537    | Effects of an Art-Oriented STEAM Course on Programming Learning Attitudes and Outcomes<br><b>Chih-Hung Yu</b> , National Taipei University of Education/Department of Mathematics and Information Education, Taiwan |

## ONLINE SESSION

**May 10 (Saturday) 13:30-15:45**

(Zoom Room: 864 4875 2379 or Link: <https://us02web.zoom.us/j/86448752379>)

**Online Session: Digital Image Analysis and Multimedia Information Education**

Session Chair: Dr. Lei Zhang, Yunnan University of Finance and Economics, Yunnan, China & University of Bristol, Bristol, UK

| Time        | Paper ID | Speech Title & Presenter   |
|-------------|----------|--|
| 13:30-13:45 | ET517    | Leveraging ChatGPT for English Writing Instruction: Curriculum and Instructional Design Perspectives<br><b>Victor Wei-Che Hsu</b> , National Taiwan Normal University, Taiwan  |
| 13:45-14:00 | ET712    | Geometry-Aware Face Reconstruction Under Occluded Scenes<br><b>Dapeng Zhao, Xiaoran Yan</b> , Zhejiang Lab, China  |
| 14:00-14:15 | ET525    | Factors influencing behavioral intention to use MOOCs for the Green Entrepreneurship Study: the testing and measurement of an instrument to measure the conceptual framework<br><b>Thannaphat Kasemwattanasuk</b> , KMITL Business School, KMITL, Thailand   |
| 14:15-14:30 | ET530    | The Effectiveness of Desktop Virtual Reality on Colour Cognition and Immersive in Higher Education among Design Students<br><b>Jingru Zhang</b> , Universiti Sains Malaysia, Malaysia  |
| 14:30-14:45 | ET536    | A Multilevel Modeling Analysis of Household Digital Technology and Senior High School Students' English Achievement in Western China: The Moderating Role of Urban-Rural Differences<br><b>Lei Zhang</b> , Yunnan University of Finance and Economics, Yunnan, China & School of Education, University of Bristol, Bristol, UK |
| 14:45-15:00 | ET709    | Visual Differential Signal Processing for Generative Image Editing<br><b>Peng Wei</b> , Dongguan University of Technology, China   |
| 15:00-15:15 | ET711    | Unified Multi-Representation Modeling for Active Neural Reconstruction<br><b>Shuaixian Wang</b> , Sun Yat-Sen University, China  |
| 15:15-15:30 | ET714    | Learning Contour-Guided 3D Face Reconstruction with Occlusions<br><b>Dapeng Zhao, Xiaoran Yan</b> , Zhejiang Lab, China  |
| 15:30-15:45 | ET703    | A Simple yet Accurate Autoadaptive Model of Network Traffic for Detection of Attacks on Low Latency Services<br><b>Rémi COGRANNE</b> , Troyes University of Technology, France   |

## Delegate List

|                        |  |
|------------------------|--|
| Andrea Diem            | Mt. San Antonio College, USA               |
| David Lane             | Mt. San Antonio College, USA               |
| Roumporn Sittimongkol  | Thammasat University, Pathumtani, Thailand |
| Sirichan Vesarachasart | Thammasat University, Pathumtani, Thailand |
| Takefumi Yoshikawa     | Toyama Prefectural University, Japan       |
| Da-Bin Zhuo            | National Sun Yat-sen University, Taiwan    |
| Yijun Duan             | Kyoto Institute of Technology, Japan       |
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