



ICONI 



KOREAN SOCIETY FOR INTERNET INFORMATION

# The 17<sup>th</sup> International Conference on Internet (ICONI 2025)

Dec. 14-17, 2025, Okinawa Convention Center, Okinawa, Japan

<http://www.iconi.org>

## Conference Program

| Organized by |

Korean Society for Internet Information (KSII)

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## Message from Honorary Chair

We express our warm welcome to all of attendants of the 17<sup>th</sup> International Conference on Internet (ICONI) that will be held from December 14-17, 2025, in Okinawa Convention Center, Okinawa, Japan.

Over the past 17 years, ICONI has increased its academic impact and influence in the area of Information Science, Computer Engineering and Internet Technology by bringing together international researchers from academia, industry, and the government to exchange novel ideas, explore enabling technologies, discuss innovative designs, and share field trial experiences and lessons learned.

This year, ICONI 2025 again covers a broad range of topics which are related with Internet technologies and applications such as wireless and sensor networks, security & privacy, multimedia, image processing, intelligent systems, mobile computing, Internet of things, and wireless communications. It is firmly believed that each paper to be presented will be a basis for further constructive discussion.

We would like to express our heartfelt gratitude to everyone who makes this conference successful. First of all, we are so grateful to all contributors who submit their valuable papers, review the papers, and chair the sessions. We also thank many sponsors for their enormous support. Our special thanks must go to the Keynote Speaker Dr. Shannon E. Reid.

Last but not least, we deeply appreciate limitless devotion of the Organizing Committee members. Without their contribution, this conference would not be realized.

We truly welcome you all to this beautiful country and wish you pleasant and joyous stay in Okinawa, Japan!



**Dr. Dongkyoo Shin**  
Sejong Univ.,  
Rep. of Korea

**Dr. Dongkyoo Shin**  
**Honorary Chair of ICONI 2025**

# Message from Conference Chair

On behalf of the Organizing Committee of the 17th International Conference on Internet (ICONI) 2025, it is my great pleasure to warmly welcome all of you and to express my sincere appreciation for your participation in this international conference to share and discuss valuable state-of-the-art research and development achievements.

This year's conference has been successfully organized with the dedicated efforts of our committee members and contributors. A substantial number of papers have been submitted across fourteen Internet-related research areas—such as mobile Internet computing, Internet security, the Internet of Things (IoT), wireless and sensor networks, multimedia and image processing, and Internet application management—and many of these will be presented throughout the conference program.

In addition, we are honored to host our distinguished keynote speaker, Dr. Shannon E. Reid, Professor at the University of North Carolina at Charlotte, USA, who will deliver an inspiring keynote address at ICONI 2025.

I would like to extend my deepest gratitude to all members of the Organizing Committee and to everyone who has contributed to the preparation of this event. Their unwavering commitment and support have made this conference possible.

I wish all participants a pleasant stay in Okinawa, Japan, and a productive and successful conference.



**Dr. Woochan Lee**  
**Incheon National Univ.,**  
**Rep. of Korea**

**Dr. Woochan Lee**  
**Conference Chair of ICONI 2025**

## Message from Program Chair

It is a pleasure to welcome you to the 17<sup>th</sup> International Conference on the Internet (ICONI 2025). ICONI 2025 will be held in Okinawa, Japan, from Dec 14-17. The hosting organization (KSII) is one of the largest ICT-related academic societies in the Republic of Korea.

Over the past 17 years, ICONI has grown to be a major international conference in the Internet Technology area. The conference is organized into 15 tracks in the Internet Technology field. ICONI continues the endeavor of high-quality, broad international participation in all areas of Internet Technology.

The successful organization of ICONI has required the talents, dedication, and time of many volunteers from Malaysia, the USA, France, Vietnam, Indonesia, the United Arab Emirates, Russia and the Republic of Korea. Special gratitude and appreciation go to all organizing committee members as they are primarily responsible for the conference. This ICONI conference serves as a unique and exciting gathering at the forefront of the most innovative and captivating realms of computer science. Your presence here provides a valuable opportunity to share novel ideas, research findings, and, importantly, to learn from each other's experiences, fostering mutual growth. We look forward to engaging in deep discussions, sharing fresh ideas, and fostering connections that will lead to newfound perspectives.

We hope that you will find the conference both enjoyable and valuable and that you will also enjoy the architectural, cultural, and natural beauty of Okinawa, Japan. We express my sincere gratitude to all participants for your tremendous support, and We genuinely hope that ICONI 2025 becomes a meaningful and enriching experience for each one of you. Thank you.



**Dr. Moonseong Kim**  
Seoul Theological Univ.,  
Rep. of Korea

**Dr. Moonseong Kim**  
**Program Chair of ICONI 2025**

# Keynote Speaker

**Keynote Speaker Dr. Shannon E. Reid**

**Associate Professor**

**University of North Carolina, Charlotte, USA**

**Criminal Justice and Criminology**



## **Title: The Power of Integration: Building Safer Communities Through Interdisciplinary Innovation**

Despite the rapid advancement of technology that could benefit communities, public safety remains a relatively traditional field, often showing hesitation in adopting innovative systems. At the same time, the technology sector tends to focus heavily on developing new tools while paying relatively little attention to the potential practical applications for real-world changes. These divergent goals, combined with broader concerns around trust in public safety agencies, has provided unique opportunities for interdisciplinary research and partnerships. These research projects and partnerships generate new technologies, new applications and inform and advance these academic areas, while helping rebuild public perceptions of law enforcement, and improving public safety. By bridging research silos and integrating diverse perspectives, we can design smarter systems, more ethical frameworks, and more resilient communities. This keynote explores how converging technologies—artificial intelligence, data analytics, social science, and public policy—can work together to strengthen public safety and community trust.

### **Short Biography:**

Dr. Reid received her Ph.D. in Criminology, Law, and Society from the University of California, Irvine in 2013. She is currently the Co-PI on a multi-year National Science Foundation funded grant developing AI based video analytics to detect anomalous behavior and provide actionable insights while preserving privacy and reducing bias.

# Organizing Committee

## | Honorary Chair |

**Dongkyoo Shin**, Sejong University, Seoul, Republic of Korea

## | Conference Chair |

**Woochan Lee**, Incheon National University, Incheon, Republic of Korea

## | Program Chairs |

**Moonseong Kim**, Seoul Theological University, Bucheon, Republic of Korea

## | Publication Chairs |

**Minho Jo**, Korea University, Sejong, Republic of Korea

**Jong-Moon Chung**, Yonsei University, Seoul, Republic of Korea

**Jaeyoung Park**, Hongik University, Seoul, Republic of Korea

## | Financial Chair |

**Jonggeun Choi**, Seoul National University of Science and Technology, Seoul,  
Republic of Korea

## | Workshop Chairs |

**Kiwon Kwon**, Korea Electronics Technology Institute, Seoul, Republic of Korea

**Woochun Jun**, Seoul National University of Education, Seoul, Republic of Korea

**Jongwon Lee**, Seoul Cyber University, Seoul, Republic of Korea

# Organizing Committee

## | Program Committee |

**Ahmad Ibahim**, Univ. of Birmingham Dubai, United Arab Emirates

**Amine M'Zali**, Efrei Paris, France

**Babak Rahimi Ardabili**, Univ. of North Carolina at Charlotte(UNCC), USA

**Byoung Soo Lee**, Ministry of Intellectual Property, Daejeon, Republic of Korea

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**Dohoon Kim**, Kyonggi University, Suwon, Republic of Korea

**Eui-Nam Huh**, Kyung Hee University, Suwon, Republic of Korea

**Ha Manh Tran**, HCMC Vietnam National University, Vietnam

**Hamed Tabkhi**, Univ. of North Carolina at Charlotte(UNCC), USA

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**Hui-Gyu Yang**, Sungkyunkwan University, Suwon, Republic of Korea

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**Minjae Park**, Daelim University, Anyang, Republic of Korea

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**Seung Huh**, Incheon National University, Incheon, Republic of Korea

**Sooyeon Park**, Seoul Theological University, Bucheon, Republic of Korea

**Suhyeon Yoo**, Korea Institute of Science and Technology Information,  
Daejeon, Republic of Korea

**Sungil Han**, Univ. of North Carolina at Charlotte(UNCC), USA

**Sungyoon Cho**, Korea Electronics Technology Institute, Seoul, Republic of Korea

**SunJu Park**, Gwangju National University of Education, Gwangju, Republic of Korea

**Vladimir Shakhov**, Novosibirsk State Technical University, Russia

**Woobin Park**, Incheon National University, Incheon, Republic of Korea

**Yousif Alhammadi**, Univ. of Birmingham Dubai, United Arab Emirates

**Yun-Young Hwang**, Korea Institute of Science and Technology Information,  
Daejeon, Republic of Korea

**Zulkefli Mansor**, Universiti Kebangsaan Malaysia, Malaysia



# Conference Program

Sun. / Dec. 14, 2025	Room
18:00-19:30	VIP Reception & Greetings

Mon. / Dec. 15, 2025	Room 1 (B5 ~B7)	Room 2 (B2)	Room 3 (B3)	Room 4 (B5)
09:30-	Registration (1F)			
10:30-12:00	Session 1	Session 2	Session 3	Session 4
12:00-13:30	Lunch / Farm Café Taiyouichiba			
13:30-14:00	Opening Ceremony & Keynote Speech (Room 1)			
14:10-15:40	Session 5	Session 6	Session 7	Session 8
15:50-17:20	Session 9	Session 10	Session 11	Session 12

# Conference Program

<b>Tue. / Dec. 16, 2025</b>	<b>Room 1 (B5~B7)</b>	<b>Room 2 (B2)</b>	<b>Room 3 (B3)</b>	<b>Room 4 (B5)</b>
<b>09:30-</b>	<b>Registration (1F)</b>			
<b>10:30-12:00</b>	<b>Session 13</b>	<b>Session 14</b>	<b>Session 15</b>	<b>Session 16</b>
<b>12:00-14:00</b>	<b>Lunch / Farm Café Taiyouchiba</b>			
<b>14:10-15:40</b>	<b>Session 17</b>	<b>Session 18</b>	<b>Session 19</b>	
<b>15:50-16:30</b>	<b>Presentation Evaluation Meeting (Room 1)</b>			
<b>17:30-19:00(1) 19:30-21:00(2)</b>	<b>Banquet 1/ Banquet 2 Okinawa Prince Hotel Ocean View Ginowan All Day Dining Jinon 1F</b>			

<b>Wed. / Dec. 17, 2025</b>	<b>Room</b>
<b>09:00-10:00</b>	<b>Panel Discussion : Collaborative Research / Okinawa Prince Hotel Ocean View Ginowan</b>
<b>11:00-12:00</b>	<b>Okinawa Institute of Science and Technology (OIST) Campus Tour</b>

# Conference Program

**Sun, Dec. 14, 2025**

**18:00-19:30**

**VIP Reception & Greetings**

**Mon, Dec. 15, 2025**

**10:30-12:00**

**Session 1: Interactive Presentation I**

**Session 2: Artificial Intelligence/Time Series Machine Learning I**

**Session 3: Cyber Education/Social Media/Metaverse/ UI /UX & Technology Management/ E-commerce/Information Systems/ Digital Transformation/BPM**

**Session 4: WIET Education Workshop I**

**13:30-14:00**

**Opening Ceremony & Keynote Speech**

**Dr. Shannon E. Reid/  
University of North Carolina, Charlotte, USA**

**14:10-15:40**

**Session 5: KETI Workshop I**

**Session 6: Artificial Intelligence/Time Series Machine Learning II**

**Session 7: Defense Information Technology/ High Performance Computing**

**Session 8: WIET Education Workshop II**

# Conference Program

## Mon, Dec. 15, 2025

15:50-17:20

**Session 9: Interactive Presentation II**

**Session 10: Network/Mobile Computing/IoT**

**Session 11: KETI Workshop II**

**Session 12: Graphics/Image Processing/Video Deep Learning/Video Control & Security System/ Information Security & Educational Technology**

## Tue, Dec. 16, 2025

10:30-12:00

**Session 13: KETI Workshop III**

**Session 14: AI for SE**

**Session 15: AI-Enhanced Learning and Interdisciplinary Applications**

**Session 16: Bigdata Platform/Analysis/Application & Technology Management/E-commerce/ Information Systems/ Digital Transformation/BPM**

# Conference Program

## Tue, Dec. 16, 2025

14:10-15:40	Session 17: Interactive Presentation III
	Session 18: Scientific Public Security/ Crime Prevention/ Intelligent CCTV Application
	Session 19: Cloud Computing/Digital Twin/ Smart Factory
17:30-19:00	Banquet 1 / Banquet 2  (Okinawa Prince Hotel Ocean View Ginowan All Day Dining Jinon 1F)
19:30-21:00	

## Wed, Dec. 17, 2025

09:00-10:00	Panel Discussion : Collaborative Research
11:00-12:00	Okinawa Institute of Science and Technology (OIST) Campus Tour

### \* Presentation Time

- Oral Session: 10 minutes Presentation / 5 minutes Q&A

# Conference Program

| 10:30-12:00, Mon, Dec. 15, 2025 |

## Session 1: Interactive Presentation I (Room 1)

Chair: Dr. Sooyeon Park

10:30-12:00, Mon, Dec. 15, 2025

(Seoul Theological Univ., ROK)

1-1	Analysis of Task Offloading Schemes in LEO Satellite Edge Computing
	Jungmin Seo, Jong-Moon Chung (Yonsei Univ., ROK)
1-2	Analysis of Technology Trends for RL-based Computation Offloading in Multi-access Edge Computing
	Byounghoon Son, Jong-Moon Chung (Yonsei Univ., ROK)
1-3	An Android-based System for ECG Signal Measurement
	WoongSik Kim, HaeIn Lee, DongKwon Jung (Konyang Univ., ROK)
1-4	Exploring SQL Aggregation Ambiguity in Table-Augmented Generation: An Experimental Study on Group Imbalance and Query Clarity
	Taekjun Jeong, Seonjeong Kim, Sooyeon Park, Moonseong Kim (Seoul Theological Univ., ROK)
1-5	Experimental Study on Adjusting MongoDB Eventual Consistency Using Change Stream Variable Control
	Taekjun Jeong, Seonjeong Kim, Moonseong Kim, Kisoeb Park (Seoul Theological Univ., ROK)
1-6	AI-based Defect Prediction Study for CNC Machining Processes Using HEMOS-INT
	Taasang Huh, Gyuhyun Hwang, Namgyu Kim, Dong-Woo Seo (KISTI, ROK)

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# Conference Program

| 10:30-12:00, Mon, Dec. 15, 2025 |

## Session 1: Interactive Presentation I (Room 1)

10:30-12:00, Mon, Dec. 15, 2025  
Chair: Dr. Sooyeon Park  
(Seoul Theological Univ., ROK)

1-7	Development of a Real-Time Worker Activity Recognition System for Manufacturing Processes Based on TCN
	Jaehyeon Lee, YoungBeom Kim (KETI, ROK)
1-8	Externally Induced Dominant Design (EIDD): A Predictive Framework for Technological Convergence in Advanced Computing Industries
	Nam-gyu Kim, Inho Jeon (KISTI, ROK)
1-9	Comparative Study of Gaussian Splatting-based Surface Reconstruction Methods using Smartphone-based 360° Video
	Doheyon Park, Jisang Yoo, Soonchul Kwon (Kwangwoon Univ., ROK)
1-10	Vision-Based Robotics System for 2D Object Scanning
	Yoonmo Yang (KETI, ROK)
1-11	A Pipeline for Image-based 3D Animal Model Generation and Morphological Control
	Meejin Kim, Byung-Ha Park (KETI, ROK)
1-12	Physics-Based Simulation and Data Generation for Detecting Marine Organisms in Power-Plant Intakes Using Multibeam Imaging Sonar
	Dongwoo Seo (KISTI, ROK)

# Conference Program

| 10:30-12:00, Mon, Dec. 15, 2025 |

## Session 2: Artificial Intelligence/Time Series Machine Learning I (Room 2)

Chair: Dr. Sungil Han  
(Univ. of North Carolina at  
Charlotte(UNCC), USA)

10:30-12:00, Mon, Dec. 15, 2025

2-1	EXA-Mind: CoT-Based Psychological Counseling for Mental Disorder Treatment LLM
	Do Hyun Kim, Won Hee Chung, Yeong Hyeon Gu (Sejong Univ., ROK)
2-2	Retrieval Augmented Classification for Confidential Documents
	Yeseul E. Chang (Chung-Ang Univ., ROK), Rahul Kailasa, Simon Shim (San Jose State Univ., USA), Byunghoon Oh, Jaewoo Lee (Chung-Ang Univ., ROK)
2-3	Dual Retrieval and Candidate Reranking Framework for LLM-based HS Code Classification
	Deokho An, Helin Yin (Sejong Univ., ROK), Sunjoo Kim (Konkuk Univ., ROK), Yeong Hyeon Gu (Sejong Univ., ROK)
2-4	A Study on Korean-based Prompt Engineering System for Video Generation Model: Focusing on CogVideoX
	Jihui Choi, Taeseon Eom, Younggi Lim, Wooseong Lee (PCN, ROK), Yeonghyeon Gu (Sejong Univ., ROK)
2-5	Digital Evidence Analysis and the Use of AI : Focusing on Admissibility and Potential Bias
	Jiwoo Lee, Kyung-Lyul Lee (SungKyunKwan Univ., ROK)
2-6	Rep-YOLO+: An Efficient Lightweight YOLO Model for Object Detection
	Linh Le Thi Dieu, Eui-Nam Huh (Kyung Hee Univ., ROK)



# Conference Program

| 10:30-12:00, Mon, Dec. 15, 2025 |

## Session 3: Cyber Education/Social Media/Metaverse/UI/UX & Technology Management/E-commerce/Information Systems /Digital Transformation/BPM (Room 3)

Chair: Dr. Jaehee Cho  
(Sogang Univ., ROK)

10:30-12:00, Mon, Dec. 15, 2025

3-1	Investigation of Effects of Online Communication on Social Capital among People with Physical Disabilities
	Jaehee Cho (Sogang Univ., ROK), Herim Lee (Hankuk Univ. of Foreign Studies, ROK), Zhou Nan (Sogang Univ., ROK)
3-2	VizClass: AI-Generated Explanatory Videos for Educational Content on KOREN
	Sumin Son, JiSeung Bae, Hyunseok Jung, Haeun Woo, Hacksung Boo, Jian Jeong, Eui-Nam Huh (Kyung Hee Univ., ROK)
3-3	Machine-Learning-Based Property Valuation for Dubai: Design, Implementation, and Evaluation
	Yousif Alhammadi, Ahmad Ibrahim (Univ. of Birmingham Dubai, UAE)
3-4	Multi-Modal Wearable System for Hazard Detection and Alarm
	Hyunseok Oh, Jaeho Hwang, Tae Hyung Kim, Jaeyoung Park (Hongik Univ., ROK)
3-5	Strategic Approaches to Facilitating Real-World Asset (RWA) Adoption
	Seungseok Lee, Qiuying Chen, Sangjoon Lee (Chonnam National Univ., ROK)
3-6	Integrated Machine Learning Model for Multi-Disease Comorbidity Prediction
	Maria Nayab, Ahmad Ibrahim (Univ. of Birmingham Dubai, UAE)

# Conference Program

| 10:30-12:00, Mon, Dec. 15, 2025 |

## Session 4: WIET Education Workshop I (Room 4)

Chair: Dr. Eusnsun Choi

10:30-12:00, Mon, Dec. 15, 2025

(Gwangju National Univ. of Education, ROK)

4-1	Development and Validation of a Digital Problem-Solving Competency Model
	Jaekwoun Shim (Daegu National Univ. of Education, ROK)
4-2	Dark Patterns in Classroom Gamification: A K-12 Taxonomy, Avoidance Principles, and a Minimum Reporting Set
	Jinsu Kim, Hyunjeong Lim (Jeju National Univ., ROK), Babar Jamil (Univ. of York, UK), Namje Park (Jeju National Univ., ROK)
4-3	Usability Evaluation of AI Chatbots for Educational Institution Adoption
	Inseong Jeon (Gwangju National Univ. of Education, ROK)
4-4	An Analysis of Elementary School Teachers' Perceptions of Generative AI Issues by Class Size
	Youngsik Jeong (Jeonju Univ. of Education, ROK), Daisung Ma (Gwangju Univ. of Education, ROK)
4-5	Design and Operation of the 2025 Physical AI-Based 'Digital Sprout' Education Program in Korea
	Kyujung Han, Eunhee Ryu (Gongju National Univ. of Education, ROK), Jonggun Park, Yeonah Ki (Circus Inc., ROK)
4-6	Game Literacy Education for Fostering Talent in AI Era: The Case of Republic of Korea
	Jaeho Lee, Jiwon Jeong, Eunseo Gu (Gyeongin National Univ. of Education, ROK), Junhyung Jang (Daehwa Elementary School, ROK)
4-7	Analysis of Teacher's Needs for the Development of an sLLM-Based Educational Support Service
	Keonwoo Kim (Gisan Elementary School, ROK), Sunju Park (Gwangju National Univ. of Education, ROK)
4-8	A Case study on the Operation the Chungnam RISE Neulbom: An After-School Education Model in Korea
	Kyujung Han, Gonsung Yang, Hyeyun Jung, Soyoung Yun (Gongju National Univ. of Education, ROK)

# Conference Program

| 14:10-15:40, Mon, Dec. 15, 2025 |

## Session 5: KETI Workshop I (Room 1)

Chair: Dr. Kiwon Kwon  
(KETI, ROK)

14:10-15:40, Mon, Dec. 15, 2025

5-1	Enhancing Document Retrieval for Fashion Dialogue with Tool-Augmented Data Generation
	San Kim, Chungil Kim, Saim Shin, Byunggill Joe (KETI, ROK)
5-2	A Comparative Study of Discrete and Continuous Representations for Co-Speech Gesture Generation
	Chungil Kim, Jinyea Jang, Saim Shin (KETI, ROK)
5-3	Motion is Not a Language: Explicit Duration Modeling for Co-Speech Gesture Generation
	Chungil Kim, Jinyea Jang, Saim Shin (KETI, ROK)
5-4	Modality Gating in Fashion Multimodal Dialogue
	San Kim, Chungil Kim, Saim Shin, Byunggill Joe (KETI, ROK)
5-5	Implementation of a Virtual-Physical Integrated Simulation Platform for Autonomous Mobile Robots
	Jungwook Wee, Myeongseop Kim, Sukwoo Jung, Hyunsik Kim, Younsung Lee (KETI, ROK)
5-6	Development of a Web-based Monitoring System for BLE-enabled Wearable IoT Devices in Industrial Safety Applications
	Jong-Hong Park, Sung-Chan Choi (KETI, ROK)

Continue next page (session 5)

# Conference Program

| 14:10-15:40, Mon, Dec. 15, 2025 |

## Session 5: KETI Workshop I (Room 1)

Chair: Dr. Kiwon Kwon  
(KETI, ROK)

14:10-15:40, Mon, Dec. 15, 2025

5-7	Hierarchical ROS2 Discovery Control Method for Unmanned Vehicle Networks
	Sung-Chan Choi, Jong-Hong Park (KETI, ROK)
5-8	RNS Modulus Chain Optimization for CKKS Homomorphic Encryption based on Effective Bits
	So-Yeon Kwon (Sangmyung Univ., ROK), Yongseong Kim (KETI, ROK), Kwangjae Lee (Sangmyung Univ., ROK)
5-9	Lightweight and Real-Time Voice Phishing Detection Application Using Deep Voice Identification Technology
	Nakyung Lee, Jisu Ahn, Junsu Han, Eunsu Kim, Kwangjae Lee (Sangmyung Univ., ROK)
5-10	Reduced-Order Modeling for Fast 2D Field Prediction
	Ikhyun Ryu, Kyu-Byung Park, Dongheum Ryu, Donggeon Lim, Yongbin Lee, Changhyun Park (PIDOTECH Inc., ROK), Sooyeon Kwon (KOMSA, ROK)
5-11	Modularization for Fishing Vessel Design and Integration to Web-based Platform
	Juhyoung Sung, Kyoungwon Park, Kiwon Kwon, Byoungchul Song (KETI, ROK)

Session 6: Artificial Intelligence/Time Series Machine Learning II (Room 2)

Chair: Dr. Minho Jo  
(Korea Univ., ROK)

14:10-15:40, Mon, Dec. 15, 2025

	An approach to integrate Linked Open Data using BERT language model
6-1	Sujin Yoo (Hansung Univ., ROK), Jihee Lee, Sehee Kim, Yerak Kim (Korea Univ., ROK), Seung-Seok Kang (Seoul Women's Univ., ROK), Seongbin Park (Korea Univ., ROK)
	MO-GRPO for Mitigating Reward Hacking in Multi-Objective LLM RL through a Variance-Equalizing Whitening Layer
6-2	Joon Soo Jeong (Puzzlesystems Co., Ltd, ROK), Oakyoung Han (Sungkyunkwan Univ., ROK)
	Dynamic GPU Resource Allocation for Efficient Multi-LLM Serving
6-3	JiSeung Bae, HackSung Boo, Kibeom Lee, Eui-Nam Huh (Kyung Hee Univ., ROK)
	MI-Exaone: Motivational Interviewing LLM by Korean Psychological Counseling Corpus Reconstruction
6-4	Heeji Hong, Won Hee Chung, Yeong Hyeon Gu (Sejong Univ., ROK)
	Testing Criteria's for AI Model: A Case Study of AI Warisan Project
6-5	Zulkefli Mansor, Rodziah Latih, Kamalrufadillah Sutling, Muhd Syamil Samli Said, Badrisham Ahmad, Ahmad Najmi Ismail (Univ. Kebangsaan Malaysia, Malaysia), Amine M'Zali, Djaganadane Mourougayane (Efrei Paris, France)
	KoVLA: A Framework for Building a Korean Language-Based Robot Command Dataset and CoT-Based Inference
6-6	Woosung Lee, Junyup Lee, Jinhwan Kim, Guenwoo Gwon, Yunju Park (PCN, ROK), Yeonghyeon Gu (Sejong Univ., ROK)

# Conference Program

| 14:10-15:40, Mon, Dec. 15, 2025 |

Session 7: Defense Information Technology/High Performance Computing (Room 3)		Chair: Dr. Shannon Reid (Univ. of North Carolina at Charlotte(UNCC), USA)
14:10-15:40, Mon, Dec. 15, 2025		
7-1	Route-RAG: Leveraging LLM-driven Query Routing for Reliable and Transparent Defense Knowledge Retrieval	
	Ye Chan Kim, Jong-geun Choi, Hyukjin Kwon, Byeong Soo Kim (Seoul National Univ. of Science and Technology, ROK)	
7-2	Efficient Open-Vocabulary Scene Graph Adaptation for Military Scene Understanding: Hierarchical Spatial Reasoning with Small-Scale Learning	
	Yeongjin Jeon, Minseo Kim, Jong-geun Choi, Hyukjin Kwon, Younghoon Lee (Seoul National Univ. of Science and Technology, ROK)	
7-3	A Standardized RAM-C Analytical Framework Based on the OPUS Suite	
	Sungjae Bae, Kiyoun Lee (MOASOFT, ROK)	
7-4	A RAG-Enhanced AI Agent System for Supercomputer Operation Based on Issue Tracker Data	
	Gukhua Lee, Do-Sik An, Joon Woo, Taeyoung Hong (KISTI, ROK)	
7-5	When Parallelism Meets Constraints: Tensor-Parallel Inference in Bandwidth-Bound Edge Systems	
	Jinyong Jun (Seoul National Univ., ROK)	

# Conference Program

| 14:10-15:40, Mon, Dec. 15, 2025 |

## Session 8: WIET Education Workshop II (Room 4)

Chair: Dr. Woochun Jun

14:10-15:40, Mon, Dec. 15, 2025 (Seoul National Univ. of Education, ROK)

8-1	Comparison of Machine Learning Models in a Korean Early Literacy Diagnostics Tool
	Sihoon Lee, Jeonghye Han (Chenongju National Univ. of Education, ROK)
8-2	A Study on the Teacher-Coaching Planner as a New Educational Approach in the Era of Generative AI
	Jungseo Lee (Daegu Gyeongdong Elementary School, ROK), Youngkwon Bae (Daegu National Univ. of Education, ROK)
8-3	A Meta-Analysis of the Effects of AI Education for Primary and Secondary School Teachers
	Eunsun Choi (Gwangju National Univ. of Education, ROK), Keunbae Choi, Namje Park (Jeju National Univ., ROK)
8-4	Development of an Artificial Intelligence Textbook for Elementary School Students (Grades 3–4)
	Jiyeon Hong (Soonchunhyang Univ., ROK), Jungho Park (Chinju National Univ. of Education, ROK)
8-5	A Comparative Analysis of Generative AI Guidelines for Elementary School Students
	Daisung Ma (Gwangju National Univ. of Education, ROK), Youngsik Jeong (Jeonju National Univ. of Education, ROK)
8-6	An Analysis Study on the Digital Divide of the Elderly in Korea
	Woochun Jun (Seoul National Univ. of Education, ROK)
8-7	Research for Competition Graph-based Relationship Analysis for Multiple-Collaborative Cyber-Physical Systems
	Sejin Jung, Ji-Hwan Jung, Jungho Park, Byoung Rae Han (Chinju National Univ. of Education, ROK)
8-8	Development of an Educational Program Utilizing Vibe Coding
	Junho Kim, Sejin Jung, Byungrae Han, Jungho Park, Jihwan Jung (Chinju National Univ. of Education, ROK), Jiyeon Hong (Soonchunhyang Univ., ROK)

# Conference Program

| 15:50-17:20, Mon, Dec. 15, 2025 |

## Session 9: Interactive Presentation II (Room 1)

Chair: Dr. Minjae Park  
(Daelim Univ., ROK)

15:50-17:20, Mon, Dec. 15, 2025

9-1	An Operational Method for AI On-Device Modules in Smart Parking Management Systems
	Minjae Park, Gunchang Moon (Daelim Univ., ROK), Woosuk Jung (D-Tech, ROK)
9-2	Human Activity Recognition in Indoor Environments Using Wi-Fi Signal
	Seho Park, Taehyeon Kim, Dongwoo-kang, Saetbyul Yu (KETI, ROK)
9-3	A Method for Extracting Land Surface Elements from Satellite Images through Linked Analysis of Measured Natural Light Characteristics
	Seungtaek Oh, Jaehyun Lim (Kongju National Univ., ROK)
9-4	A Study on Estimating External Cost from Ship Emission in the Port Area using Port-MIS data
	Minh-Hoan Pham, Hwayoung Kim (Mokpo National Maritime Univ., ROK)
9-5	Analyzing Characteristics of Port Accidents during Cargo Operation in Korea using System Dynamics
	Minh-Hoan Pham, Hwayoung Kim, Min-Woo Park (Mokpo National Maritime Univ., ROK), Sung-Sam Hong (OceantoAi Co., ROK)
9-6	Blockchain-Enabled Path-Aware Security Architecture for 6G Non-Terrestrial Networks
	Sungbeen Kim, Dohoon Kim (Kyonggi Univ., ROK)

Continue next page (session 9)



# Conference Program

| 15:50-17:20, Mon, Dec. 15, 2025 |

## Session 9: Interactive Presentation II (Room 1)

Chair: Dr. Minjae Park  
(Daelim Univ., ROK)

15:50-17:20, Mon, Dec. 15, 2025

9-7	Mobile Ticket Validation with Security Hologram Codes
	YoungBeom Kim, Byoung-Ha Park (KETI, ROK)
9-8	Clustering of Attack Surfaces: Redefining the Defender's Perspective
	Gaeul Kim, Sungbeen Kim, Dohoon Kim (Kyonggi Univ., ROK)
9-9	Shadow AI Governance at the Network Edge A Metadata-Based Classifier
	Minseong Kim, Sungbeen Kim, Gaeul Kim, Dohoon Kim (Kyonggi Univ., ROK)
9-10	Perceptual-Practical Gap Analysis of HPC Resource Utilization
	Myoungju Koh, Noori On, Hyungwook Shim, Minho Suh (KISTI, ROK)
9-11	Development of Generative AI-Based Virtual Exhibition and Motion-Interactive Virtual Performance Content Technologies for Senior Users
	Byoung-Ha Park, Sung-Oh Jung, Meejin Kim (KETI, ROK)
9-12	Uncertainty-Aware Parameter Generation via Adaptive Physics–Information Fusion in a Process-Specific Latent Space: A Review and Proposal
	Jinhong Yang (Inje Univ., ROK), Hoan-suk Choi (Kyungnam Univ., ROK)

# Conference Program

| 15:50-17:20, Mon, Dec. 15, 2025 |

## Session 10: Network/Mobile Computing/IoT (Room 2)

Chair: Dr. Woochan Lee

15:50-17:20, Mon, Dec. 15, 2025

(Incheon National Univ., ROK)

10-1	Edge Inference Controller for Heterogeneous AI Accelerators: Layer-wise Runtime Ratios and Operator Affinity
	Hyunseok Jung, Hacksung Boo (Kyung Hee Univ., ROK), A-Young Son (KISTI, ROK), Eui-Nam Huh (Kyung Hee Univ., ROK)
10-2	FETI-DP with Guided-Mode-Aware Transmission Conditions for Electromagnetic Analysis of Waveguides
	Sunghan Lee, Woonbin Park, Hyeonyeol Na, Woochan Lee (Incheon National Univ., ROK)
10-3	FPGA-Based Conversion Device from CAN to AFDX for Large Drone In-Vehicle Networks
	Daekyo Shin, Pusik Park (KETI, ROK)
10-4	Memory-Efficient Parallel FETI-DP Solver for Electromagnetic Scattering
	Woobin Park, Sunghan Lee, Hyeonyeol Na, Woochan Lee (Incheon National Univ., ROK)
10-5	An Automated Representative Sampling Framework for Proactive Fault Sensing in Large-Scale IP Networks
	Eungyeom Ha, Seung Jun Lee, Seil Lee (SK Broadband Co., ROK), Haemin Jung (Korea National Univ. of Transportation, ROK)
10-6	SBR-Based Specular Path Tracing with Image Method Refinement
	Hyeonyeol Na, Chanho Kim, Woobin Park, Sunghan Lee, Woochan Lee (Incheon National Univ., ROK)

# Conference Program

| 15:50-17:20, Mon, Dec. 15, 2025 |

## Session 11: KETI Workshop II (Room 3)

15:50-17:20, Mon, Dec. 15, 2025

Chair: Dr. Sungyoon Cho  
(KETI, ROK)

11-1	LSTM-Based Predictive Task Offloading Algorithm for Energy-Constrained Edge Monitoring Systems
	Junsu Kim, Sungyoon Cho, Kiwon Kwon (KETI, ROK)
11-2	Gaussian process-based prediction of fishing vessel performance with Mixed variable integration
	Donggeon Lim, Ikhyun Ryu, Dongheum Ryu, Yongbin Lee, Changhyun Park (PIDOTECH Inc., ROK), Sooyeon Kwon (KOMSA, ROK)
11-3	Considering R&D Support for Technology Commercialization in the Marine and Fisheries Industry: A Study on Mutual Cooperation
	Jeonghoon Kang, Jooyoung Lee (KSPP, ROK)
11-4	A Study on Policy Strategies for the Dissemination of Hydrographic Information Products for Smart Ships
	Min-jong Hong, Joo-young Lee, Jeong-hoon Kang (KSPP, ROK)
11-5	A Study on Policy Recommendations for the Digital Transformation of Flounder Aquaculture Farms
	Na-jeong Park, Joo-young Lee, Jeong-hoon Kang (KSPP, ROK)
11-6	A Study on Applying Partition Computing to Hybrid HPC-Cloud Native Integration Models for High Availability
	Taehyun Yoo, Sooyoung Lim, Jaegi Son, Dongmin Kim (KETI, ROK)
11-7	GIS-Based Pattern Analysis of Fishing Vessel Accidents Using STPA Scenarios
	Narae You, Jooyoung Lee (KSPP, ROK)

# Conference Program

| 15:50-17:20, Mon, Dec. 15, 2025 |

## Session 12: Graphics/Image Processing/Video Deep Learning/Video Control & Security System/Information Security & Educational Technology (Room 4)

Chair: Dr. Dohoon Kim  
(Kyonggi Univ., ROK)

15:50-17:20, Mon, Dec. 15, 2025

12-1	Enhancing YOLO-based Pest Detection : Mitigating Missing Annotation with NANS and IoU Based Loss Functions
	Jimin Lee, Helin Yin, Yeong Hyeon Gu (Sejong Univ., ROK)
12-2	CMSM-DETRIS: Parameter-Efficient RIS via Cross-Modal Similarity Map
	CUI JUNXI, PIAO ZHEGAO, Yeong Hyeon Gu (Sejong Univ., ROK)
12-3	A Comparative Study of Normal Extraction Methods for Inverse Rendering in 3D Gaussian Splatting
	Hyeontae Son, Junchul Chun (Kyonggi Univ., ROK)
12-4	Adaptive Pooling Comparison Benchmark: Evaluating Pooling Methods in ResNet-based Image Classification
	YoungEun Kim (Jeonju Univ., ROK)
12-5	Vulnerability Mapping Methodology Based on Network Threat Traffic
	Jisoo Jang, Taesu Kim, Hyoseong Park, Dongkyoo Shin (Sejong Univ., ROK)
12-6	From Clicks to Insights: Machine Learning-Driven Learner Modeling in Korean National Digital Literacy Assessment
	Sujin Yoo (Hansung Univ., ROK), Jeong-hee Seo (KERIS, ROK), Hansung Kim (Korea Cyber Univ., ROK)

# Conference Program

| 10:30-12:00, Tue, Dec. 16, 2025 |

## Session 13: KETI Workshop III (Room 1)

Chair: Dr. Kiwon Kwon  
(KETI, ROK)

10:30-12:00, Tue, Dec. 16, 2025

13-1	AI-Generated News Article Detection System
	Yeon-Seung Choo, Yong-Suk Park (KETI, ROK)
13-2	Semantic Textual Similarity for News Domain
	Hyun-Sik Kim, Yong-Suk Park (KETI, ROK)
13-3	Systematic Underestimation in Software-based Power Profiling for LLM Inference Phases
	Seokhun Jeon, Manjo Kim, Sihyeong Park, Byung-Soo Kim (KETI, ROK)
13-4	Accelerating I/O Performance for AI Frameworks on DAOS
	Sooyoung Lim, Taehyun Yoo, Jaegi Son, Dongmin Kim (KETI, ROK)
13-5	Utterance Count Suffixing: Toward Exact Utterance Count Control for LLM-Generated Dialogues
	Byunggill Joe, San Kim, Chungil Kim, Saim Shin (KETI, ROK)
13-6	Reordering Multi-Image Dialogues: Benchmarking LLM Utterance Order Recovery
	Byunggill Joe, San Kim, Chungil Kim, Saim Shin (KETI, ROK)

Continue next page (session 13)

# Conference Program

| 10:30-12:00, Tue, Dec. 16, 2025 |

## Session 13: KETI Workshop III (Room 1)

Chair: Dr. Kiwon Kwon

10:30-12:00, Tue, Dec. 16, 2025

(KETI, ROK)

13-7	Achieving Autonomous AI-Powered Storage: Optimizing Reliability and Efficiency via Meta-RL, Causal AIOps, and CXL-Native Placement
	Hojung Lim, Taehyun Yoo, Jaegi Son, Dongmin Kim (KETI, ROK)
13-8	AOSH: AI-Orchestrated Self-Healing Framework Design
	Hojung Lim, Taehyun Yoo, Jaegi Son, Dongmin Kim (KETI, ROK)
13-9	Base Station Side Thompson Sampling to minimize transmit power in Maritime Uplink Communication
	Kyeongjea Lee (Yonsei Univ., ROK), Sungyoon Cho, Kiwon Kwon (KETI, ROK), Dong Ku Kim (Yonsei Univ., ROK)
13-10	Design of Microservice Architecture-Based Operating System for Efficient Aids to Navigation System Management
	Sungyoon Cho, Junsu Kim, Kiwon Kwon (KETI, ROK)
13-11	VLM-Based Real-Time Question-Answering Video Analysis and Situational Awareness Alarm System
	Jong-Hong Park, Sung-Chan Choi (KETI, ROK)

# Conference Program

| 10:30-12:00, Tue, Dec. 16, 2025 |

## Session 14: AI for SE (Room 2)

Chair: Dr. R. Young Chul Kim  
(Hongik Univ., ROK)

10:30-12:00, Tue, Dec. 16, 2025

14-1	Development of unique career exploration educational content using metaverse-based VR
	Hyung-goo Jo, Ye-eun Park, Seul-ah Choi, Myeong-hee Heo, Ye-eun Ma, Dae-won Kim, Janghwan Kim, Chaeyun Seo, R. Young Chul Kim (Hongik Univ., ROK)
14-2	Simultaneous Code and Test Case Generations with Natural Language-based Requirement Specifications
	Yejin Jin, Janghwan Kim, Chaeyun Seo, R. Young Chul Kim (Hongik Univ., ROK)
14-3	Enhancing Reasoning Performance of LLMs based on Metacognition with Naïve Evaluation Results
	Jinmo Yang, Jaeho Kim, Hyeon-uk Jeong, Kidu Kim, R. Young Chul Kim (Hongik Univ., ROK)
14-4	Improving KLUE Classification Performance based on Multi-Trial Evaluation
	Jaeho Kim, Jinmo Yang, Jihoon Kong, Chaeyun Seo, R. Young Chul Kim (Hongik Univ., ROK)
14-5	Probing the Previous State Dependency in the Decision Transformer for Reducing the Number of RL Validation
	Taehyun Han, Janghwan Kim (Hongik Univ., ROK), Sangho Lee (Rastech, ROK), Chanyul Yang (DAON INC, ROK), R. Young Chul Kim (Hongik Univ., ROK)

# Conference Program

| 10:30-12:00, Tue, Dec. 16, 2025 |

## Session 15: AI-Enhanced Learning and Interdisciplinary Applications (Room 3)

10:30-12:00, Tue, Dec. 16, 2025

Chair: Dr. Jongwon Lee  
(Seoul Cyber Univ., ROK)

15-1	A Phenomenological study on the potential for AI application in the field of psychological counseling education
	Yowan Kim (Seoul Cyber Univ., ROK)
15-2	Exploring Learner Engagement in the Metaverse Sejong Institute: Implications for Cyber Education and Teacher Training
	Eunho Kim (Seoul Cyber Univ., ROK)
15-3	Unbundling Education with AI: From Standardization to Symbiosis
	Howard Kim, Jung Han Choi, Jongwon Lee (Seoul Cyber Univ., ROK)
15-4	Study on Logic Locking Techniques Against SAT Attacks
	Jongwon Lee (Seoul Cyber Univ., ROK), Hyung Gyoon Kim (ADD, ROK), Howard Kim (Seoul Cyber Univ., ROK)
15-5	Internet-Based Disclosure of Industrial Accidents: A Comparison of the USA, UK, France, Japan, and South Korea, and Policy Implications
	Taesun Kang (Seoul Cyber Univ., ROK)
15-6	The Effects of Learners' Metacognitive and AI Utilization Experiences on Learning Outcomes in Cyber Learning Environments
	Yoon Jung, Kim (Seoul Cyber Univ., ROK)



# Conference Program

| 10:30-12:00, Tue, Dec. 16, 2025 |

## Session 16: Bigdata Platform/Analysis/Application & Technology Management/E-commerce/ Information Systems/Digital Transformation/BPM (Room 4)

Chair: Dr. Jaeyoung Park

10:30-12:00, Tue, Dec. 16, 2025

(Hongik Univ., ROK)

16-1	Supply Chain Network Structure and Firm Value: A Graph Neural Network Approach
	HUI LIU (Ajou Univ., ROK), MinSu Jung, SangGun Lee (Sogang Univ., ROK)
16-2	Hormone Replacement Therapy and Health Outcomes in Menopausal Women: A Nationwide Cohort Study of Korean Medicine and Integrative Care
	Man Young Park (Korea Institute of Oriental Medicine, ROK)
16-3	Analyzing Characteristics of Swimming Pool Accidents in Korea using System Dynamics
	Minh-Hoan Pham, Hwayoung Kim, Ji-Hyeon Kim, Jun-Ho Kim, Gyeong-Hyeon Kim (Mokpo National Maritime Univ., ROK), Sung-Sam Hong (Smart Safety Lab Co., ROK)
16-4	A Framework for Performance Analysis of Broadcast Traffic in FSO Mesh Network Architectures
	Vladimir Shakhov (Institute for Information Transmission Problems RAS, Russia), Nikolai Shakhov (Novosibirsk State Technical Univ., Russia), Ha Manh Tran (HCMC Vietnam National Univ., Vietnam)
16-5	Reliability Criteria for Networks of Unreliable IoT Devices
	Vladimir Shakhov (Institute for Information Transmission Problems RAS, Russia)

# Conference Program

| 14:10-15:40, Tue, Dec. 16, 2025 |

## Session 17: Interactive Presentation III (Room 1)

14:10-15:40, Tue, Dec. 16, 2025

Chair: Dr. Minho Jo  
(Korea Univ., ROK)

17-1	CNN-Based Disease Classification using Bio-Signal
	Jinho Park, Chanhee Jeong (KETI, ROK), Myunghyon Kim (Seoil Univ., ROK), Yeonsik Choi, Youngchang Jo, Hyuck-ki Hong (KETI, ROK)
17-2	Feed-Adjusted Growth Modeling and Time-Series Prediction of Market Weight in Broilers Using Farm-Scale Data
	Sangmin Yoo, Juwhan Song (Jeonju Univ., ROK)
17-3	Spatio-temporal Feature Learning for Dead Broiler Candidate Detection: A Deep Learning Pipeline Approach
	Subin Jeong, Eunji Park, Juwhan Song (Jeonju Univ., ROK)
17-4	A Study on the Failure Prediction Technology based on the Degradation Characteristics of Single Board Computer
	Youngchul Kim, Youngmin Park (Hanwha Systems, ROK), Gwanghyeon Mun (Myongji Univ., ROK)
17-5	Performance Evaluation of Speculative Decoding on Edge Devices
	Sihyeong Park, Byung-Soo Kim, Seokhun Jeon (KETI, ROK)
17-6	Forecasting Annual Rice Production Using a State-Space Model with Ridge Regression
	Beomchang Kim, Kyungmin Lim, Minho Jo (Korea Univ., ROK)

Continue next page (session 17)

# Conference Program

| 14:10-15:40, Tue, Dec. 16, 2025 |

## Session 17: Interactive Presentation III (Room 1)

14:10-15:40, Tue, Dec. 16, 2025

Chair: Dr. Minho Jo  
(Korea Univ., ROK)

17-7	Performance Analysis of MedSAM According to Object Size in Medical Image Segmentation
	Si-Yeon Park, Keun-Chang Kwak (Chosun Univ., ROK)
17-8	Depression Prediction Based on Multi-Scale Time–Frequency Speech Embeddings via Deep Metric Learning
	A-Hyeon Jo, Keun-Chang Kwak (Chosun Univ., ROK)
17-9	Fuzzy Energy–Frequency Rule-Based Artifact Reduction for EEG Spectrogram Processing
	Tae-Wan Kim, Keun-Chang Kwak (Chosun Univ., ROK)
17-10	Bayesian Deep Learning Approach for Traffic Accident Severity Prediction with Uncertainty Estimation
	Sunghwan Kim (Korea Univ., ROK), I Gede Pasek Suta Wijaya (Univ. of Mataram, Indonesia), Jinsuk Baek (Winston-Salem State Univ., USA), Minho Jo (Korea Univ., ROK)
17-11	Do Data Augmentations Always Help? A Study on Multi-Level RGB–LiDAR Fusion Networks
	Md Imtiaz Hossain, S M Jannatul Nayeem, Sharmen Akhter, Eui-Nam Huh (Kyung Hee Univ., ROK)

# Conference Program

| 14:10-15:40, Tue, Dec. 16, 2025 |

## Session 18: Scientific Public Security/Crime Prevention/ Intelligent CCTV Application (Room 2)

Chair: Dr. Dinh-Lam Pham

14:10-15:40, Tue, Dec. 16, 2025

(Dong Nai Technology Univ., Vietnam)

18-1	YOLO Based Road Environment Factor Detection Model
	Tsagaantsooj Batzaya, Park Junho, Eunbi Cho, Jeong-Hyeon Chang, Dinh-Lam Pham, Kwanghoon Plo Kim (Kyonggi Univ., ROK)
18-2	Closing the Loop: Human-in-the-Loop Learning for Trustworthy Intelligent CCTV
	Babak Rahimi Ardabili, Shanle Yao, Shannon Reid, Hamed Tabkhi (Univ. of North Carolina at Charlotte, USA)
18-3	A Novel Method for Detecting Attempts to Drive Under the Influence in Parking Lot Areas
	Hyunhee Kim, Jeong-Hyeon Chang, Kwanghoon Kim (Kyonggi Univ., ROK)
18-4	The Effect of Collective Efficacy on Fear of Crime in the context of South Korea: Group Differences in the Mediating Role of Perceived Disorder
	Naeun Kim, Chaeun Hwang, Euigab Hwang (Kyonggi Univ., ROK)
18-5	Multi-Objective Weather-Aware Maritime Routing
	Maariyah Khanche, Abdul Wahid, Mian Hamayun (Univ. of Birmingham Dubai, UAE)
18-6	Towards an Integrated Edge-Cloud IoT System for Real-Time Fall Detection and Activity Monitoring in Elderly Care
	Prashant, Mian M. Hamayun, Abdul Wahid (Univ. of Birmingham Dubai, UAE)

# Conference Program

| 14:10-15:40, Tue, Dec. 16, 2025 |

## Session 19: Cloud Computing/Digital Twin/Smart Factory (Room 3)

Chair: Dr. Moonseong Kim

14:10-15:40, Tue, Dec. 16, 2025

(Seoul Theological Univ., ROK)

19-1	Quantization Corrected Reflector Detection on Low-Vertical-Resolution 3D LiDAR for Docking Stations
	Byeong-Jun Kim, Jin-Ho Kim, Gi-Hyeon Kwon, Seung-Won Kwon, Tae-Yong Kuc (Sungkyunkwan Univ., ROK)
19-2	LLM-Generated Policies for Adaptive GPU Scheduling in Distributed Deep Learning
	Sumin Son, Teh-Jen Sun, Eui-Nam Huh (Kyung Hee Univ., ROK)
19-3	Burst-Aware Time-Series Forecasting with LLM for Mitigating Cold Start in FaaS
	Haeun Woo, Hyoeun Hwang, Eui-Nam Huh (Kyung Hee Univ., ROK)
19-4	Design of a Cloud Resource Monitoring System for Collaborative Shipbuilding Data Platform
	Younghak Chun, Chang Jong Kim (RIMS, ROK), Chang-Soo Kim (Pukyong National Univ., ROK)
19-5	Modeling and Performance Analysis of Atomicity Violation Detection Time in Sharded MySQL and MongoDB
	Seonjeong Kim, Taekjun Jeong, Sooyeon Park, Moonseong Kim (Seoul Theological Univ., ROK)
19-6	Energy and SLO-Aware Inference Scheduling for Heterogeneous AI Accelerators in Edge Cloud
	Hacksung Boo, Jiseung Bae (Kyung Hee Univ., ROK), Junyoung Park (KISTI, ROK), Eui-Nam Huh (Kyung Hee Univ., ROK)
19-7	Advancing Network Access Control Toward Zero Trust
	Junghyun Yi, Suho Son, Moonseong Kim (Seoul Theological Univ., ROK), Woochan Lee (Incheon National Univ., ROK)

## Venue Information

### | Okinawa Convention Center Conference Building B 1F |

Okinawa, Japan

<https://www.oki-conven.jp>



### | Conference Contact |

4-3-1 Mashiki, Ginowan City Okinawa 901-2224, Japan

**Tel :** +81(0)98-898-3000

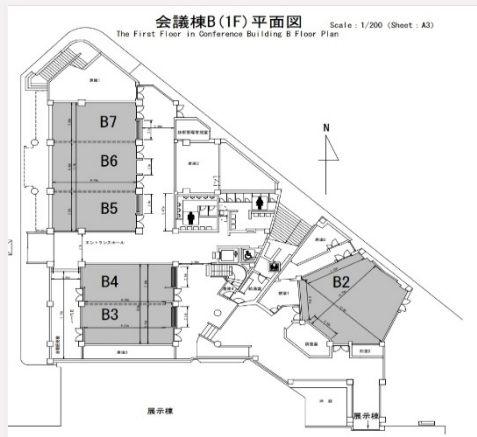
**E-mail :** [info@oki-conven.jp](mailto:info@oki-conven.jp)

# Venue Information

## | Okinawa Convention Center Conference Building B 1F |

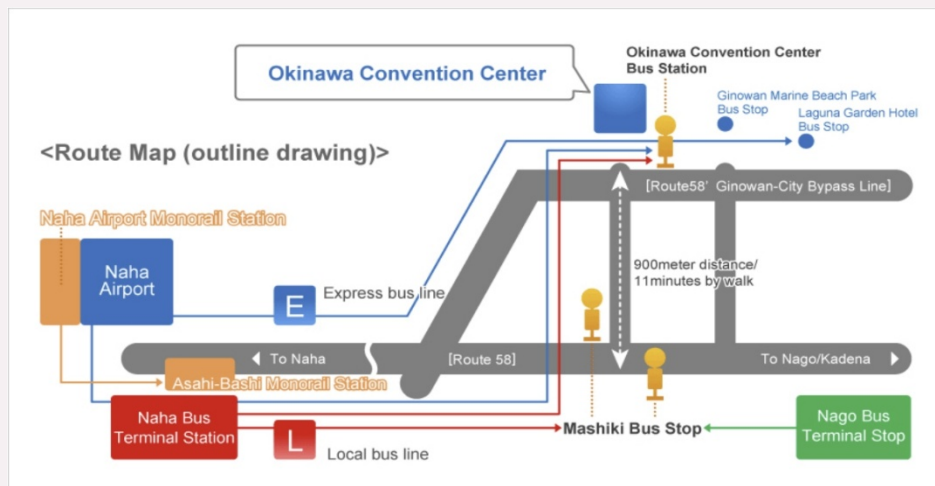
Okinawa, Japan

<https://www.oki-conven.jp>



### - Location / Direction

#### 1) Bus / Monorail



# Venue Information

## | Okinawa Convention Center Conference Building B 1F |

Okinawa, Japan

<https://www.oki-conven.jp>

### - Location / Direction

#### Access form Naha Bus Terminal Station.

■ To the Okinawa Convention Center Bus Stop.  
- Route Number: [No.26](#) · [No.43](#) · [No.32](#) · [No.55](#) (takes from 40 minute to 60 minutes) Fare: ¥530  
Route Number: [No.112](#) (takes 50 minute) · [No.99](#) (takes 60 minute)

■ To the Mashiki Bus Stop  
- Route Number: [No.20](#) · [No.77](#) · [No.120](#) (takes from 45 minute via Kokusai Street) Fare: ¥530  
Route Number: [No.23](#) · [No.29](#) · [No.63](#) (takes from 35 minute via Kumoiji Street) Fare: ¥530  
Route Number: [No.31](#) (takes from 50 minute via Kumoiji Street) Fare: ¥530

#### Access from Naha International Air Port

■ 50-70 minutes from Naha International Air Port (Bus Station No 3) to Okinawa Convention Center Bus Stop. Fare: ¥570  
Route Number: [No.26](#) (50 minutes)  
Route Number: [No.99](#) (70 minutes)

E Airport Limousine Bus is easy accessible

\*Additional note: This limousine liner is not to stop at the convention center, get off at Laguna Garden Hotel bus stop and walk to the center for 10 minutes. (takes from 55 minute) Fare: ¥600

■ Access by the monorail (Asahibashi station and Furushima Station are easy accessible) – [See the route map and operation time table.](#)  
· About 11 minutes from the airport to Asahibashi station. Fare: ¥260. From Asahibashi station to the bus terminal station takes 3 minutes by walk.  
· About 21 minutes from the airport to Furushima station. Fare: ¥320. From Furushima station to the convention center takes 15 minutes by taxi.

#### Access form Nago Bus Terminal Station

■ About 120 minutes from Nago Bus Terminal Station to Mashiki bus stop. Fare: ¥1,650 Route: [No.20](#) and [No.120](#)

\* Additional note: 1. The required time is defer according to the traffic situation. 2. The operation of bus liner on Saturday, Sunday and public holidays are run in less number than on week days.

## 2) Arriving By Taxi

- Takes approximately 40 minutes and costs average ¥3,500 form the Naha Airport.
  - Takes approximately 30 minutes and costs average ¥3,000 from the center of Naha city.
  - Takes approximately 90 minutes and costs average ¥9,800 from the center of Nago city.
- \* Additional note: The taxi rate and the travel time may differ according to the traffic situation.



## Banquet Information

| Okinawa Prince Hotel Ocean View Ginowan, Japan |

<https://www.princehotels.com/ginowan/>



### -Date Info.

December 16(Tue), 2025 Part 1 17:30-19:00 / Part 2 19:30-21:00

Place : Okinawa Prince Hotel Ocean View Ginowan All Day Dining Jinon 1F

### - Address

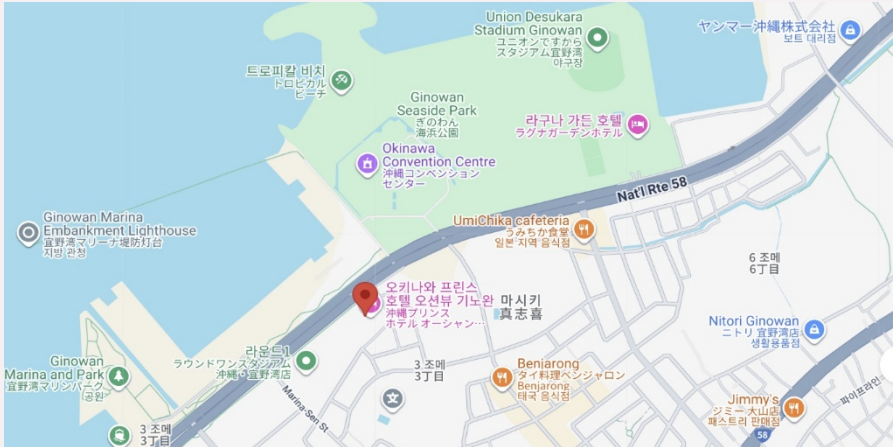
3-28-1, Mashiki, Ginowan-shi, Okinawa, 901-2224, Japan

TEL +81 98 898-1110

# Banquet Information

## | Okinawa Prince Hotel Ocean View Ginowan, Japan |

<https://www.princehotels.com/ginowan/>



### By Airport Limousine Bus

Naha Airport  
Domestic Flights  
Bus Stop.  
Aboard Buses No12.  
[Okinawa Bus]

Area A: Chatan・Yomitan

Approx. 35min.

Okinawa  
Prince Hotel  
Ocean view  
Ginowan

### By Chatan Bus Line

Naha Airport  
Domestic Flights  
Bus Stop.  
Aboard Buses No1.  
[Karry Kanko Bus]

To Chatan

Approx. 39min.

Convention  
Center mae  
Bus Stop

on foot  
4min.

Okinawa  
Prince Hotel  
Ocean view  
Ginowan

### By Route Bus

Naha Airport  
Domestic Flights  
Bus Stop.  
[Aboard Buses No3.]

No.26・No.99

Approx. 50-70min.

Convention  
Center mae  
Bus Stop

on foot  
4min.

Okinawa  
Prince Hotel  
Ocean view  
Ginowan

\*The time required may vary depending on the time of day and traffic conditions.

- Bus fare (one-way): adults 700 yen, children 350 yen
- Please check the Airport Limousine Bus website for the latest information as they may change without notice.
- For inquiries regarding the Airport Limousine Bus, please contact the Airport Limousine Bus Information Center. (TEL098-869-3301)
- To use the bus, please purchase tickets in advance via the online reservation service.

## Special Program Information

| Okinawa Institute of Science and Technology (OIST) |

| Campus Tour |

[https:// www.oist.jp/](https://www.oist.jp/)



### - Conference Special program Info.

- Dec. 17(Wed), 2025 / Tour Hours - 11:00 AM - 12:00 PM
- Self-Guide Tour : Daily from 9:00 AM to 5:00 PM

Located in Onna Village, Okinawa, it is an international research-focused graduate university. It conducts innovative research by integrating diverse scientific fields, with all classes conducted in English. It brings together outstanding students and faculty from around the world. It offers a five-year integrated doctoral program, enabling learning and research in a cutting-edge research environment. It also conducts various activities in collaboration with the local community to achieve the Sustainable Development Goals (SDGs).

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# MEMO

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MEMO

A large, light gray rectangular area with rounded corners, intended for writing a memo. It occupies the majority of the page below the header.

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