

ICICIC2025 Program (Japan Time)

August 26, 2025, Tuesday

18:30 – Welcome Reception
Sea Lounge, 2F

August 27, 2025, Wednesday

09:20 – 09:40 Opening Ceremony
Main Hall, 1F
Opening Remarks
Dr. Takeshi Yamakawa (General Chair, ICICIC2025)
Chair: Dr. Yan Shi (Program Committee Chair, ICICIC2025)

09:40 – 10:40 Keynote Speech I
Main Hall, 1F
Failure Detection and Fault Tolerant Control System –Parameterization Approach–
Speaker: Prof. Kou Yamada (Gunma University, Japan)
Chair: Dr. Takeshi Yamakawa (General Chair, ICICIC2025)

11:00 – 12:00 Keynote Speech II
Main Hall, 1F
Related Works about Intelligent Ship: Development of Situation Awareness System, Verification and Valuation System and Application of Digital Twin Technology
Speaker: Prof. Qidan Zhu (Harbin Engineering University, China)
Chair: Prof. Dongsoo Kim (Soongsil University, Korea)

13:20 – 17:40 Parallel Sessions
(Onsite and Online)

18:30 – Banquet
JR Kyushu Station Hotel Kokura, 5F

August 28, 2025, Thursday

08:30 – 18:00 Parallel Sessions
(Onsite and Online)

18:30 – Farewell Party
Event Hall, 1F

August 29, 2025, Friday

08:30 – 17:00 Technical Visit

Technical Sessions (Onsite Presentation)

†: Research Presenter. Each presenter will be given 15 minutes in total, including 10-min presentation at the most and 5-min for Q&A after every presentation.

August 27, 2025, Wednesday (Japan Time)

13:20 – 15:20 Intl. Conference Room, 2F

A1: Platform Business in South Korea (1)

Chairs: Prof. Seok Chan Jeong (Dong-Eui University, Korea)

Prof. Dae-Yul Jeong (Gyeongsang National University, Korea)

A1-1

ICICIC2025-SS15-01

Efficient Classification of Alzheimer's Disease Using Regularized Feature Selection

Sang-Ha Sung, Sung-Phil Kim and Sangjin Kim[†] (Korea)

A1-2

ICICIC2025-SS15-02

Comparison of the Performance of Various Korean NLP Models in Voice Phishing Detection

Byeong Jun Gong[†], Ji-Yeon Kim, Ki-Hwan Kim, Young-Jin Kang

and Seok Chan Jeong (Korea)

A1-3

ICICIC2025-SS15-03

Exploring Research Trends in Vertical Platforms through Textual Relationship Analysis

Giseob Yu and Chang Gyu Oh[†] (Korea)

A1-4

ICICIC2025-SS15-04

Financial System Anomaly Detection Using AI-Based Log Analysis

Yoonjae Noh[†], Chang Yong Seo and Sangjin Kim (Korea)

A1-5

ICICIC2025-SS15-06

Image Generative Modeling for Hourly S&P 500 Forecasting with Hourly-Aligned Multi-Indicators

Yoonjae Noh[†] and Sangjin Kim (Korea)

A1-6

ICICIC2025-SS15-07

Low-Light Image Enhancement Using Homomorphic Filtering Based on Y-Channel

In Ho Jeong[†], Ji-Yeon Kim, Ki-Hwan Kim, Young-Jin Kang, Myungil Kim

and Seok Chan Jeong (Korea)

A1-7

ICICIC2025-SS15-08

Operating Port Congestion Prediction Models with Recurrent Concept Drift Awareness in Data

Seong Hyeon Jo[†], Ji-Yeon Kim, Ki-Hwan Kim, Young-Jin Kang, Myungil Kim

and Seok Chan Jeong (Korea)

August 27, 2025, Wednesday (Japan Time)

13:20 – 15:20 Conference Room 21-1, 2F

B1: Domain-Driven Design (DDD) Application Development (1)

Chairs: Dr. Winai Wongthai and Dr. Isara Kongmee (Naresuan University, Thailand)

B1-1

ICICIC2025-SS20-07

Human-Machine Collaborative Learning: E-Sports Platforms as Interactive Tools for English Language Teaching in Thai Upper Secondary Education

*Isara Kongmee[†], Pat Watanasin, Puriwan Waranusast, Pitchayapa Siridetkoon
Issariyaporn Thongtab and Pakorn Chan-in (Thailand)*

B1-2

ICICIC2025-SS20-08

Intelligent IoT Infrastructure for E-Sports Tourism: A Smart City Development Model for Nakhon Sawan Municipality

Isara Kongmee[†], Winai Wongthai, Tanee Kosum and Tanaphot Paesuwan (Thailand)

B1-3

ICICIC2025-SS20-10

Cloud-Based Deep Learning System for Melodic Pattern Analysis in Classical Music

Vich Boonrod[†], Winai Wongthai and Isara Kongmee (Thailand)

B1-4

ICICIC2025-SS20-12

Adaptive Learning System for Thai Music Education Using AI and Augmented Reality

Waraporn Cherdchoot[†], Decha Srikongmuang and Isara Kongmee (Thailand)

B1-5

ICICIC2025-SS20-22

Evaluation of the Impact of Digitalization: A Case Study on Request Form System of the Ministry of Social Development and Human Security

*Suwaphat Preeprem[†], Pudtan Phanthunane, Winai Wongthai
and Isara Kongmee (Thailand)*

B1-6

ICICIC2025-SS20-27

Green Space Integration in Mixed-Use Developments: GAR and Sound Calculator Applications for Bangkok's Urban Communities

Umaporn Chanthima[†] and Sirimas Hengrasmee (Thailand)

B1-7

ICICIC2025-SS20-28

Shifting Social Support Systems from Paper-Based to Digital Platforms: Development and Its Initial Evaluation

*Hansachon Fuenglikhit, Pudtan Phanthunane, Atipan Suwatmakin, Winai Wongthai[†]
Chaithawat Thonglua and Supasit Pannarunothai (Thailand)*

August 27, 2025, Wednesday (Japan Time)

13:20 – 15:20 Conference Room 21-2, 2F

C1: Computation Intelligence

Chairs: Prof. Olarik Surinta (Mahasarakham University, Thailand)

Prof. Warangkham Kimpan (King Mongkut's Institute of Technology Ladkrabang, Thailand)

C1-1

ICICIC2025-SS16-01

Deep Residual Network for User Identification Based on Stair and Lift Usage Using Smartwatch Sensor and Barometer Data

Sakorn Mekruksavanich[†], Olarik Surinta and Anuchit Jitpattanakul (Thailand)

C1-2

ICICIC2025-SS16-02

Cross-Domain Aspect-Based Sentiment Classification for Hotel Reviews
Using Domain-Aligned Product Reviews

Anirut Chotthanom, Manasawee Kaenampornpan, Jantima Polpinij[†], Theeraya Uttha Thananchai Khamket, Chumsak Sribunruang and Jatuphum Juanchaiyaphum (Thailand)

C1-3

ICICIC2025-SS16-03

Evaluating Cross-Regional Generalization of Machine Learning and Deep Learning Models for Land Cover Classification from Sentinel-2 Data

Theeraya Uttha, Jantima Polpinij[†], Anirut Chotthanom, Manasawee Kaenampornpan Thananchai Khamket, Jatuphum Juanchaiyaphum, Chumsak Sribunruang and Siriwiwat Lata (Thailand)

C1-4

ICICIC2025-SS16-04

Wildfire Classification with Deep Learning Model

Puwanai Tankue, Boonhatai Kruekaew and Warangkham Kimpan[†] (Thailand)

C1-5

ICICIC2025-SS16-05

Context-Aware Routing Optimization in DAWN-MANET Using Dynamic Topology Prediction for Disaster Scenarios

Jantima Polpinij, Khanista Namee[†], Karn Na Sritha, Pitpimon Choorod Rudsada Kaewsang-On and Areej Meny (Thailand)

C1-6

ICICIC2025-SS16-06

Comparative Study of Implicit Aspect Extraction Using Classical and Transformer-Based Embeddings: A Case Study on Hotel Reviews

Lili Ban, Jantima Polpinij, Gamgarn Somprasertsri, Benjawan Intara and Khanista Namee[†] (Thailand)

C1-7

ICICIC2025-052

Enhancing Depression Classification from Social Media Using Transformer-Based Ensemble Models and DSM-5 Criteria

Jandara Suksam[†], Damrongdet Doenribram, Wongpanya S. Nuankaew Praty Nuankaew, Umaporn Chaisoong and Chatklaw Jarenpon (Thailand)

C1-8

ICICIC2025-156

The Impact of Value Distribution Patterns on Shapley Payoff Allocation

Benjawan Intara (Thailand)

August 27, 2025, Wednesday (Japan Time)

13:20 – 15:20 Conference Room 22, 2F

D1: Control Theory and Applications (1)

Chairs: Dr. Huiyan Zhang and Prof. Wengang Ao (Chongqing Technology and Business University, China)

D1-1

ICICIC2025-SS28-01

Load Frequency Control of Multi-Area Power System under DoS Attacks: A Hold-Input Strategy
Yang Liu[†], Xintong Kuang, Baishu Xu and Shuo Zhao (China)

D1-2

ICICIC2025-SS28-03

Improved Dynamic Memory-Based Event-Triggered Control for T-S Fuzzy Systems under Hybrid Cyber-Attacks
Yu Huang[†], Huiyan Zhang and Zixian Chen (China)

D1-3

ICICIC2025-SS28-04

A Hybrid LSTM-PID Control Strategy for Enhanced Performance in Vehicle Active Suspension Systems
Wenting He[†], Huiyan Zhang and Hao Sun (China)

D1-4

ICICIC2025-SS28-05

Optimizing Unmanned Vehicle Formation Navigation with Obstacle Avoidance: A Synergy of Improved GWO and APF
Haoyi Zhang[†] and Huiyan Zhang (China)

D1-5

ICICIC2025-SS28-06

Hybrid Optimization for Multi-AGV Systems: Dynamic Task Allocation and Conflict-Free Path Planning in Smart Warehouses
Jiarui Fan[†] and Zufeng Li (China)

D1-6

ICICIC2025-SS28-07

Robust Adaptive Dynamic Programming with Experience Replay for Optimal Trajectory Tracking Control of Wheeled Mobile Robots
Jun Gou[†] and Pengda Liu (China)

D1-7

ICICIC2025-SS28-08

Sliding and Slipping Disturbance Rejection Trajectory Tracking Control for Life Support Robots
Minxin Wang[†] and Wengang Ao (China)

D1-8

ICICIC2025-SS28-09

Fixed-Time Fault-Tolerant Trajectory Tracking Control for a Wheeled Mobile Robot
Hao Yin and Wengang Ao[†] (China)

August 27, 2025, Wednesday (Japan Time)

13:20 – 15:20 Conference Room 31, 3F

E1: Advanced Methodologies in Data Analysis, Evaluation, and Educational Research

Chairs: Prof. Naruki Shirahama (Shimonoseki City University, Japan)

Prof. Satoshi Watanabe (Shizuoka Institute of Science and Technology, Japan)

E1-1

ICICIC2025-SS06-01

Understanding User *Likes* on OOTD Posts through Keyword Analysis: Evidence from Social Media in the Fashion Sector

Yi Lu[†], Yoji Kawamura and Yukio Kodono (Japan)

E1-2

ICICIC2025-SS06-02

Development of an Experimental Platform for Evaluating LLM Emotion Understanding

Naruki Shirahama[†], Naofumi Nakaya and Satoshi Watanabe (Japan)

E1-3

ICICIC2025-SS06-03

Analyzing Determinants of Consumer Buying Decisions in Live Commerce:
A PLS-SEM Approach

Lu Jiang[†] and Yukio Kodono (Japan)

E1-4

ICICIC2025-SS06-04

A Comparison of the Distribution of Subjective Evaluations between Two Groups
Based on the Visual Analog Scale Visualization Analysis Method

Satoshi Watanabe[†], Naofumi Nakaya and Naruki Shirahama (Japan)

E1-5

ICICIC2025-SS06-05

Analysis of Data Posted on Social Media Regarding Foreign Tourists

Yoshiyuki Matsumoto (Japan)

E1-6

ICICIC2025-SS06-06

The Relationship between R&D Team Structures and Exploration in the Electric Vehicle
Industry: A Patent Data Perspective

Iori Nakaoka[†], Yousin Park and Yunju Chen (Japan)

E1-7

ICICIC2025-195

Industrial Analysis of the Osaka Area Using Production Functions

Yoshiyuki Yabuuchi (Japan)

August 27, 2025, Wednesday (Japan Time)

13:20 – 15:20 Conference Room 32, 3F

F1: Computer Technologies for Intelligent Systems (1)

Chairs: Prof. Zhong Zhang (Aichi Sangyo University, Japan)

Prof. Hirotaka Takahashi (Tokyo City University, Japan)

F1-1

ICICIC2025-SS34-01

An Attempt at Glitch Classification in Gravitational Wave Detectors across Different Observation Periods Using Transfer Learning

Yusuke Sakai[†], Naoki Koyama, Marco Meyer-Conde, Seiya Sasaoka, Diego Dominguez Kentaro Somiya, Yuto Omae, Yoshikazu Terada and Hirotaka Takahashi (Japan)

F1-2

ICICIC2025-SS34-02

Delineation of the Underground Structure Using 2D Gravity Data Modelling in Geothermal Potential Area as an Analysis of Sustainable Energy Exploration Strategies

Trisna Ikhsan Ningati, Muhamad Ragil Setiawan, Rahmat Nawi Siregar, Alamta Singarimbun Emi Prasetyawati Umar, Rofiqul Umam and Hirotaka Takahashi[†] (Japan)

F1-3

ICICIC2025-SS34-03

A Webcam-Based Eye Movement Training System for Low Vision Rehabilitation: Development and Evaluation of Appearance-Based Gaze Estimation

Akihiro Yamashita[†], Takashi Togasaki, Hiroki Karashima, Daichi Kuroki and Katsushi Matsubayashi (Japan)

F1-4

ICICIC2025-SS34-09

Development of a High-Precision and Simple Quantitative Evaluation System for Vehicle Body Damage Using OpenCV

Zhong Zhang[†], Koki Tokiyasu and Toshihiro Okuyama (Japan)

F1-5

ICICIC2025-SS34-10

A Visualization Method for Interpreting Deep Learning Using Directional Components from Wavelet Transform

Zhong Zhang[†], Tatsuyai Sugino, Takuma Akiduki and Toshihiro Okuyama (Japan)

F1-6

ICICIC2025-015

A Proposal to Estimate Computer Network Congestion in Disaster Areas by Utilizing Wi-Fi Sniffers

Jin Qi (Japan)

F1-7

ICICIC2025-188

A New Cyclo-Stationarity Based Model Structure Selection Approach for Dynamic Systems

Lianming Sun and Jianing Liu[†] (Japan)

F1-8

ICICIC2025-SS25-21

NPU Enhanced Hybrid AI Architecture for High-Performance and Cost-Effective AI Services

Youngpyo Hong and Dongsoo Kim[†] (Korea)

August 27, 2025, Wednesday (Japan Time)

13:20 – 15:20 Conference Room 33, 3F

G1: AI, Image Technologies and Data Science for Multidisciplinary Applications

Chair: Prof. Thi Thi Zin (University of Miyazaki, Japan)

G1-1

ICICIC2025-003

Full Optimization for the Zero-Inflated Binary Classification Model with Regulation Rules
Using the DE Algorithm

Hua Xin, Ya-Yen Fan and Tzong-Ru Tsai[†] (Taiwan, China)

G1-2

ICICIC2025-SS35-01

A Method for Detecting Werewolves in the Werewolf Game Using Sentence Embeddings
with BERT

Hiroki Ono[†] and Atsushi Ueno (Japan)

G1-3

ICICIC2025-SS35-02

Tripartite Image Decomposition-Based Histogram Equalization to Enhance Slightly Low-Contrast
and Low-Contrast Images

Hafijur Rahman[†] and Tetsuya Shimamura (Japan)

G1-4

ICICIC2025-SS35-03

Robust Cow Detection and Tracking in Livestock Environments Using YOLOv8 and DeepSORT
with Depth Camera Fusion

San Chain Tun[†], Pyke Tin, Masaru Aikawa, Ikuo Kobayashi and Thi Thi Zin (Japan)

G1-5

ICICIC2025-SS35-04

Real-Time Cattle Identification Based on Ear Tag Recognition with ID Reuse and Template
Matching

Shimizu Yuichiro[†], Thi Thi Zin, Masaru Aikawa and Ikuo Kobayashi (Japan)

G1-6

ICICIC2025-SS35-05

Depth Camera-Based Analysis of Elderly Behavior for Risk Detection Using Skeletal Data

Remon Nakashima[†], Thi Thi Zin, Tamura Hiroki and Shinji Watanabe (Japan)

G1-7

ICICIC2025-137

Personalizing Music Generation Prompts via User Feedback and Embedding Visualization

Yuki Waragai[†], Tetsuya Shimamura and Yosuke Sugiura (Japan)

G1-8

ICICIC2025-159

Improving Speech Enhancement Performance in Untrained Environments
by Self-Supervised Learning

Kyosuke Hanzawa[†], Yosuke Sugiura and Tetsuya Shimamura (Japan)

August 27, 2025, Wednesday (Japan Time)

15:40 – 17:40 Intl. Conference Room, 2F

A2: Platform Business in South Korea (2)

Chairs: Prof. Seok Chan Jeong (Dong-Eui University, Korea)

Prof. Dae-Yul Jeong (Gyeongsang National University, Korea)

A2-1

ICICIC2025-SS15-05

Impact of Healthcare AI Chatbot Service on Continuous Usage Intention among the Korean Young Generation: Moderating Effects of Experience and Voluntariness

Rui Zhang and Taesoo Moon[†] (Korea)

A2-2

ICICIC2025-SS15-09

Impact of Perceived Value and Feedback of Facility AI Platform Service on Organizational Performance Based on SERVQUAL Model

Byungkoo Lee[†] and Taesoo Moon (Korea)

A2-3

ICICIC2025-SS15-10

The Antecedents of Continuous Usage Intention of Short-Form Videos in Live Streaming Application: Focusing on Travel-Themed Content Video Clips

Geukjoo Kang, Yuliang Yang and Wonjong Kim[†] (Korea)

A2-4

ICICIC2025-SS15-11

The Impact of Food Delivery Application User Experience on Brand Loyalty: The Moderating Effect of Personalization Perception

Ji-Hee Jung, Jae-Ik Shin[†] and Jong-Hyun Kim (Korea)

A2-5

ICICIC2025-SS15-12

The Impact of Quality Factors of EPUB3.0-Based Authoring Tool on Continuous Intention to Use

Dae-Yul Jeong[†] and Seok-Hwan Kim (Korea)

A2-6

ICICIC2025-SS23-10

A Recursive Optimization/Simulation Approach to the Network Design in Delivery Service Considering Product Return

Muzaffar Makhmudov, Ratna Sari, Young Tae Park and Chang Seong Ko[†] (Korea)

August 27, 2025, Wednesday (Japan Time)

15:40 – 17:40 Conference Room 21-1, 2F

B2: Domain-Driven Design (DDD) Application Development (2)

Chairs: Dr. Winai Wongthai and Dr. Vitzit Janma (Naresuan University, Thailand)

B2-1

ICICIC2025-SS20-01

Virtual Reality Exergames for Wheelchair Users: Enhancing Accessibility and Engagement through Thematic Analysis of User Experiences

Linda Intralak[†] and Vitzit Janma (Thailand)

B2-2

ICICIC2025-SS20-11

Enhancing Students' Spatial Reasoning and Engagement with 3D Game-Based Learning

*Gosin Nilratana[†], Somkid Amornsamankul, Wasakorn Laesanklang
and Suntaree Unhapipat (Thailand)*

B2-3

ICICIC2025-SS20-13

AI-Enhanced Interactive Art from PM2.5 Detection: An IoT-Based Environmental Communication System in Laplae, Thailand

Rachata Yooyim[†] and Isara Kongmee (Thailand)

B2-4

ICICIC2025-SS20-14

TikTok-Based Virtual Tourism Academy: A Modern Application for Local Community Engagement in Thailand

Wasin Panyavuttrakul[†], Isara Kongmee and Warach Madhyamapurush (Thailand)

B2-5

ICICIC2025-SS20-15

AR-Enhanced Motion Comics: A Digital Storytelling Framework for Cultural Heritage Preservation

*Vitzit Janma[†], Orawan Sirisawat Apichayakul, Roongrot Ratanapichetkul
and Nipatsara Bureepia (Thailand)*

B2-6

ICICIC2025-SS20-16

Cloud-Based 3D Animation Framework for Cultural Heritage Preservation: A Case Study of Phra Phuttha Chinnarat, Phra Phuttha Chinnasi, and Phra Si Satsada

*Nipatsara Bureepia[†], Vitzit Janma, Roongrot Ratanapichetkul
and Orawan Sirisawat Apichayakul (Thailand)*

B2-7

ICICIC2025-SS20-19

AI-Enhanced Interactive Storytelling in Public Spaces: A Framework for Culturally Grounded Infographics

*Roongrot Ratanapichetkul[†], Nipatsara Bureepia, Vitzit Janma
and Orawan Sirisawat Apichayakul (Thailand)*

August 27, 2025, Wednesday (Japan Time)

15:40 – 17:40 Conference Room 21-2, 2F

C2: Intelligent Control and Identification

Chair: Dr. Amphawan Julsereewong (King Mongkut's Institute of Technology Ladkrabang, Thailand)

C2-1

ICICIC2025-021

VGG16-Based Students' Emotion Recognition Based on Their Facial Expressions in Different Learning Times in the Classroom

Andi Hutami Endang[†], Amil Ahmad Ilham and Andani Achmad (Indonesia)

C2-2

ICICIC2025-043

Enhanced Transformer Text Encoder for Indonesian Visual Semantics

Suci Ramadhani Arifin[†], Amil Ahmad Ilham and Intan Sari Areni (Indonesia)

C2-3

ICICIC2025-068

Applying MELSOFT Gemini Software for Digital Twin Creation in Automation System Project Phases

Teerawat Thepmanee, Watcharapon Sopha, Farzin Asadi and Sawai Pongswatd[†] (Thailand)

C2-4

ICICIC2025-077

Optimizing Digital Evidence Analysis Using Comprehensive Machine Learning in Cybercrime Forensics

Qammaddin[†], Amil Ahmad Ilham and Andani Achmad (Indonesia)

C2-5

ICICIC2025-101

Leveraging Multimodal Data for Classification of Facial Skin Disorder Using Convolutional Neural Network

Amil Ahmad Ilham[†], Rismayani and Andani Achmad (Indonesia)

C2-6

ICICIC2025-165

A Variation on the Firefighter Problem with Edge Subdivision

Chutchawon Weeranukunjit[†] and Chanun Lewchalermvongs (Thailand)

C2-7

ICICIC2025-196

Open-Source Intrusion Detection and Notification Framework for Operational Technology: A Comparative Study on S7-Series PLCs

Krit Smerpitak, Chayangkun Saleethong, Tanawat Suphapod, Siripong Wongkharn Amphawan Julsereewong[†] and Jirasak Sittigon (Thailand)

August 27, 2025, Wednesday (Japan Time)

15:40 – 17:40 Conference Room 22, 2F

D2: Control Theory and Applications (2)

Chairs: Dr. Huiyan Zhang and Prof. Wengang Ao (Chongqing Technology and Business University, China)

D2-1

ICICIC2025-SS28-02

Balancing Patent Protection and Knowledge Spillover: A Novel Multi-Criteria Decision-Making Method Based on 2-Tuple Linguistic Model

Jiafu Su, Mingyan Wang[†] and Hongyu Liu (China)

D2-2

ICICIC2025-SS28-10

Data-Driven Feedback ILC Design for Batch Processes with Extended State Observer

Qinsheng Li and Jiafeng Yu[†] (China)

D2-3

ICICIC2025-SS28-11

Model Predictive Control of DC Microgrids with Event-Triggered Scheme

Qing Lu[†] and Huiyan Zhang (China)

D2-4

ICICIC2025-SS28-13

Research on Dual-Channel Supply Chain Decisions under Carbon Cap-and-Trade Policy with Consumer Low-Carbon Preferences

Xin Yu[†], Yihui Zhu and Sid Suntrayuth (China)

D2-5

ICICIC2025-SS28-14

Self-Triggered Robust Tracking Control for Wheeled Mobile Robots Using Reinforcement Learning

Pengda Liu[†], Huiyan Zhang, Wengang Ao and Huafeng Qin (China)

D2-6

ICICIC2025-SS28-15

Exponential Synchronization of Complex Networks via Feedback Control and Periodically Intermittent Noise

Xiuli He[†] and Huiyan Zhang (China)

D2-7

ICICIC2025-037

Resilient Distributed Fixed-Time Event-Triggered Consensus Control for Multiple USVs against DoS Attacks

Ge Song[†] and Xueting Cao (China)

D2-8

ICICIC2025-178

Design of Inchworm-Inspired Liquid Crystal Elastomer Robots Based on Fuzzy PID Control

Yazhou Zhu, Gongxin Li[†] and Xiaoli Luan (China)

August 27, 2025, Wednesday (Japan Time)

15:40 – 17:40 Conference Room 31, 3F

E2: Advancements in Intelligent Computing and Control Systems

Chairs: Prof. Hiroshi Shiratsuchi and Prof. Takanori Matsuzaki (Kindai University, Japan)

E2-1

ICICIC2025-SS10-01

Development of Power-Assisted Cart with Stair Climbing Function

Kosuke Miura and Go Hirano[†] (Japan)

E2-2

ICICIC2025-SS10-02

Design and Implementation of Support System for Beginner's Programming Education

–Cause-Effect Map and Its Application to Specification of Program–

Kozo Horiuchi[†], Takanori Matsuzaki, Hiroshi Shiratsuchi and Kazuoki Osada (Japan)

E2-3

ICICIC2025-SS10-03

Studies on Multi-Layered Time Series Analysis with RAG for Student Engagement

Hiroshi Shiratsuchi[†], Miyu Fujita, Kozo Horiuchi, Go Hirano and Takanori Matsuzaki (Japan)

E2-4

ICICIC2025-SS10-04

Evaluating Pitcher Batting Positions Using Monte Carlo Simulations in Japanese

Professional Baseball

Nobuo Iwasaki[†], Yukinori Shimura and Kazuya Okamoto (Japan)

E2-5

ICICIC2025-SS10-05

Estimating Motor and Mechanical Equipment Failures Using Vibration Sensors

Kazuya Okamoto[†], Shuma Sakaguchi and Nobuo Iwasaki (Japan)

E2-6

ICICIC2025-SS10-06

Offline Simulator for Evaluating Billet Charging Intervals in a Reheating Furnace

Keiichi Takahashi[†] and Yasunori Tajima (Japan)

E2-7

ICICIC2025-SS10-07

Evaluation of Data Size and Performance in Machine Tool State Classification Using Wi-Fi

Channel State Information

Takanori Matsuzaki[†], Arata Nakamura, Shunya Ogawa, Takamichi Kudo, Hijiri Yano

Kozo Horiuchi, Go Hirano and Hiroshi Shiratsuchi (Japan)

August 27, 2025, Wednesday (Japan Time)

15:40 – 17:40 Conference Room 32, 3F

F2: Computer Technologies for Intelligent Systems (2)

Chairs: Prof. Zhong Zhang (Aichi Sangyo University, Japan)

Prof. Hirotaka Takahashi (Tokyo City University, Japan)

F2-1

ICICIC2025-SS34-04

Ensemble Neural Network-Based Surrogate Optimization with Adjustable Logarithmic Search Weight in an Upper Confidence Bound

Kyoya Sasaki[†], Yuto Omae and Jun Toyotani (Japan)

F2-2

ICICIC2025-SS34-05

Towards Performance-Aware Feature Selection in Deep Learning Framework for Dynamic Sample-Size Adaptation

Masaya Mori[†], Yuto Omae and Jun Toyotani (Japan)

F2-3

ICICIC2025-SS34-06

Extended p -Median Problem with Embedded Linear SVR

Yohei Kakimoto (Japan)

F2-4

ICICIC2025-SS34-07

Closed-Form Jacobians for PCA- and SVM-Grad-CAM

Yuto Omae (Japan)

F2-5

ICICIC2025-SS34-08

Corrosion Classification of Tunnel Lighting Metal Components Using Feature Fusion of Regression- and Classification-Based CNNs

Seito Nameki[†], Yuto Omae, Masato Ito, Daiki Takahashi and Jun Toyotani (Japan)

F2-6

ICICIC2025-099

Application of YOLOv8 for Detecting Sediment Disaster Prone Areas from Map Images

Osuke Yamashita, Keigo Miwa, Noritaka Shigei[†], Satoshi Sugimoto, Yoichi Ishizuka and Hiromi Miyajima (Japan)

F2-7

ICICIC2025-106

Null-Noise Spectrum of a 5G Future Digital Transmitter System

Dewiani Djamaluddin[†], Sirmayanti Sirmayanti and Merna Baharuddin (Indonesia)

F2-8

ICICIC2025-141

Enhancing LSTM Prediction Accuracy through Internal Block Optimization

Makoto Tanaka (Japan)

August 27, 2025, Wednesday (Japan Time)

15:40 – 17:40 Conference Room 33, 3F

G2: Electronic Circuit and Systems

Chairs: Prof. Kuniaki Fujimoto (Tokai University, Japan)

Ms. Miku Fujimoto (Kyushu Gakuin Lutheran High School, Japan)

G2-1

ICICIC2025-SS19-01

Neuron CMOS with Configurable Positive and Negative Synaptic Weights for All Inputs

Tsubasa Hamada[†], Mitsutoshi Yahara, Kuniaki Fujimoto and Daishi Nishiguchi (Japan)

G2-2

ICICIC2025-SS19-02

Stepwise Multiple Comparison Procedure with a Control for Comparing Sizes of Two Means in Each Pairwise Comparison Based on Ordered Sample Means

Tsunehisu Imada (Japan)

G2-3

ICICIC2025-SS19-03

A Sequential Comparison-Based Minimum Hamming Distance Search Circuit

Ayaka Kawahito[†], Tsubasa Hamada, Kuniaki Fujimoto, Daishi Nishiguchi and Yujiro Harada (Japan)

G2-4

ICICIC2025-SS19-04

A Literature Review on the Use of Generative AI in English Language Education

Miku Fujimoto (Japan)

G2-5

ICICIC2025-SS19-05

Audio Transmission and Energy Harvesting Using PWM-Modulated LED and Solar Cell Receiver

Miu Fujimoto (Japan)

G2-6

ICICIC2025-SS19-06

Chip Evaluation of a High-Speed Minimum Hamming Distance Search Associative Memory Using an Electronic Neuron

Daishi Nishiguchi[†], Yujiro Harada, Mitsutoshi Yahara, Norio Fujimoto and Kuniaki Fujimoto (Japan)

G2-7

ICICIC2025-SS19-07

A Hamming Distance Detection Circuit Using Current Mirrors

Yujiro Harada[†], Kenma Somemori, Mitsutoshi Yahara, Daishi Nishiguchi and Kuniaki Fujimoto (Japan)

G2-8

ICICIC2025-032

Analysis of a Neuron-CMOS-Based Full Adder with Floating Gate Calibration Circuit

Hirotaaka Furukawa[†], Naruaki Hokari, Tatsuya Hasegawa, Daishi Nishiguchi and Masaaki Fukuhara (Japan)

August 28, 2025, Thursday (Japan Time)

08:30 – 10:30 Intl. Conference Room, 2F

A3: Smart Technology in Industry

Chair: Prof. Jaehun Park (Changwon National University, Korea)

A3-1

ICICIC2025-SS25-09

AI-Driven Process Improvement for End-of-Life Refrigerator Recycling with Experimental Design Approaches

JunSeong Kim[†], Tai-Woo Chang and HyunSoo Kim (Korea)

A3-2

ICICIC2025-SS25-10

YOLO-Based Size Estimation with Reference Objects to Enhance Classification Accuracy of Waste Home Appliances

Ye-Eun Park[†], Seung-Jae Yoo, Yong-Jun Im, JunSeong Kim and Tai-Woo Chang (Korea)

A3-3

ICICIC2025-SS25-11

Key Factors for Expanding the Waiting Time Tolerance Range for On-Demand Riding Service Delays

Minho Song[†] and Tai-Woo Chang (Korea)

A3-4

ICICIC2025-SS25-12

Building an Automatic Waste Clothing Classification System through Deep Learning-Based Image Analysis: An Approach for Realizing the Circular Economy

Jungwoon Kang[†], Donghwa Yoon, Walimuni Arachchilage Chathuri Sugandika Muthukumari Soyoung Park, Seungbin Hong and Mincheol Kim (Korea)

A3-5

ICICIC2025-SS25-17

Analysis of the Legacy Industry Status in the Southeast Region Using Data Envelopment Analysis and Malmquist Index

Cheolho Choi, Youngjun Park, Inbang Song and Sangpil Yoon[†] (Korea)

A3-6

ICICIC2025-SS25-26

Multi-Layer Benchmarking Path Optimization Model Using MILP: A Case of Korea Domestic Port Terminals

Jaehun Park, Myeong Hwan Kim[†] and Raphael Gonda (Korea)

A3-7

ICICIC2025-SS25-27

Statistical Correction Methods for Evaluating Guided Missile Reliability and Estimating Minimum Sample Sizes

Jaehun Park[†], Hyeyeoung Koo and Raphael Gonda (Korea)

August 28, 2025, Thursday (Japan Time)

08:30 – 10:30 Conference Room 21-1, 2F

B3: Intelligent Detection and Control Systems (1)

Chairs: Dr. Winai Wongthai (Naresuan University, Thailand)

Dr. Pisit Nakjai (Uttaradit Rajabhat University, Thailand)

B3-1

ICICIC2025-SS20-03

Object Detection Approach to Egg Tray Corner Counting with YOLO12

Pisit Nakjai[†], Tadchai Yuying, Niyada Rukwong and Patcharee Maneerat (Thailand)

B3-2

ICICIC2025-SS20-04

Machine Vision Based Human Differentiation for Automatic Door Control System

Panus Nattharith[†], Winai Wongthai and Isara Kongmee (Thailand)

B3-3

ICICIC2025-SS20-06

Northern Thailand Lanna Script Localization and Classification with YOLO Technique

*Niyada Rukwong, Patcharee Maneerat, Pisit Nakjai
and Sutthiphod Phiranawong[†] (Thailand)*

B3-4

ICICIC2025-SS20-23

Design and Construction of Solar Panel Cleaning Robot

Bunyarit Wangngon[†], Tanee Kosum and Somporn Ruangsinchaiwanich (Thailand)

B3-5

ICICIC2025-SS20-24

Demagnetization Fault Detection on Permanent Magnet Synchronous Generator
for Micro Hydropower by ANFIS

Kreangsuk Kraikitrat, Bunyarit Wangngon[†] and Somporn Ruangsinchaiwanich (Thailand)

B3-6

ICICIC2025-SS20-25

Fault Diagnosis of Broken Rotor Bar in Induction Motor Using Discrete Wavelet Transform
and Artificial Neural Networks

Chatchai Kosoom[†], Bunyarit Wangngon and Somporn Ruangsinchaiwanich (Thailand)

August 28, 2025, Thursday (Japan Time)

08:30 – 10:30 Conference Room 21-2, 2F

C3: Sustainable Maritime Logistics: Innovations for Safety, Efficiency, and Clean Port

Chairs: Dr. Dohee Kim and Prof. Hyerim Bae (Pusan National University, Korea)

C3-1

ICICIC2025-SS17-01

Bidirectional Causality between Arctic Sea Ice and Maritime Traffic: A Regional Analysis
Using ASTD Data

Jaehoon Lee[†], Seungwoo Lee, Hyerim Bae and Sunghyun Sim (Korea)

C3-2

ICICIC2025-SS17-02

Identifying Severity of Maritime Accidents Based on Weighted Kernel Density Estimation

Sangmin Jo[†], Dohee Kim, Seongmoon Hong, Taekhyun Park and Hyerim Bae (Korea)

C3-3

ICICIC2025-SS17-03

LURKER: Language Models for Unveiling Maritime Risks via Knowledge-Driven Event
Forecasting and Reasoning

Seongmoon Hong[†], Taekhyun Park, Dohee Kim, Sangmin Jo and Hyerim Bae (Korea)

C3-4

ICICIC2025-SS17-04

ST-Correlation Transformer-Based Hybrid Network for Spatiotemporal Forecasting
of Arctic Marine Emissions

Younghwi Kim[†], Hyerim Bae and Sunghyun Sim (Korea)

C3-5

ICICIC2025-SS17-05

Ensemble Index Recording-Based Pruning for Enhancing Robustness of Edge AI Models
in Smart Port Environments

Doohyun Kim[†], Joongrock Kim and Sunghyun Sim (Korea)

C3-6

ICICIC2025-SS23-12

Enhancing Efficiency and Sustainability in Cold Chain Logistics

Young Tae Park[†], Chang Seong Ko, Kwangyeol Ryu and Gyu Sung Cho (Korea)

C3-7

ICICIC2025-SS23-13

Multi-Objective Modeling for Resilient and Risk-Aware Design of Perishable Logistics
Considering Uncertainty

Jianming Lei, Kwangyeol Ryu[†], Siku Kim, Gyu Sung Cho and Young Tae Park (Korea)

C3-8

ICICIC2025-SS23-14

Enhancing Container ID Recognition with YOLOv9 and OCR Integration for Smart Logistics

Le Pham Khanh Huyen, Gyu Sung Cho[†], Tran Xuan Trong and Young Tae Park (Korea)

August 28, 2025, Thursday (Japan Time)

08:30 – 10:30 Conference Room 22, 2F

D3: New Development of Analysis and Synthesis of Multi-Agent Systems (1)

Chair: Prof. Zhiguang Feng (Harbin Engineering University, China)

D3-1

ICICIC2025-SS32-01

Sensitivity Study of Atmospheric Parameters to Water Vapor and Oxygen Absorption Coefficients Based on Ground-Based Microwave Radiometer MP-3000A Microwave Radiometer
Peng Wu, Kairui Xing[†], Changzhe Wu and Hanze Wu (China)

D3-2

ICICIC2025-SS32-02

Research on Atmospheric Temperature Profile Inversion Algorithm Based on Residual Connected BP Neural Network
Peng Wu, Hanze Wu[†], Changzhe Wu and Kairui Xing (China)

D3-3

ICICIC2025-SS32-06

Reachable Set Estimation for Singular Systems
Zhiguang Feng (China)

D3-4

ICICIC2025-SS32-08

Research on UAV Multi-Sensor Fusion Positioning and Mapping Technology in GPS-Denied Scenario
Lanyong Zhang[†], Wenxuan Wang and Xiaojie Guo (China)

D3-5

ICICIC2025-SS32-10

Fault-Tolerant Formation Control of AUVs: A Leader-Adaptive Strategy for Lagging Recovery
Wen Xing, Yingxia Wan[†], Ze Liu and Zheping Yan (China)

D3-6

ICICIC2025-087

A Human-Inspired One-Shot Inverse Hierarchical Reinforcement Learning Method for Autonomous Driving
Jincao Zhou, Shuaipeng Liu[†], Weiping Fu, Rui Li and Hongbin Rui (China)

D3-7

ICICIC2025-198

Development of a Ship Ice Load Prediction Neural Network Model Based on Rans Method and H-M Model
Guihua Xia[†], Xiao Peng, Finglei Han, Yuliang Wu, Feng Li, Wangyuan Zhao, Zeyu Zhou and Qi Lin (China)

August 28, 2025, Thursday (Japan Time)

08:30 – 10:30 Conference Room 31, 3F

E3: Evolutionary Computing

Chair: Prof. Jun-ichi Kushida (Nihon Fukushi University, Japan)

E3-1

ICICIC2025-030

Enhancing Diffusion Evolution with Selection Mechanisms

Jun-ichi Kushida (Japan)

E3-2

ICICIC2025-040

On-Line Identification of Nonlinear Systems Using Gaussian Process Model and Genetic Algorithm with Variable Number of Generations

Tomohiro Hachino[†] and Daijiro Yamasaki (Japan)

E3-3

ICICIC2025-056

Estimation of Strawberry Growth Factors Using Sparse Modeling AI

Haruki Hisatsune[†] and Keiji Kamei (Japan)

E3-4

ICICIC2025-092

Evaluation of Fuzzy Connectivity Indices

*Hiroaki Uesu[†], Tetsuya Taniguchi, Keita Nishioka, Hayato Nakagawa, Shinkai Kimiaki
Shuya Kanagawa and Norihiro Someyama (Japan)*

E3-5

ICICIC2025-167

Development of an Evolutionary Algorithm with Autonomous Merge-and-Split and Applying to the Polygon Packing Problem

Yusei Hida[†] and Shudai Ishikawa (Japan)

E3-6

ICICIC2025-175

Binary Animated Oat Optimization Algorithm and Its Application for Feature Selection

Jingwen Zhang, Fangdong Geng and Ruobin Wang[†] (China)

E3-7

ICICIC2025-SS03-01

Q-Learning-Enhanced Animated Oat Optimization Algorithm for UAV-Based Urban Logistics Delivery

Junjie Li, Chairui Chen, Jiaqi Zhang, Lin Xu, Qixing Qu and Ruobin Wang[†] (China)

August 28, 2025, Thursday (Japan Time)

08:30 – 10:30 Conference Room 32, 3F

F3: Sound System and Applications

Chair: Prof. Shunsuke Ishimitsu (Hiroshima City University, Japan)

F3-1

ICICIC2025-SS24-01

Acoustic Feature Analysis for Evaluating Acting Quality in Theater

Saki Mitou[†] and Shunsuke Ishimitsu (Japan)

F3-2

ICICIC2025-SS24-02

The Influence of Beats per Minute on Subjective Time Estimation

Daiki Ito[†] and Shunsuke Ishimitsu (Japan)

F3-3

ICICIC2025-SS24-03

Optimal Sound Source Selection Based on Sensory Dimensions for Audio Listening
Space Evaluation

*Yuko Ishikawa[†], Hirona Murakami, Shunsuke Ishimitsu, Takahiro Eno
and Yuki Fujimoto (Japan)*

F3-4

ICICIC2025-SS24-04

Basic Study on the Influence of 3D Surround on the Sense of Alarm and Comfortability
of Sound Signs

Koji Sakamoto (Japan)

F3-5

ICICIC2025-SS24-05

Extraction of Physical Phonetic Features Encoding Emotional Conceptual Information

Takahiro Soshi[†] and Mariko Shirai (Japan)

F3-6

ICICIC2025-SS24-06

The Study of the Relationship between Articulation Characteristics in Japanese Consonant
Phonemes and Vertical Occlusion

*Satoshi Murata[†], Masashi Nakayama, Shuya Fujimura, Fuga Oshima, Kaori Ishii
Satoshi Horihata and Shinich Negishi (Japan)*

F3-7

ICICIC2025-SS24-07

Duration Controlled Nonnegative Matrix Factorization for Diagnosis of Heart Failure

Miyu Nashiwa, Fuga Oshima, Masashi Nakayama[†] and Yuichi Tamura (Japan)

August 28, 2025, Thursday (Japan Time)

08:30 – 10:30 Conference Room 33, 3F

G3: Operations Management in Agriculture and Energy

Chair: Prof. Junhu Ruan (Northwest A&F University, China)

G3-1

ICICIC2025-SS21-01

Data Service Selection Strategy of Power Companies under Green Certificate Market

Wei Chen[†], Yijing Zhang and Chunguang Bai (China)

G3-2

ICICIC2025-SS21-02

Cooperative Adoption Strategies Selection for Carbon Verification Technology Based on Blockchain-IoT in Emission-Dependent Supply Chains

Shuyi Fan[†], Yongkai Ma, Chang Fang and Tsan-Ming Choi (China)

G3-3

ICICIC2025-SS21-03

Personalized Pricing Strategies in a Supply Chain Channel under Imperfect Consumer Information

Zhenwei Liu[†], Yongkai Ma and Shuyi Fan (China)

G3-4

ICICIC2025-SS26-01

Integrating Smallholders into Digital Agri-Supply Chains: Synergies and Income Effects of Modern Agricultural Parks in HY County, China

Chenhuan Liu[†], Yue Wang, Zeqing Huang and Junhu Ruan (China)

G3-5

ICICIC2025-SS26-02

An Interpretable and Human Knowledge-Enhanced Hierarchical Supervised Learning Approach for Egg Hatchability Prediction in Industrial Hatcheries

Qingguo Wu, Tianteng Wang, David Jingjun Xu, Ruize Ma, Wenping Fan, Felix T. S. Chan and Junhu Ruan[†] (China)

G3-6

ICICIC2025-SS26-03

Spatio-Temporal Evolution and Trend Prediction Analysis of Inclusive Green Efficiency in Cities along the Yellow River Basin in China

Yao Sun[†], Jinkuan Yu and Junhu Ruan (China)

G3-7

ICICIC2025-177

Liner Shipping Fleet Planning with Uncertain Demand: A Data-Driven Distributionally Robust Chance-Constrained Optimization Approach

Xu Xin[†], Shuaian (Hans) Wang, Tao Zhang, Xiaoli Wang, Fang He and Kang Chen (Hong Kong, China)

August 28, 2025, Thursday (Japan Time)

10:50 – 12:35 Intl. Conference Room, 2F

A4: Intelligent Data Analytics and Management

Chair: Prof. Nam-Wook Cho (Seoul National University of Science and Technology, Korea)

A4-1

ICICIC2025-SS25-03

From Awareness to Action: The Moderating Role of Marine Tourism Experience
on Pro-Environmental Attitudes in Coastal Destinations

*Soyoung Park[†], Walimuni Arachchilage Chathuri Sugandika Muthukumari, Donghwa Yoon
Jungwoon Kang and Mincheol Kim (Korea)*

A4-2

ICICIC2025-SS25-07

Altruism over Inhibitors: Exploring the Motivational and Inhibitory Factors Influencing
Travel-Related eWOM on Social Media in Sri Lanka

*Walimuni Arachchilage Chathuri Sugandika Muthukumari[†], Donghwa Yoon, Jungwoon Kang
Soyoung Park and Mincheol Kim (Korea)*

A4-3

ICICIC2025-SS25-08

SHAP-Based Analysis of Fatal Accident Risk Factors in US National Parks

*Donghwa Yoon[†], Jungwoon Kang, Walimuni Arachchilage Chathuri Sugandika Muthukumari
Soyoung Park and Mincheol Kim (Korea)*

A4-4

ICICIC2025-SS25-15

Corporate-Startup Collaboration Research Trends Analysis Using BERTopic

Sehoon Park[†], Dongphil Chun, Chungwon Woo and Youngwook Ko (Korea)

A4-5

ICICIC2025-SS25-16

Enhancing Deep Learning Recommendation Systems through Extractive Text
Summarization-Based Review

Himchan Lee and Nam-Wook Cho[†] (Korea)

A4-6

ICICIC2025-SS25-19

A Study on the Selection of Confidence Levels in Various Reliability Test and Evaluation
Processes Including Airworthiness Certification

Siil Sung (Korea)

A4-7

ICICIC2025-SS23-11

Development of a Sustainable Supply Chain Management Strategy to Promote SMR Exports

Chang Seong Ko, HaeKyung Lee[†], Sung Hoon Lee, Taioun Kim and Friska Natalia (Korea)

August 28, 2025, Thursday (Japan Time)

10:50 – 12:35 Conference Room 21-1, 2F

B4: Intelligent Detection and Control Systems (2)

Chairs: Dr. Winai Wongthai (Naresuan University, Thailand)

Dr. Pakorn Chan-in (Rajamangala University of Technology Lanna Nan, Thailand)

B4-1

ICICIC2025-SS20-02

Predicting Obesity Levels Using Multiple Cascade Generalizations

Sarawut Meesri, Somkid Amornsamankul[†] and Pawalai Kraipeerapun (Thailand)

B4-2

ICICIC2025-SS20-05

AI-Driven Acoustic Optimization: Deep Learning Approach for Minimizing Noise Pollution in Educational Architecture

Umaporn Chanthima[†] and Sirimas Hengrasmee (Thailand)

B4-3

ICICIC2025-SS20-09

Intelligent Systems for Automated Legal Risk Assessment in Thailand's Digital Economy

Athitaya Sawasdisara[†], Pakorn Chan-in, Panus Nattharith, Weerachat Jaritngam and Piyalap Manakit (Thailand)

B4-4

ICICIC2025-SS20-18

A Hybrid Analytical Technique for Time-Fractional Modeling of Computer Virus Propagation

Patcharee Dunnimit[†], Wannika Sawangtong and Panumart Sawangtong (Thailand)

B4-5

ICICIC2025-SS20-20

Smart Mobile Audio Guide System with Real-Time Crime Risk Alerts for Independent Tourism

Winai Wongthai, Isara Kongmee, Nattapon Timthong, Adirek Roongrungsi Panus Nattharith, Pakorn Chan-in[†] and Wichep Jaiboon (Thailand)

B4-6

ICICIC2025-SS20-21

The Generalized Taylor Series for the Caputo-Katugampola Fractional Derivative and Applications

Patcharee Dunnimit, Panumart Sawangtong[†] and Wannika Sawangtong (Thailand)

B4-7

ICICIC2025-SS20-26

Using Multimodal Classification for ROSA Assessment System

Nichapa Yodmuangchai[†], Janjira Payakpate, Kawintra Sittikraipong and Phonrob Sawasdee (Thailand)

August 28, 2025, Thursday (Japan Time)

10:50 – 12:35 Conference Room 21-2, 2F

C4: Information and Knowledge Management

Chair: Prof. Huipo Wang (Hebei University of Engineering, China)

C4-1

ICICIC2025-048

Intelligence, Trustworthiness and Co-Creation: New Paradigms for Evaluating the Service Quality of Tourism Platforms and Strategies for Boosting Conversion Rates

Lin Ma[†], Peisu Song and Liang Sun (China)

C4-2

ICICIC2025-049

Research on the Relationship among Tourist Perceived Value, Satisfaction, and Behavioral Intentions in Downtown Duty-Free Shops

Liang Sun[†], Chenhao Li and Lin Ma (China)

C4-3

ICICIC2025-059

Research on Pricing Strategies for LTC Consolidation Platform in Maritime Shipping

Huipo Wang (China)

C4-4

ICICIC2025-107

Knowledge Mapping of Research on Live Streaming E-Commerce: A Bibliometric Analysis Using CiteSpace

Jing Shen[†], Jidong Li, Weifeng Lu and SoonJae Kwon (Korea)

C4-5

ICICIC2025-117

Cost Analysis on Brake Pads Production Process and Order Tracking Chatbot: A Case Study of a Brake Pad Company in Thailand

*Paveen Neelamai, Phongthep Wongsiri, Sirapath Yeamdee, Banpot Hobanluekit
Tipaluck Krityakierne and Wasakorn Laesanklang[†] (Thailand)*

C4-6

ICICIC2025-146

Prediction of Emergency Material Demand in Chemical Industry Parks Based on KPCA-FASSA-BP Neural Network Combination Model

Xuping Wang[†], Huimin Yang and Nana Zhang (China)

C4-7

ICICIC2025-149

Optimization of Emergency Resource Allocation for Hazardous Chemical Accidents in Chemical Industry Parks

Xuping Wang, Zhu Zheng[†] and Xiaoying Zhang (China)

August 28, 2025, Thursday (Japan Time)

10:50 – 12:35 Conference Room 22, 2F

D4: New Development of Analysis and Synthesis of Multi-Agent Systems (2)

Chair: Prof. Zhiguang Feng (Harbin Engineering University, China)

D4-1

ICICIC2025-SS32-03

Coordinated Control of Multiple Underwater Unmanned Vehicles under Communication Limitations

Enjiao Zhao[†], Xiaoyan Mo, Zhiqiang Zeng and Shuqiang Xia (China)

D4-2

ICICIC2025-SS32-04

Research on Autonomous Lift Control Method of Hovercraft Based on DDPG

Yuanhui Wang, Peng Wu[†], Yitian Guan, Ziqi Qin and Changzhou Lu (China)

D4-3

ICICIC2025-SS32-05

2m Temperature Spatial Downscaling with Spatial Attention and Temporal Sequence Modeling

Yuankang Ye, Wen Sun and Feng Gao[†] (China)

D4-4

ICICIC2025-SS32-07

Multi-UUVs Heterogeneous Swarm Regional Exploration Task Planning

Yuanlong Hu, Hongjian Wang[†], Hao Wu and Ziqi Shan (China)

D4-5

ICICIC2025-SS32-11

Multi-Level Domain Adaptive Pedestrian Detection Algorithm for Wide-Area High-Density Scenes

Renjie Qiao, Chengtao Cai[†], Biqin Gao, Yanze Liu, Xiaoye Yuan and Wenhai Dong (China)

D4-6

ICICIC2025-103

Real-Time Path Planning for Multiple Omnidirectional Robots in Unstructured Mines

Bing Yan[†], Peng Shi, Junkang Ni and Isira Uthpala Eashwara Naotunna (Australia)

D4-7

ICICIC2025-203

Distributed Resilient Asynchronous Event-Triggered Consensus for Nonlinear Heterogeneous Multi-Agent Systems against DoS Attacks

Li Liu, Bing Yan[†], Junkang Ni and Peng Shi (Australia)

August 28, 2025, Thursday (Japan Time)

10:50 – 12:35 Conference Room 31, 3F

E4: Advances on Artificial Intelligence and Control Engineering

Chair: Prof. Kou Yamada (Gunma University, Japan)

E4-1

ICICIC2025-005

Lightweight Phishing Detection for Thai SMS Using Hybrid Classification and URL Reputation Checks

Thattapon Surasak, Pornwipa Kornsuwan, Nattaya Jansrinak, Jirayu Samkunta[†] and Nattagit Jiteurtragool (Japan)

E4-2

ICICIC2025-022

3-Frame Ahead Prediction of Hand Poses from 3D Landmarks Using Neural Networks

Souta Kanou[†], Nghia Thi Mai, Md Abdus Samad Kamal, Iwanori Murakami and Kou Yamada (Japan)

E4-3

ICICIC2025-025

Automated Social Media Information Retrieval and Classification

Nattagit Jiteurtragool, Jirayu Samkunta[†], Kou Yamada and Thattapon Surasak (Japan)

E4-4

ICICIC2025-035

Sparsity Promoted and Randomization Approaches to System Identification and Observer Design via Hankel-Koopman Method

Patinya Ketthong[†], Jirayu Samkunta, Nghia Thi Mai, Md Abdus Samad Kamal Iwanori Murakami and Kou Yamada (Japan)

E4-5

ICICIC2025-065

A Single Luenberger Observer for Combined Fault Detection and SOC Estimation in Lithium-Ion Battery Charging

Natthorn Chuayphan[†], Patinya Ketthong and Kou Yamada (Japan)

E4-6

ICICIC2025-152

Motion Control Incorporating Environmental and Human Understanding in Isaac Sim

Guang Yang[†], Shuoyu Wang, Junyou Yang and Peng Shi (Japan)

E4-7

ICICIC2025-194

Parametric Prediction of Indoor Virus Aerosol Decay Based on Ventilation-Driven Exponential Modeling

Yunshui Li[†], Kaishan Feng, Yoshiki Yanagita, Yuko Miyamura and Masaaki Tamagawa (Japan)

August 28, 2025, Thursday (Japan Time)

10:50 – 12:35 Conference Room 32, 3F

F4: Circuits and Information Processing

Chair: Prof. Kei Eguchi (Fukuoka Institute of Technology, Japan)

F4-1

ICICIC2025-004

Rapid Control Prototyping System Based Parameter Estimation for Electric Motors

Pyung Soo Kim (Korea)

F4-2

ICICIC2025-007

A Temporal Subtraction Method for Diagnosis of Bone Metastatic Tumors

Based on DRMIME and VoxelMorph

Shogo Baba[†], Kazuya Sakoda, Takashi Terasawa, Tohru Kamiya and Takatoshi Aoki (Japan)

F4-3

ICICIC2025-011

An Experimental Study on Underwater Shock Waves Induced by Fine Wire Discharge

*Hiroyasu Takahashi, Takuro Suematsu[†], Sora Yonemura, Takaaki Ishibashi
and Kei Eguchi (Japan)*

F4-4

ICICIC2025-012

1/4 Step-Down Conversion Using Always-Current-Path Converter: A Comparative Study

Sora Yonemura[†] and Kei Eguchi (Japan)

F4-5

ICICIC2025-095

Benchmarking Face Recognition Models on Pose-Aware Child Face Embeddings

*Ritik Shukla[†], Tiya Bisla, Yui Kataoka, Keisuke Teramoto, Md. Rahatul Islam
and Keiichi Horio (Japan)*

F4-6

ICICIC2025-180

Development of Optical Wave Microphone Capable of Simultaneous Multichannel Detection

*Seiryu Ueda[†], Fumiaki Mitsugi, Takashi Samatsu, Kuniaki Fujimoto
and Yoshito Sonoda (Japan)*

August 28, 2025, Thursday (Japan Time)

10:50 – 12:35 Conference Room 33, 3F

G4: Environment and QOL (Quality of Life)

Chairs: Prof. Yoichi Hirano and Prof. Toru Hattori (Tokai University, Japan)

G4-1

ICICIC2025-SS01-01

Consideration of the Concept of “Environment-Related Quality of Life (eQOL)” in the Local Society – From the Perspective of Human Relationships in the Community

Toru Hattori^{}, Yoichi Hirano, Takuo Nakashima, Hidetaka Shirasawa, Mina Adachi and Hota Moriya (Japan)*

G4-2

ICICIC2025-SS01-02

Reference Point Dependence in Tourist Destination Evaluation: Evidence from a Behavioral Economics Study in Hokkaido

Soji Lee (Japan)

G4-3

ICICIC2025-SS01-03

The Relationship between “Community Collaboration” and “Subjective Well-Being” –Based on the Concept of Social Capital–

Hota Moriya (Japan)

G4-4

ICICIC2025-SS01-04

A Study on the Development and Use of Manga and Anime in Society

Manasisha Pengsom (Japan)

G4-5

ICICIC2025-SS01-05

The History of Leisure and Recreation in the State of Hawaii, U.S.A., through the Penetration of Japanese Content and Future Prospects for Tourism

Masamitsu Futaesaku (Japan)

G4-6

ICICIC2025-SS01-06

Artistic Expression of the Younger Generation in Hawai'i and Their Conceptions of 'Aloha 'Āina'

Yuki Takatori (Japan)

August 28, 2025, Thursday (Japan Time)

13:20 – 15:20 Intl. Conference Room, 2F

A5: Industrial Optimization and Predictive Analytics

Chair: Prof. Young Jin Kim (Pukyong National University, Korea)

A5-1

ICICIC2025-SS25-01

Optimization Modeling of Energy Storage Systems Operation Connected to Photovoltaic Generation

Yongjoo Chung, Chunhyun Paik and Young Jin Kim[†] (Korea)

A5-2

ICICIC2025-SS25-02

Load Duration Curve-Based Capacity Credit Evaluation Considering Combined Contributions of Solar and Wind Power

Chunhyun Paik, Yongjoo Chung and Young Jin Kim[†] (Korea)

A5-3

ICICIC2025-SS25-04

Enhancing Production Efficiency through Smart Scheduling: A Deep Learning and Simulation-Based Approach

Yutika Amelia Effendi and Minsoo Kim[†] (Korea)

A5-4

ICICIC2025-SS25-20

Threshold-Based Priority Control in Two-Class Polling Queues for Delay-Sensitive Systems

Doo Il Choi and Dae-Eun Lim[†] (Korea)

A5-5

ICICIC2025-SS25-23

A Supervised Link Prediction Methodology for Identifying Latent Technology Convergence Opportunities

Mokh Afifuddin and Wonchul Seo[†] (Korea)

A5-6

ICICIC2025-SS25-24

A Buyback-Option Contract for Enhancing Supply Chain Efficiency under Updated Demand Uncertainty

Ze-jin Tao and Pyung-Hoi Koo[†] (Korea)

A5-7

ICICIC2025-SS25-28

Optimizing Job Sequencing in Mixed-Model Assembly Lines Based on Deep Q-Networks

JiYou Song[†], YunHo Seo, Yumin Kim, Hyunkyung Lee and Haejoong Kim (Korea)

A5-8

ICICIC2025-SS25-29

Optimization of Inbound Logistics in Fulfillment Systems Using a Dynamic Two-Stage Genetic Algorithm Based on Two-Stage Clustering

Byeonghyun Cha[†] and Haejoong Kim (Korea)

August 28, 2025, Thursday (Japan Time)

13:20 – 15:20 Conference Room 21-1, 2F

B5: Big Data Analysis and Data-Driven Intelligent Optimization for Decision Making (1)

Chairs: Prof. Lijun Sun (Dalian University of Technology, China)

Prof. Minfang Huang (North China Electric Power University, China)

B5-1

ICICIC2025-WS02-01

Vehicle Relocation with Location-Based Compensation

Bomin Bian[†], Long He, Zhenyu Hu and Sixing Hu (China)

B5-2

ICICIC2025-WS02-05

Situation Identification of Photovoltaic Power Generation Considering Micro-Meteorological Evolution

Minfang Huang[†], Liqin Xiong, Weijia Min, Jingru Li and Yuanpei Ma (China)

B5-3

ICICIC2025-WS02-06

Learn from Others Well: A Cross-Context POMDP-Based Approach to Optimal Contextualization of Cancer Surveillance Guideline

Hongtao Yu, Mu Du[†] and Nan Kong (China)

B5-4

ICICIC2025-WS02-07

Network Design of Battery Swapping Infrastructure Considering Time-Sensitive Demands

Lijun Sun and Jing Cui[†] (China)

B5-5

ICICIC2025-WS02-08

Explainable Stacking Ensemble Learning Model with Cost-Sensitive and Focal Loss for Colorectal Cancer Risk Prediction

Huilin Ke[†], Lijun Sun, Hongtao Yu, Mu Du and Bo Zhu (China)

B5-6

ICICIC2025-WS02-12

AI Based Denoising of ECG Signals and Its Application

Zhongsheng Hua[†], Zeyu Xing and Xiaoyan Xu (China)

B5-7

ICICIC2025-WS02-13

Research on the Factors Affecting Online Purchase Intention of Cross-Border E-Commerce Platform

Ye Hua (China)

August 28, 2025, Thursday (Japan Time)

13:20 – 15:20 Conference Room 21-2, 2F

C5: Management and Innovative Approaches in Education

Chair: Prof. Angel Chang (National Chi Nan University, Taiwan, China)

C5-1

ICICIC2025-SS12-01

Can Children Learn via Play? A Case Study of Applying Board Game in Teaching Preschoolers' Spatial Concept

Chen-Ju Lo and Angel Chang[†] (Taiwan, China)

C5-2

ICICIC2025-SS12-02

Fiscal Resilience in Taiwan's Higher Education: Strategic Insights from the SPROUT Project

Xinying Wang[†] and Angel Chang (China)

C5-3

ICICIC2025-SS12-03

Data-Driven Higher Education Learning: Using Learning Management System to Promote Student Engagement

Angel Chang (Taiwan, China)

C5-4

ICICIC2025-SS12-04

Enhancing Students' Interests in Learning through Flipped Classroom Methods and Digital Tools

I Elizabeth Cha[†] and Joey Yao (Taiwan, China)

C5-5

ICICIC2025-157

Learning Motivation of Students in Next-Generation 3D Art Courses: An Empirical Study of the ARCS Model and Its Influencing Factors Courses

Hung Sun (Taiwan, China)

C5-6

ICICIC2025-166

Learning through Screens: How Online Communication Tools Supported STEM Students during the Pandemic

Yi-jung Wu[†] and Wei Lin (Taiwan, China)

C5-7

ICICIC2025-171

The Psychological and Behavioral Impacts of Social Media Use across Diverse Demographics

Wannaporn Sarapugdi[†] and Songphon Namkhun (Thailand)

August 28, 2025, Thursday (Japan Time)

13:20 – 15:20 Conference Room 22, 2F

D5: Advanced Control and Application of Embodied Intelligent Robotics Systems

Chairs: Dr. Shaoxin Sun and Dr. Yaoyao Tan (Chongqing University, China)

D5-1

ICICIC2025-SS14-03

A Traversability Analysis-Based Path Planning Method for Unstructured Roads

Shaoxin Sun[†] and Hang Li (China)

D5-2

ICICIC2025-SS14-04

Adaptive Synchronization of Uncertain Nonlinear Systems Based on Odd Impulsive Protocol

Tiedong Ma[†] and Zhengle Zhang (China)

D5-3

ICICIC2025-SS14-05

Improved Segmented Step-Length Search Mechanism and Hybrid A* Based Path Planning Optimization Method

Haowen Wang, Xiaojie Su[†] and Shaoxin Sun (China)

D5-4

ICICIC2025-SS14-08

Vision-Fused Navigation Control Framework for Mobile Robots in Complex Environments

Zhihao Hu and Yaoyao Tan[†] (China)

D5-5

ICICIC2025-SS14-09

Real-Time Robotic System: Perception, Reasoning, Manipulation

Yizhuo Sun (China)

D5-6

ICICIC2025-SS14-10

Markov-Based Multi-Modal Switching Control for Single Joint in Bipedal Lower-Limb Robots

Yucheng Liu, Yufeng Tian[†] and Xiaojie Su (China)

D5-7

ICICIC2025-SS14-12

PID Based Meta-Reinforcement Learning for Space Noncooperative Object Active Visual Tracking

Zhongliang Yu (China)

D5-8

ICICIC2025-SS14-13

Attcd: A Node Attribute-Driven Approach for Community Deception in Networks

Yue Yang[†] and Chong Zhang (China)

August 28, 2025, Thursday (Japan Time)

13:20 – 15:20 Conference Room 31, 3F

E5: Advanced Control and Industrial Application of Complex Networked Systems

Chairs: Prof. Rongni Yang (Shandong University, China)

Prof. Yanzheng Zhu (Shandong University of Science and Technology, China)

E5-1

ICICIC2025-SS31-01

Improved Dynamic Output Feedback Control for T-S Fuzzy Systems against Hybrid Cyber-Attacks via Neural Network Method

Huiyan Zhang[†], Zixian Chen, Hao Sun, Ning Zhao and Rathinasamy Sakthivel (China)

E5-2

ICICIC2025-SS31-02

Learning Event-Triggered Controllers for Linear Parameter-Varying Systems from Data

Su Zhang and Renjie Ma[†] (China)

E5-3

ICICIC2025-SS31-03

Data-Driven Evaluable Criterion and Security Control for CPSs under Stochastic DoS Attacks via Switching-Q-Learning

Ruifeng Zhang and Rongni Yang[†] (China)

E5-4

ICICIC2025-SS31-05

Fault Reconstruction for Continuous-Time Switched Affine Systems with Actuator Faults via an Integrated UIO Approach

Fang Liao and Yanzheng Zhu[†] (China)

E5-5

ICICIC2025-SS31-06

Hybrid-Triggered Control for 2-D Cyber-Physical Systems under Malicious Attacks

Lingling Li and Rongni Yang[†] (China)

E5-6

ICICIC2025-SS30-01

The Impact of Chronic Diseases on Elderly in China: A Cluster Analysis Approach

Xiangtai Meng and Wenyan Song[†] (China)

E5-7

ICICIC2025-SS30-02

A Kidney Disease Data Analysis Approach Based on Modified Information Granulation and Data Reconstruction

Wenyan Song[†] and Xiangtai Meng (China)

E5-8

ICICIC2025-SS30-03

An Online Stacked Ensemble Deep Interval Type-2 Neuro-Fuzzy System

Jie Li, Degang Wang[†], Shifeng Dai and Xiaosong Wu (China)

August 28, 2025, Thursday (Japan Time)

13:20 – 15:20 Conference Room 32, 3F

F5: Knowledge Discovery and Intelligent Identification

Chair: Prof. Hajime Murao (Kobe University, Japan)

F5-1

ICICIC2025-006

Detection On-Street Available Parking Space Based on Deep Learning

*Rung-Ching Chen[†], Ibrahim Yahaya Garta, Su-Wen Huang, Shao-Kuo Tai
and Chayanon Sub-r-pa (Taiwan, China)*

F5-2

ICICIC2025-121

Dementia Severity Evaluation Based on ERICA Score in Magnetic Resonance Imaging
Using Vision Transformer

*Chadaporn Keatmanee[†], Anusart Chamornmano, Banlang Sinprasert
Atchara Mahaweerawat, Apirak Jirayusakul, Matthew N. Dailey, Lin Tun Naing
Mongkol Ekpanyapong, Yoichi Nagaguro, Songphon Klabwong, Rungsiri Patanasantichai
Sittaya Buathong, Jitsupa Wongsripuemtet, Chatchawan Rattanabannakit
Vorapun Senanarong, Dittapong Songsaeng and Alisa Kunapinun (Thailand)*

F5-3

ICICIC2025-145

Basic Research on Multi-Object 3D Shape Reconstruction from Single-Image via Slot Attention
and Shape Code Index Prediction

Tomoya Senda[†], Kazuma Sakamoto and Yoshihiro Ueda (Japan)

F5-4

ICICIC2025-161

Exploring Customer Segmentation for Postal Services Using K-Means and Agglomerative
Hierarchical Clustering

Pimolrat Ounsrimung, Prapaporn Phetrak and Supakit Nootyaskool[†] (Thailand)

F5-5

ICICIC2025-176

Identification of Bacteria Using Effective and Efficient Deep Learning Techniques

Cheng-Fa Tsai[†], Jun-Yi Chu and Chia-En Tsai (Taiwan, China)

F5-6

ICICIC2025-184

Facial EMG-Based Unsupervised Clustering for Classifying Japanese Learners

Jiawen Xu[†] and Hajime Murao (Japan)

F5-7

ICICIC2025-190

An Estimation System of Students' Concentration for Online Lectures

Haozhe Ren[†] and Hajime Murao (Japan)

F5-8

ICICIC2025-199

An Application of Variational Recurrent Auto-Encoder to Suggesting the Motion Improvements
for Darts Throwing

Hajime Murao (Japan)

August 28, 2025, Thursday (Japan Time)

15:40 – 18:00 Intl. Conference Room, 2F

A6: Artificial Intelligence Development and Its Applications in Industry

Chair: Prof. Hong-In Cheng (Kyungshung University, Korea)

A6-1

ICICIC2025-SS25-05

Human and Generative Artificial Intelligence (Gen-AI) in Academic Writing

Ratna Permata Sari and Hong-In Cheng[†] (Korea)

A6-2

ICICIC2025-SS25-06

The Muscle Activity Pattern in Hand Truck Operation

Qi Wang[†], Jun Jie Deng and Hong-In Cheng (Korea)

A6-3

ICICIC2025-SS25-13

Self-Adaptive Prompt Engineering for Cost-Efficient Language Models: Switching between Chain-of-Thought and Direct Answer

Yongjin Kim[†], Younsoo Lee and Changmuk Kang (Korea)

A6-4

ICICIC2025-SS25-14

Structure-Preserving Process Case Embeddings via Directed Graph Convolutional Networks

Ho Jun Park[†], Younsoo Lee and Changmuk Kang (Korea)

A6-5

ICICIC2025-SS25-18

Last-Mile Robot Delivery Model: Establishing Convenience Stores as Robot Hubs

Sang-Myeong Kim[†] and Jae-Dong Son (Korea)

A6-6

ICICIC2025-SS25-22

AI Agent Utilization Methodology to Build a Logistics Information Integration Platform

Haram Kim[†], Jongsun Choi and Dongsoo Kim (Korea)

A6-7

ICICIC2025-SS25-25

Research on Automated Calculation of NIOSH Lifting Equation Using Video-Based Joint Position Extraction

Haeun Lim[†] and Taezoon Park (Korea)

August 28, 2025, Thursday (Japan Time)

15:40 – 18:00 Conference Room 21-1, 2F

B6: Big Data Analysis and Data-Driven Intelligent Optimization for Decision Making (2)

Chairs: Prof. Xiangpei Hu and Dr. Yonggang Li (Dalian University of Technology, China)

B6-1

ICICIC2025-WS02-02

Research on an Anti-Counterfeiting and Traceability Method for Transformers Based on NFC and Blockchain Technologies

Dequan Meng[†], Xiangpei Hu and Yonggang Li (China)

B6-2

ICICIC2025-WS02-03

Prediction Algorithm of Northbound Capital and Stock Factor Based on Large Language Model

Jianming Li[†], Tianwen Feng and Xiangpei Hu (China)

B6-3

ICICIC2025-WS02-04

Research on Blockchain-Based Traceability and Anti-Counterfeiting System for Jade Commodities

Jundong Wang, Dequan Meng, Xiangpei Hu[†] and Qi Chen (China)

B6-4

ICICIC2025-WS02-09

Research on a Blockchain-Based Digital Book Trading System

Dequan Meng, Tian Wang, Shuolei Hu, Jundong Wang and Yonggang Li[†] (China)

B6-5

ICICIC2025-WS02-11

Last-Mile Delivery Optimization for Truck-UGV Relay Delivery System of Urban Logistics

Meng Zhao[†], Yang Wang, Bo Zhang, Xiangpei Hu and Shining Li (China)

B6-6

ICICIC2025-008

Explainable Deep Learning-Based Soft Sensors in Dynamic Industrial Process Monitoring

Renzhi Gao, Xiangwei Kong[†], Xiaoyu Yao and Hefu Liu (China)

B6-7

ICICIC2025-124

Multi-Teacher Knowledge Distillation for Forged Speech Detection: Separating Synthetic and Converted Speech Artifacts

Yilin Zhang[†], Zhuocheng Wu, Yufeng Song, Tianxiang Luo and Bo Wang (China)

August 28, 2025, Thursday (Japan Time)

15:40 – 18:00 Conference Room 21-2, 2F

C6: Brain-Based Embodied Intelligence and Control

Chair: Prof. Hiroaki Wagatsuma (Kyushu Institute of Technology, Japan)

C6-1

ICICIC2025-018

Design and Experimental Validation of a Heart Rate Control System Based on Subject Data

Takao Sato[†], Yoshiharu Kawahara and Yusuke Tsunoda (Japan)

C6-2

ICICIC2025-130

Development of Metamaterial Based Active Compliant Knee Support for Knee Orthosis

Raushan Kumar, Vartika Narayani Srinet, Subhadeep Sahana, Malik Arsala Nissar

Ruchira Kumar Pradhan, Shintaro Kasai[†], Choisureen Purevdorj, Yiqian Ge

Hiroaki Wagatsuma and Bishakh Bhattacharya (Japan)

C6-3

ICICIC2025-182

A Mathematical Framework for Modeling Local Interactions between Pedestrians

Based on Utility Maximization

Ahmad Altaweel[†], Kazuhito Mine and Hiroaki Wagatsuma (Japan)

C6-4

ICICIC2025-183

Vehicle Behavior Analysis and Risk Detection in Autonomous Buses via Synchronized Multi-Camera Systems and GPS Integration

Jargal Davaanyam[†], Obada Al Aama, Tomoki Taniguchi, Hakaru Tamukoh

and Hiroaki Wagatsuma (Japan)

C6-5

ICICIC2025-187

EEG-Based Analysis Using Event-Related Synchronization and Desynchronization in Playing a Strategic Board Game

Shibata Kosei, Yide Yang, Rena Kato, Hendry F. Chame, Laurent Bougrain

and Hiroaki Wagatsuma[†] (Japan)

C6-6

ICICIC2025-189

A Behavioral Analysis of the Two-Player “Look This Way!” Game by Using Simultaneous Measurements of EEG, Motion and Gaze

Rena Kato[†], Shibata Kosei, Yide Yang, Masayuki Fujiwara, Laurent Bougrain

and Hiroaki Wagatsuma (Japan)

C6-7

ICICIC2025-191

An Effective Noise Reduction Method and Optimization for 3D Modeling of Body Surfaces from CT Images toward Automated 3D Printing Torso Prostheses

Yiqian Ge[†], Choisureen Purevdorj, Shintaro Kasai and Hiroaki Wagatsuma (Japan)

August 28, 2025, Thursday (Japan Time)

15:40 – 18:00 Conference Room 22, 2F

D6: Cognitive Perception, Intelligent Computing and Adaptive Control for Resilient Autonomous Systems

Chairs: Prof. Tao Hu (Hubei Minzu University, China)

Prof. Li Zou (Shandong Jianzhu University, China)

D6-1

ICICIC2025-070

SEAT: A Spatially Enhanced Attention Transformer for EEG Emotion Recognition

Xin Long[†], Jun Li and Tao Hu (China)

D6-2

ICICIC2025-084

Application of Lightweight Dynamic Two-Channel Attention Network in Abnormal Driving Behavior Detection at the Edge

Haifeng Huang[†], Fangke Yan, Li Zhu and Tao Hu (China)

D6-3

ICICIC2025-128

A Lightweight Deep Learning Framework for Multi-Channel sEMG Gesture Recognition Based on STFT and Attention Modules

Xiuxiu Yang[†], Shuangbin Wen, Jun Li and Tao Hu (China)

D6-4

ICICIC2025-133

Research on Privacy Protection Optimization Algorithm for CXR Image Classification Based on DP-Adamax

Xuanyu Zhao, Fangke Yan, Shuangbing Wen[†], Fukui Wu and Tao Hu (China)

D6-5

ICICIC2025-SS18-01

An Intelligent Diagnosis Method for New Energy Vehicles Based on Dynamic Association Rules and XGBoost

Xiaolu Chen[†], Li Guo, Yuan Ge, Mingxing Chen, Keguang Qi and Qinglai Wang (China)

D6-6

ICICIC2025-SS29-01

Carbon Emission Evaluation in the Materialization Phase of Prefabricated Buildings Using Spherical Fuzzy AHP

Lixian Xu, Jun Liu, Aftab Ali, Li Zou[†] and Dehu Yu (China)

D6-7

ICICIC2025-SS29-02

Collaborative Meta-Learning and Auxiliary Information Knowledge Tracing

Yuling Ma[†], Wang Jing, Jianhua Su and Meng Liu (China)

D6-8

ICICIC2025-SS29-03

Dynamic Stripe Pruning Based on Optimization and Filter Skeletons

Lili Song[†], Yongchao Liu and Xinfeng Liu (China)

D6-9

ICICIC2025-SS29-04

Barycentric Interpolation Collocation Method to Solve Time-Fractional Fokker-Planck Equation

Wanjuan Song[†] and Jin Li (China)

August 28, 2025, Thursday (Japan Time)

15:40 – 18:00 Conference Room 31, 3F

E6: AI-Based Fault Diagnosis and Predictive Health Management

Chair: Prof. Chao Zhang (Northwestern Polytechnical University, China)

E6-1

ICICIC2025-SS07-01

Reliability Modeling and Optimization of High-Voltage Power Supply Based on Dynamic Fault Tree Analysis

Yiyang Huang[†], Yufei Zhang, Chengning Zhu, Chao Zhang and Yan Yang (China)

E6-2

ICICIC2025-SS07-02

Dynamic Reliability Optimization Analysis of High-Voltage Power Supply Accounting for CCF Based on DTBN

Yufei Zhang[†], Yiyang Huang, Chengning Zhu, Chao Zhang and Yan Yang (China)

E6-3

ICICIC2025-SS07-03

Research on Motion Control Method of a Six-DOF Flight Simulator Platform

Peng Du[†], Shuhan Li, Yufeng Li, Xiaodong Wu and Chao Zhang (China)

E6-4

ICICIC2025-SS07-04

Research on Development History and Current Research of Flight Simulators

Shuhan Li[†], Peng Du, Yufeng Li, Xiaodong Wu and Chao Zhang (China)

E6-5

ICICIC2025-SS07-05

Nonlinear Intelligent Compensation Control Strategy for Electromechanical Actuation System

Jinxing Xu[†], Yong Zhou, Chao Zhang, Zhanqiang Luo, Xiner Li and Yuming Liu (China)

E6-6

ICICIC2025-SS07-06

Model-Based Systems Engineering: Research on Landing Gear System Model Construction Technology

Jinlan Ma[†], Xiaohui Yang, Tao Zhang, Haonan Yu, Zan Liang and Xin Li (China)

E6-7

ICICIC2025-SS07-07

Research on Comprehensive Evaluation Methods for Helicopter Transmission System Configurations

Xiong Zhao[†], Shuai Wang, Bing Han, Zhizhong Zhang and Jiaren Wang (China)

E6-8

ICICIC2025-SS07-08

Research on the Method of Landing Gear System Architecture Design and Modeling Based on Semantic Model

Jingyi Cheng[†], Bing Han, Tao Zhang, Guangyuan Chu, Jian Li and Maoxiong Liao (China)

E6-9

ICICIC2025-SS07-09

Sea Ice Concentration Estimation from Satellite Passive Microwave Data Using a Deep Learning Model

Shujia Wan[†], Bing Han and Ruiting Tong (China)

August 28, 2025, Thursday (Japan Time)

15:40 – 18:00 Conference Room 32, 3F

F6: Soft Computing and Large Language Models

Chair: Dr. Asako Ohno (Kobe University, Japan)

F6-1

ICICIC2025-002

Estimation Parameters of Wind Speed and Direction for Wind Turbine Applications
Using SARIMA Method

*Syafaruddin[†], Yusri Syam Akil, Putri Aisyah Kurnia, Agusman, Sri Mawar Said
and Anuar Mohamad (Indonesia)*

F6-2

ICICIC2025-046

The Impact of Social Media on Travel Motivation and Destination Choice

*Aye Nyeint Ko[†], Chang Hoon Lee, Zejian Li, Mari Kikuchi, Iori Tani, Etsuko Kumamoto
and Asako Ohno (Japan)*

F6-3

ICICIC2025-061

RAGrader: A Report Grading Support System Using Large Language Models
and Retrieval-Augmented Generation

Manato Okada[†], Asako Ohno, Iori Tani, Chengjiu Yin and Etsuko Kumamoto (Japan)

F6-4

ICICIC2025-072

A Study of a Method for Role Estimation in Discussions Using Large Language Models

Kai Yoshida[†], Asako Ohno, Iori Tani, Chengjiu Yin and Etsuko Kumamoto (Japan)

F6-5

ICICIC2025-089

Example Retrieval for Few-Shot Reasoning Based on Non-Dominant Solutions

Hidekazu Yanagimoto[†], Shota Sasaki and Kiyota Hashimoto (Japan)

F6-6

ICICIC2025-114

Co-Occurrence Word Network Creation System Using Vectorization of Patent Information
for IP Landscape Support

Yurie Okuhara, Eri Domoto and António Oliveira Nzinga René[†] (Japan)

F6-7

ICICIC2025-153

Retrieval Augmented Prompt Based on Few-Shot Reasoning

Takuma Namisaki[†], Hidekazu Yanagimoto and Kiyota Hashimoto (Japan)

F6-8

ICICIC2025-172

Analysis of Real Estate Price Formation Factors Using Variable Selection and Hedonic
Approach Using Sparse Estimation

António Oliveira Nzinga René[†], Koji Okuhara and Ryo Haruna (Japan)