

PROGRAM GUIDE



NBiS-2026

The 29th International Conference on
Network-Based Information Systems
and



*Intelligent Networking
and Collaborative Systems*

INCoS-2026

The 18th International Conference on
Intelligent Networking and Collaborative Systems

Technically Sponsored by: Fukuoka Institute of Technology (FIT)



Supported by:

Kwansei Gakuin University

Support Center for Advanced Telecommunications Technology Research (SCAT)



Hybrid Conferences

Kwansei Gakuin University, Hyogo, Japan

September 9-11, 2026

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Welcome Message from NBiS-2026 Organizing Committee

We would like to welcome you to the 29th International Conference on Network-Based Information Systems (NBiS-2026), which is held from September 9 to September 11, 2026, at Kwansei Gakuin University, Hyogo, Japan.

The main objective of NBiS is to bring together scientists, engineers, and researchers from both network and information systems with the aim of encouraging the exchange of ideas, opinions, and experiences between these two communities.

NBiS is one of the important conferences in the information networking field. Extensive international participation, coupled with rigorous peer reviews, has made this an exceptional technical conference. The Technical Program and Workshops add important dimensions to this event. We hope that you will enjoy each and every component of this event and benefit from interactions with other attendees.

Since its inception, NBiS has attempted to bring together people interested in information and networking, in areas that range from the theoretical aspects to the practical design of new network systems, distributed systems, multimedia systems, Internet/Web technologies, mobile computing, intelligent computing, pervasive/ubiquitous networks, dependable systems, semantic services, and scalable computing. We have continued these efforts as novel networking concepts emerge and new applications flourish. For this edition, many good and interesting papers were submitted from all over the world. They were carefully reviewed and only high quality papers will be presented during conference days.

The organization of an international conference requires the support and help of many people. A lot of people have helped and worked hard for a successful NBiS-2026 technical program and conference proceedings. First, we would like to thank all authors for submitting their papers. We are indebted to Track Co-Chairs, Program Committee members and reviewers who carried out the most difficult work of carefully evaluating the submitted papers.

We would like to express our great appreciation to our keynote speakers for accepting our invitation and their interesting and inspiring talks.

We hope that you have an enjoyable and productive time during the conference days.

INCoS-2026 Organizing Committee

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Makoto Takizawa, Hosei University, Japan

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Finance Chair

Makoto Ikeda, Fukuoka Institute of Technology, Japan

Steering Committee Chair

Leonard Barolli, Fukuoka Institute of Technology, Japan

Welcome Message from the INCoS-2026 Organizing Committee

Welcome to the 18th International Conference on Intelligent Networking and Collaborative Systems (INCoS-2026), which is held from September 9 to September 11, 2026, at Kwansei Gakuin University, Hyogo, Japan.

INCoS is a multidisciplinary conference that covers latest advances in intelligent social networks and collaborative systems, intelligent networking systems, mobile collaborative systems, secure intelligent cloud systems, and so on. Additionally, the conference addresses security, authentication, privacy, data trust and user trustworthiness behaviour, which have become crosscutting features of intelligent collaborative systems.

With the fast development of the Internet, we are experiencing a shift from the traditional sharing of information and applications as the main purpose of the networking systems to an emergent paradigm, which locates people at the very centre of networks and exploits the value of people's connections, relations and collaboration. Social networks are playing a major role as one of the drivers in the dynamics and structure of intelligent networking and collaborative systems.

Virtual campuses, virtual communities and organizations strongly leverage intelligent networking and collaborative systems by a great variety of formal and informal electronic relations, such as business-to-business, peer-to-peer and many types of online collaborative learning interactions, including the virtual campuses and e-Learning systems. Altogether, this has resulted in entangled systems that need to be managed efficiently and in an autonomous way. In addition, the conjunction of technologies based on IoT, Cloud, mobile and wireless infrastructures are bringing new dimensions of collaborative and networking applications, but they face also new issues and challenges.

The aim of this conference is to stimulate research that will lead to the creation of responsive environments for networking and the development of adaptive, secure, mobile, and intuitive intelligent systems for collaborative work and learning.

The successful organization of the conference is achieved thanks to the great collaboration and hard work of many people and conference supporters. First, we would like to thank all authors for their continued support to the conference by submitting their research work and for their presentations and discussions during the conference days. We would like to thank PC Co-chairs, Track Co-chairs, TPC members and external reviewers for their work by carefully evaluating submissions and providing constructive feedback to authors.

We would like to acknowledge the excellent work and support by International Advisory Committee. We give special thanks to conference Keynote Speaker for their interesting and inspiring keynote speeches.

We greatly appreciate the support by Web Administrator Co-chairs. We are very grateful to Springer as well as several academic institutions for their endorsement and assistance.

Finally, we hope that you will find these proceedings to be a valuable resource in your professional, research and educational activities.

NBiS-2026 & INCoS-2026 Keynote I



Dr. Sho Tsugawa, University of Tsukuba, Tsukuba, Japan

Rethinking Influence and Control: The Limits and Possibilities of Managing Information Spread on Social Media

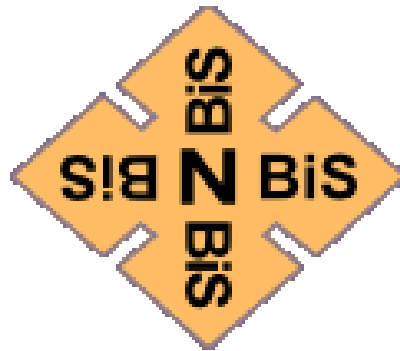
Abstract: Is it possible to control the spread of misinformation or accelerate viral marketing through network interventions? This keynote critically evaluates established strategies for managing information diffusion. I will present empirical evidence challenging the effectiveness of link deletion methods for suppressing misinformation, highlighting how "seed users" driven by external factors often render structural interventions inefficient. Shifting focus from suppression to facilitation, I will explore the mechanisms of "influential brokers", who act as critical bridges for the others' content. Unlike source spreaders, brokers exhibit distinct structural characteristics that require advanced embedding-based identification. Furthermore, I will discuss the phenomenon of "implicit-link diffusion", where information leaps across communities without social ties, offering new avenues for mitigating echo chambers. This talk provides actionable insights for designing more realistic and effective diffusion strategies.

NBiS-2026 & INCoS-2026 Keynote II



Prof. Hiroshi Yamamoto, Ritsumeikan University, Ibaraki, Osaka, Japan
R&D Toward Social Implementation of IoT Systems for Supporting Diverse Social Activities in Indoor and Outdoor Environments

Abstract: Internet of Things (IoT) systems that comprehensively collect and analyze information on the states of people, objects, and environments in the physical world are attracting attention in order to support a wide range of human activities. For example, advances in technologies such as LiDAR, which can directly observe three-dimensional structure of physical spaces, and SLAM techniques that reconstruct 3D structures from camera images, have made it possible to directly measure and observe people, objects, and environments. Furthermore, the rapid development of machine learning technologies, including generative AI, enables accurate understanding and prediction of real-world contexts, thereby providing appropriate and advanced support for human activities. In this talk, we first present an overview of the overall architecture of IoT systems, followed by an explanation of recent technological trends in sensing and AI, which constitute their core components. Additionally, we introduce research and development case studies of IoT systems aimed at real-world social implementation across a variety of indoor and outdoor fields.



NBiS-2026

Main Conference and Workshops Program

Wednesday, 9 September, 2026

Opening

09:45-10:00 (UTC+9) Japan Standard Time

NBiS-2026 and INCoS-2026 Keynote #1

10:00-11:00 (UTC+9) Japan Standard Time

NBiS-2026 and INCoS-2026 Keynote Talk 1

Dr. Sho Tsugawa: Rethinking Influence and Control: The Limits and Possibilities of Managing Information Spread on Social Media

Coffee Break

11:00-11:30 (UTC+9) Japan Standard Time

Parallel Sessions

11:30-13:00 (UTC+9) Japan Standard Time

NBIS-S1: Multimedia Systems and Applications I

Chair: Isaac Woungang, Toronto Metropolitan University, Canada

1. Aging and Diversity in Facial Recognition: A Survey of Deep Learning Approaches
Patrice Kisanga, Isaac Woungang, Issa Traore
2. Decoupled Software Architecture for Web Applications and Their Coachmark-Guided Interactive Tutorials
Yuta Niinami, Erjing Zhou, Michitoshi Niibori, Masaki Kohana, Shusuke Okamoto, Yasuhiro Ohtaki, Masaru Kamada
3. Shift Generation Using a Nurse Scheduling Model for a University Festival
Taiki Takahashi, Masaki Kohana
4. AI-Assisted Seminar Planning Using Personas
Jun Iio

DEMoC-S1: Data Engineering and Mobile Computing

Chair: Yusuke Gotoh, Okayama University, Japan

1. Hallucinated Citations in Large Language Model-Generated Radiology Researches: A Cross-Model Evaluation of in Four Major LLMs
Koji Sakai
 2. An Object Mass Estimation Method Using Semantic Segmentation and Depth Images
Jun Inoue, Tomoya Kawakami
 3. Collaborative Sculpture Creation System in Virtual Reality Environment
Shion Kimura, Kazuki Beppu, Tomoyuki Ishida
 4. A Proposal for Updating Delivery Schedule of Live Streaming in Division-Based Broadcasting
Yusuke Gotoh, Keita Katsuno
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Lunch

13:00-14:00 (UTC+9) Japan Standard Time

Parallel Sessions

14:00-15:30 (UTC+9) Japan Standard Time

NBIS-S2: Mobile and Wireless Computing

Chair: Hyunhee Park, Myongji University, South Korea

1. A Comparison Study of RIWM and LDIWM Router Replacement Methods for SPX and psBLX Crossover Methods Considering a Large-Scale WMN and Two Islands Client Distribution
Paboth Kraikritayakul, Admir Barolli, Shunya Higashi, Shinji Sakamoto, Leonard Barolli, Arjan Durrresi
 2. PART: Priority-Aware Resource-Constrained Patch Transmission for Task-Oriented Communication
Seohyeon Kim, Hyunhee Park
 3. Chain Federated Learning: Communication-Efficient Serverless FedAvg for Wireless Ad Hoc Networks
Chaeyun Lim, Hyunhee Park
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4. Investigation into the Effectiveness of an RSSI Measurement Method Considering Directional Characteristics in BLE Indoor Positioning
Takahiro Uchiya

WSSM-S1: Web Services and Social Media I

Chair: Jun Iio, Chuo University, Japan

1. Implementation of a Prototype System for Tracking Vulnerability Remediation
Yasuhiro Ohtaki, Kazuyuki Yamamoto
2. Constraint-Driven Procedural Content Generation for Trade-Off-Based Decision Making in a Project Management Serious Game
Galang Prihadi Mahardhika, Yuta Sato, Masaru Kamada
3. Development of a Real-Time Conversation Support System for Intercultural Online Exchange: Speak Ease
Airi Mikami, Jun Iio
4. Game Design as a Driver of Computational Thinking: A Case Study of an Elementary Learner's Board Game Implementation
Yuka Kawano

Coffee Break

15:30-16:00 (UTC+9) Japan Standard Time

Parallel Sessions

16:00-17:30 (UTC+9) Japan Standard Time

NBIS-S3: Multimedia Systems and Applications II

Chair: Yoshihiro Okada, Kyushu University, Japan

1. Contactless Automatic Evacuee Information Collection System
Sho Sakamoto, Ayato Oba, Tomoyuki Ishida
2. An AST Based Static Analysis System for SQL Anti-Pattern Risk Quantification and Inline Improvement Suggestions
Narumi Kiyooka, Masaki Kohana
3. 3DCG Animation Generation from Multi-location 360-degree VR Videos for XR Training Materials
Yoshihiro Okada, Wei Shi
4. Development of a Feature to Open Projects as Libraries in IslayTouch
Atsuhiko Katsura, Erjing Zhou, Masaru Kamada, Shusuke Okamoto

WSSM-S2: Web Services and Social Media II

Chair: Shusuke Okamoto, Seikei University, Japan

1. Design and Deployment of an Edge LLM System for Adaptive Reflection Support in Community-Based Learning
Shota Saito, Ryunosuke Harada, Tetsuya Sato, Eriko Harada, Yoshihiro Kawano
2. Development of a PMV-Based Thermal Comfort-Oriented Outfit Recommendation System
Yuna Kikuchi, Masaki Kohana

3. A Method for Topic Retrieval from Social Media Using S-BERT

Yuta Kokubo, Shusuke Okamoto

4. Haptic Feedback to an MR Virtual Pet System

Saki Motoji, Shusuke Okamoto

Reception Party

18:00-20:00 (UTC+9) Japan Standard Time

Reception Party will be held at KWANSEI GAKUIN BIG MAMA

Thursday, 10 September, 2026

NBiS-2026 and INCoS-2026 Keynote #2**10:00-11:00 (UTC+9) Japan Standard Time****NBiS-2026 and INCoS-2026 Keynote Talk 2****Prof. Hiroshi Yamamoto:** R&D Toward Social Implementation of IoT Systems for Supporting Diverse Social Activities in Indoor and Outdoor Environments

Coffee Break**11:00-11:30 (UTC+9) Japan Standard Time**

Parallel Sessions**11:30-13:00 (UTC+9) Japan Standard Time****NBiS-S4: Security and Privacy I****Chair: Hsing-Chung Chen, Asia University, Taiwan**

1. Lost in Translation: Evaluating the Security of Phonetically Transformed Multilingual Passwords
Nathaniel Kofi Adjadeh, Prima Ardiansyah, Masaki Narita
2. A RAG- and Blockchain-Based System for Souvenir Ticket Evidence Preservation and Traceability
Hsing-Chung Chen, Hsin-Yu Li, Pei-Yu Hsu, Chin-Ling Chen
3. Short Revocable Group Signatures with Compact Revocation Lists from SPS-EQ
Yuka Yonezawa, Toru Nakanishi, Teruaki Kitasuka, Zhuotao Lian
4. Distributed Dependency Intervention to Mitigate AI Companion Overreliance
Takato Yokoyama, Itta Matsuda, Fan Yang, Shiro Yamada, Seiji Sato, Tetsushi Ohki, Masakatsu Nishigaki

WSSM-S3: Web Services and Social Media III**Chair: Masaki Kohana, Chuo University, Japan**

1. A Restaurant Search System for Food Allergy
Riko Kobayashi, Masaki Kohana
 2. Mitigating Smartphone Addiction and Fostering Cognitive Shifts through Narrative-based Gamification
Masyu Iijima, Jun Iio
 3. Integrating Hardware-Aware Hand Gesture Recognition into IslayTouch
Erjing Zhou, Masaru Kamada, Shusuke Okamoto
 4. AI-Driven Development of Domain-Specific Archival Tools: A Case Study in Academic Digital Evidence Preservation
Erjing Zhou
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Lunch

13:00-14:00 (UTC+9) Japan Standard Time

Parallel Sessions

14:00-15:30 (UTC+9) Japan Standard Time

NBiS-S5: Intrusion Detection and Self-Learning Systems

Chair: Bhed Bahadur Bista, Iwate Prefectural University, Japan

1. A SMOTE-Augmented Performance-Aware Exponential Weighted Ensemble Framework for False Alarm Reduction in Network Intrusion Detection Systems
Chaitanya Kumar Kurra, Bhed Bahadur Bista, Eiichiro Kodama
2. Efficient Offline-Online Server-Blind Aggregation for Privacy-Preserving Federated Learning
Trieu Phong Le, Thi Phuong Tran
3. Detecting the Unknown: RAG-Enhanced Framework for Intrusion Detection
Oscar A. Gonzalez Lira, Alberto Marroquin, Marco A. To De Leon
4. CISAF: Climate-Intelligence and Self-Supervised Learning for Sustainable Agriculture and Environmental Resilience
Alavikunhu Panthakkan, Shruthi T S, Rajalakshmi V, Ranjini K S, M. Sandeep Kumar, Balamurugan Balusamy, Hussain Al-Ahmad

INVITE-S1: Multimedia and VR Applications I

Chair: Tomoyuki Ishida, Fukuoka Institute of Technology, Japan

1. Influence of VR-based Exercise Support System with Real-time Sharing Features on Exercise Habits of Young People
Ayaka Uozumi, Yudai Ueno, Tomoyuki Ishida
 2. Production of AR Video Content Using Generative AI for Regional Mascots
Hideo Miyachi, Yura Komatsu, Hideaki Ishida, Yasuyo Takemoto
 3. Immersive Virtual Reality-Based Evacuation Drill System for Enhancing Disaster Preparedness
Ayato Oba, Sho Sakamoto, Tomoyuki Ishida
 4. Development of a Network-based AR System for Emergency Response Training in Industrial Environments
Tomoki Udagawa, Takeru Aoki, Yuichi Matsuo, Tomoaki Tatsukawa
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Coffee Break

15:30-16:00 (UTC+9) Japan Standard Time

Parallel Sessions

16:00-17:30 (UTC+9) Japan Standard Time

NBIS-S6: Parallel and Distributed Systems and Applications**Chair: Tomoya Enokido, Rissho University, Japan**

1. Serialization Algorithm to Reduce the Electric Energy Consumption of Servers and the Execution Time of Transactions without Executing Meaningless Read Methods
Tomoya Enokido, Shigenari Nakamura, Dilawaer Duolikun, Makoto Takizawa
2. Networked IoT Healthcare System Selection Using Weighted Cosine Divergence Measure under Picture Fuzzy Information
Adeeba Umar, Alavikunhu Panthakkan, Hussain Al-Ahmad
3. Activation Dynamics Under Observable Response Characterization
Aufy Mulyadi, Robertus Hudi
4. MPI-based Sampling of Time-Respecting Random Walks on Partitioned Temporal Graphs
Yao Hu

INVITE-S2: Multimedia and VR Applications II**Chair: Hideo Miyachi, Tokyo City University, Japan**

1. Virtual Reality Viewing System Based on the Three-Dimensional Reconstruction of Objects Depicted in Ukiyo-e
Yudai Ueno, Ayaka Uozumi, Tomoyuki Ishida
 2. A Network-based AR Interface for Industrial Machine Visualization and Control: Evaluation of Fault Localization and Machine Control Tasks
Daichi Toshino, Takeru Aoki, Yuichi Matsuo, Tomoaki Tatsukawa
 3. The LLM Anchor: Human-LLM Semantic Relations Over Time in Co-writing
Hideki Muto, Tetsuro Ogi, Takahiro Yakoh
 4. Experiment on Sense of Presence in Online VR Communication by Spatial Audio focusing on Proxemics
Akito Nishi, Yasuo Ebara
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Banquet Party**18:00-20:00 (UTC+9) Japan Standard Time**Banquet Party will be held at KWANSEI GAKUIN KAIKAN

Friday, 11 September, 2026**NBIS-2026 and INCoS-2026 Steering Committee Meeting and Discussion**



INCoS-2026

Main Conference and Workshops Program

Wednesday, 9 September, 2026

Opening

09:45-10:00 (UTC+9) Japan Standard Time

NBiS-2026 and INCoS-2026 Keynote #1

10:00-11:00 (UTC+9) Japan Standard Time

NBiS-2026 and INCoS-2026 Keynote Talk 1

Dr. Sho Tsugawa: Rethinking Influence and Control: The Limits and Possibilities of Managing Information Spread on Social Media

Coffee Break

11:00-11:30 (UTC+9) Japan Standard Time

Parallel Sessions

11:30-13:00 (UTC+9) Japan Standard Time

INCoS-S1: Intelligent Systems and Knowledge Management I**Chair: Shinji Sakamoto, Kanazawa Institute of Technology, Japan**

1. Plant Stress Prediction via Explainable Multimodal Fusion of Temporal Stomatal Dynamics and Environmental Signals
Zahida Mashaallah, Alessandro Del Prete, Flora Amato
2. FDCTES: A Fuzzy-based Device Cyber Trust Evaluation System Using Interval Type-2 Fuzzy Logic for IoT and Smart City Environments
Shunya Higashi, Paboth Kraikritayakul, Makoto Ikeda, Keita Matsuo, Leonard Barolli, Arjan Durrresi
3. A Proposal of a Road Priority Scoring Method based on Fuzzy Logic
Kawai Naoyuki, Yutaro Iida, Shinji Sakamoto
4. An Intelligent Composting System for Compost Detection Progress Considering Multi-sensor Monitoring and On-device AI-based Image Analysis
Miku Ikeda, Gordon Sim Jia Ming, Hironobu Shigyou, Keita Matsuo, Leonard Barolli

WIND-S1: WIND-2026 Invited Talks**Chair: Kazuya Tsukamoto, Kyushu Institute of Technology, Japan**

1. Rethinking of Physical-Layer Foundations beyond Classical Nyquist-Shannon Limits: Non-Orthogonal Waveforms and Semantic Intelligence for Sustainable 6G
Tongyang Xu
 2. Machine Learning Approach for Resource Allocation in Mobile Edge Computing
Myung Jong Lee
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Lunch**13:00-14:00 (UTC+9) Japan Standard Time**

Parallel Sessions**14:00-15:30 (UTC+9) Japan Standard Time****INCoS-S2: Intelligent Systems and Knowledge Management II****Chair: Myung Lee, CUNY, City College, USA**

1. A Simplified Operational Wargame Testbed for Evaluating Reinforcement Learning Agents under Partial Observability
Harry Forman, Seongjae Shin, Hang Hu, Myung Lee, Hong Kook Kim
 2. General-Purpose Packet Filtering Method Using Dynamic Field Resolution by Machine Learning
Kazuhiro Oka, Yuya Aono, Hiroyoshi Miwa
 3. Building Trustworthy and Sustainable AI Competences for Humanities in Higher Education
Aneta Poniszewska-Maranda, Jan Worpus-Budziejewski
 4. Integrated Database Platform for Dialogue and Communication Research
Miyu Yoshimi, Hiroyoshi Miwa, Kentaro Hasa, Yoshiyuki Asazu
 5. CJEU-Bench: A Structured Benchmark for EU Environmental and Agricultural Case Law
Egidia Cirillo, Giuseppe Fiengo, Francesca Galloni, Marco Giacalone, Marcello Pelosi
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WIND-S2: Information Network Design and Network Applications I**Chair: Akihiro Fujihara, Chiba Institute of Technology, Japan**

1. Cross-Chain Interoperability: A Brief Review
Akihiro Fujihara, Takaaki Yanagihara
2. A Multi-Scale Context-Gated Network for Cooperative Spectrum Sensing under Generalized Gaussian Noise
Yuzhou Han, Ahmad Gendia, Osamu Muta, Zhuoran Li
3. Effectiveness and Limitations of Orbital Prediction Based Routing for Long-Distance ISL-Enabled LEO Satellite Networks
Ayaka Matsuo, Daiki Nobayashi, Takeshi Ikenaga, Akiko Fujimoto, Kazuya Tsukamoto
4. Link-Aware Data Transfer Scheduling for Satellite-to-Ground Station Communication: A Priority-Aware Approach with Class-Bound LoRa Parameters
ZhengYu Zhang, Nova Khamsah, Daiki Nobayashi, Takeshi Ikenaga

Coffee Break**15:30-16:00 (UTC+9) Japan Standard Time****Parallel Sessions****16:00-17:30 (UTC+9) Japan Standard Time****INCoS-S3: Intelligent Systems and Knowledge Management III****Chair: Francesco Orciuoli, University of Salerno, Italy**

1. Situation-Aware Prompting for Vision-Language Models: Detecting Complex Social Phenomena in Videos
Flavia Forte, Francesco Orciuoli
2. An Explainable Neuro-Symbolic Framework for Predictive Maintenance Using XGBoost, SMT Reasoning, Health Index Prognostics, and Retrieval Augmented Generation
Mouna Berquedich, Khadim Ndiaye, Moustapha Gaye, Ahmed Chebak
3. Double Machine Learning in Sensor Networks: Quantifying Epistemic Uncertainty for Collaborative Predictive Maintenance
Alessandro Del Prete, Giuseppe Fiengo, Zahida Mashaallah, Flora Amato
4. Towards Fully Autonomous Robotic Grinding: Advances in Multi-Sensor Perception, Process Modeling, and Intelligent Data Fusion
Vianney Papot, Atal Anil Kumar, Ines Chihi

WIND-S3: Information Network Design and Network Applications II**Chair: Chenglong Shao, Kyushu Institute of Technology, Japan**

1. Indoor Human Activity Sensing via Wi-Fi Router and Mobile Hotspot Signals
Ruoyu Zhao, Xinyuan Cui, Kechen Liu, Haning Li, Xiaoyu Shi, Tongyang Xu
2. LoRa Frame Transmission Control for Efficient QUIC Communication Using a 920 MHz Private LoRa Interface
Hayate Sukeguchi, Daiki Nobayashi, Kazuya Tsukamoto, Takeshi Ikenaga, Goshi Sato, Kenichi Takizawa
3. Vision-Based Semantic Sensing and Non-Orthogonal Communication
Xiaoyu Shi, Yu Zhang, Tongyang Xu

4. Improving the On-Time Delivery Ratio in Multi-Queue MTQ/QTL with Deficit Round Robin on a Programmable Data Plane

Sosuke Makito, Daiki Nobayashi, Takeshi Ikenaga

Reception Party

18:00-20:00 (UTC+9) Japan Standard Time

Reception Party will be held at KWANSEI GAKUIN BIG MAMA

Thursday, 10 September, 2026

NBiS-2026 and INCoS-2026 Keynote #2**10:00-11:00 (UTC+9) Japan Standard Time****NBiS-2026 and INCoS-2026 Keynote Talk 2****Prof. Hiroshi Yamamoto:** R&D Toward Social Implementation of IoT Systems for Supporting Diverse Social Activities in Indoor and Outdoor Environments

Coffee Break**11:00-11:30 (UTC+9) Japan Standard Time**

Parallel Sessions**11:30-13:00 (UTC+9) Japan Standard Time****INCoS-S4: Network Security and Privacy I****Chair: Juggapong Natwichai, Chiang Mai University, Thailand**

1. Novel Activation Functions: SCigmoid and SSoftmax in Stochastic Computing (SC) Deep Neural Network for Resource-Constrained IoT Security
Kazi Ahmed, Myung Lee, Kazuya Tsukamoto
2. A Lightweight Intrusion Detection Method for IoT Based on Pearson–ExtraTrees Feature Selection and DSConv
RuiXuan Zhang, XiaoFang Dong, Kai Yang, LiangChen Ren, FeiFan Wu, Wang Xu An
3. A Defense Framework Against Cross-Modal Multi-Level Backdoor Attacks in Multimodal Federated Learning
Kainat Ibrar, Fatos Xhafa, Francesco Palmieri
4. Thai-context Data Privacy Assessment for Large Language Models
Kittiwit Phannachet, Phiphatphong Kawindong, Pattarapol Na Nakorn, Wayu Tharai, Titipat Sukhvitul, Juggapong Natwichai
5. Analysis of a Dynamic Auditing Scheme for Cloud-Fog-Assisted Industrial Internet of Things
Zhongqiang Liu, Xu An Wang, Weidong Zhong, Zhanpeng Du

INCoS-S5: Network Security and Privacy II**Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan**

1. Personalising Cyber Threat Intelligence for Federated Higher-Education IT: A Conceptual Framework
Opas Muensaen, Damrongsak Naparat, Thanapat Suphothina
 2. Transformer-CNN-Based Network Intrusion Detection Method
XiaoFang Dong, RuiXuan Zhang, Kai Yang, Wang Xu An
 3. Reliable Face Authentication System Using Zero-Knowledge Proofs and Blockchain Technology
Sukeno Sakura, Hideaki Miyaji, Hiroshi Yamamoto
 4. TCN-DT: A Lightweight IoT Intrusion Detection Method
XiaoFang Dong, RuiXuan Zhang, Kai Yang, LiangChen Ren, JiaRui Wang, Wang Xu An
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5. Dynamic Trust Evaluation for Secure Zero-Trust Multi-Cloud Collaborative Data Sharing
Manish Kumar, Anuj Kumar
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Lunch

13:00-14:00 (UTC+9) Japan Standard Time

Parallel Sessions

14:00-15:30 (UTC+9) Japan Standard Time

INCoS-S6: Wireless and Mobile Computing

Chair: Makoto Ikeda, Fukuoka Institute of Technology, Japan

1. A Leakage-Free Spatio-Temporal Graph Learning Framework with Node-wise Adaptive Normalization for Wireless Throughput Prediction
Pan Ruifeng, Chun Wang, Wang Xu An, Mengsheng Wang
2. DA-RLAST: Delay-Aware RLAST with Adaptive Forwarding Control for Vehicular DTN
Haruki Okazaki, Hiroki Fukue, Makoto Ikeda, Leonard Barolli
3. Drone Control Using Recognition of Multiple Consecutive Gestures without Delimiter Gesture
Masamune Izo, Hiroyoshi Miwa
4. Path Planning Algorithms for Multitask Service Robots with Patrol and Delivery Tasks
Yuka Nagahama, Hiroyoshi Miwa, Amuro Takano, Naoyuki Fujiyama

INCoS-S7: Social Networking and Graph Learning

Chair: Yusuke Sakumoto, Kwansei Gakuin University, Japan

1. Impact of Cluster Structure on Link Deletion Methods for Epidemic Suppression in Networks
Masaki Komatsu, Yusuke Sakumoto, Hiroyuki Ohsaki
 2. Toward Qualitative Analysis of Surges of Excitement on Social Networks Based on an Oscillation Model
Shusaku Hida, Yusuke Sakumoto, Masaki Aida
 3. Dynamic Spatiotemporal Graph Learning With Multi-Scale Temporal Modeling for Cellular Traffic Forecasting
Pan Ruifeng, Chun Wang, Wang Xu An, Jianjun Cai
 4. Improving Laplacian-Based Anomaly Detection in Dynamic Networks Using Graph Spectrum Shift
Koki Kampu, Yusuke Sakumoto
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Coffee Break

15:30-16:00 (UTC+9) Japan Standard Time

Parallel Sessions

16:00-17:30 (UTC+9) Japan Standard Time

INCoS-S8: Distributed Computing and Routing Algorithms**Chair: Makoto Ikeda, Fukuoka Institute of Technology, Japan**

1. Information-Restricted Selfish Routing Algorithm Suppressing Price of Anarchy
Rana Kawase, Sato Kamimura, Hiroyoshi Miwa
2. Ground Taxi Routing and Scheduling Algorithm Considering Pushback in Aviation Ground Control
Mizuna Hasegawa, Hiroyoshi Miwa
3. Resolving Catastrophic Blindness in Epistatic Motif Discovery via SHAP-Guided Tree-Ensembles
Pusit Seephueng, Prompong Sugunnasil
4. A Survey of Certificateless Signature Schemes for Resource-Constrained Dynamic Networks: Applications in UAVs, VANETs, and IoD
Zhanpeng Du, Xu An Wang, Zhongqiang Liu, Yi Su, Hao Wang

INCoS-S9: Multimedia Computing and Applications**Chair: Leonard Barolli, Fukuoka Institute of Technology, Japan**

1. Non-contact Digital Drawing System Using Air-Drawing Interface for Mobile Devices
Sosuke Tochio, Hiroyoshi Miwa
 2. Interactive Rikka Game System Using Real-Time Hand Gesture Recognition
Saki Kaneko, Hiroyoshi Miwa
 3. 3D Vehicle Position Estimation from Monocular Camera Images and Real-Time Visualization System
Ryota Fujitsuka, Hiroyoshi Miwa
 4. Enhanced Melody Recognition for Japanese Stringed Instrument Performances Considering Chords
Fujino Tochishita, Hiroyoshi Miwa
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Banquet Party**18:00-20:00 (UTC+9) Japan Standard Time**Banquet Party will be held at KWANSEI GAKUIN KAIKAN

Friday, 11 September, 2026**NBiS-2026 and INCoS-2026 Steering Committee Meeting and Discussion**

Hybrid Meeting Schedule for NBiS-2026 and INCoS-2026, 9 September to 11 September, 2026

1st day:	Room #1		Room #2		Room #3		Room #4	
Wednesday, 9 September, 2026	Meeting ID: 821 1310 0215		Meeting ID: 839 7488 8645		Meeting ID: 892 9957 0141		Meeting ID: 812 3980 9206	
	Session title	Session Chair	Session title	Session Chair	Session title	Session Chair	Session title	Session Chair
09:45-10:00 (UTC+9) Japan Standard Time	Opening							
Slot 1 10:00-11:00 (UTC+9) Japan Standard Time	NBiS-2026 and INCoS-2026 Keynote #1: Dr. Sho Tsugawa Meeting ID: 821 1310 0215							
11:00-11:30 (UTC+9) Japan Standard Time	Coffee Break							
Slot 2 11:30-13:00(UTC+9) Japan Standard Time	NBiS-S1	Isaac Woungang, Canada	DEMoC-S1	Yusuke Gotoh, Japan	INCoS-S1	Shinji Sakamoto, Japan	WIND-S1	Kazuya Tsukamoto, Japan
13:00-14:00(UTC+9) Japan Standard Time	Lunch							
Slot 3 14:00-15:30(UTC+9) Japan Standard Time	NBiS-S2	Hyunhee Park, Korea	WSSM-S1	Jun Iio, Japan	INCoS-S2	Myung Lee, USA	WIND-S2	Akihiro Fujihara, Japan
15:30-16:00(UTC+9) Japan Standard Time	Coffee Break							
Slot 4 16:00-17:30(UTC+9) Japan Standard Time	NBiS-S3	Yoshihiro Okada, Japan	WSSM-S2	Shusuke Okamoto, Japan	INCoS-S3	Francesco Orciuoli, Italy	WIND-S3	Chenglong Shao, Japan
18:00-20:00(UTC+9) Japan Standard Time	Reception Party at KWANSEI GAKUIN BIG MAMA							
2nd day:	Room #1		Room #2		Room #3		Room #4	
Thursday, 10 September, 2026	Meeting ID: 821 1310 0215		Meeting ID: 839 7488 8645		Meeting ID: 892 9957 0141		Meeting ID: 812 3980 9206	
	Session title	Session Chair	Session title	Session Chair	Session title	Session Chair	Session title	Session Chair
Slot 1 10:00-11:00 (UTC+9) Japan Standard Time	NBiS-2026 and INCoS-2026 Keynote #2: Prof. Hiroshi Yamamoto Meeting ID: 821 1310 0215							
11:00-11:30 (UTC+9) Japan Standard Time	Coffee Break							
Slot 2 11:30-13:00(UTC+9) Japan Standard Time	NBiS-S4	Hsing-Chung Chen, Taiwan	WSSM-S3	Masaki Kohana, Japan	INCoS-S4	Juggapong Natwichai, Thailand	INCoS-S5	Leonard Barolli, Japan
13:00-14:00(UTC+9) Japan Standard Time	Lunch							
Slot 3 14:00-15:30(UTC+9) Japan Standard Time	NBiS-S5	Bhad Bahadur Bista, Japan	INVITE-S1	Tomoyuki Ishida, Japan	INCoS-S6	Makoto Ikeda, Japan	INCoS-S7	Yusuke Sakumoto, Japan
15:30-16:00(UTC+9) Japan Standard Time	Coffee Break							
Slot 4 16:00-17:30(UTC+9) Japan Standard Time	NBiS-S6	Tomoya Enokido, Japan	INVITE-S2	Hideo Miyachi, Japan	INCoS-S8	Makoto Ikeda, Japan	INCoS-S9	Leonard Barolli, Japan
18:00-20:00(UTC+9) Japan Standard Time	Banquet Party at KWANSEI GAKUIN KAIKAN							
3rd day:	Room #1		Room #2		Room #3		Room #4	
Friday, 11 September, 2026	Session title	Session Chair	Session title	Session Chair	Session title	Session Chair	Session title	Session Chair
	NBiS-2026 and INCoS-2026 Steering Committee Meeting and Discussion							