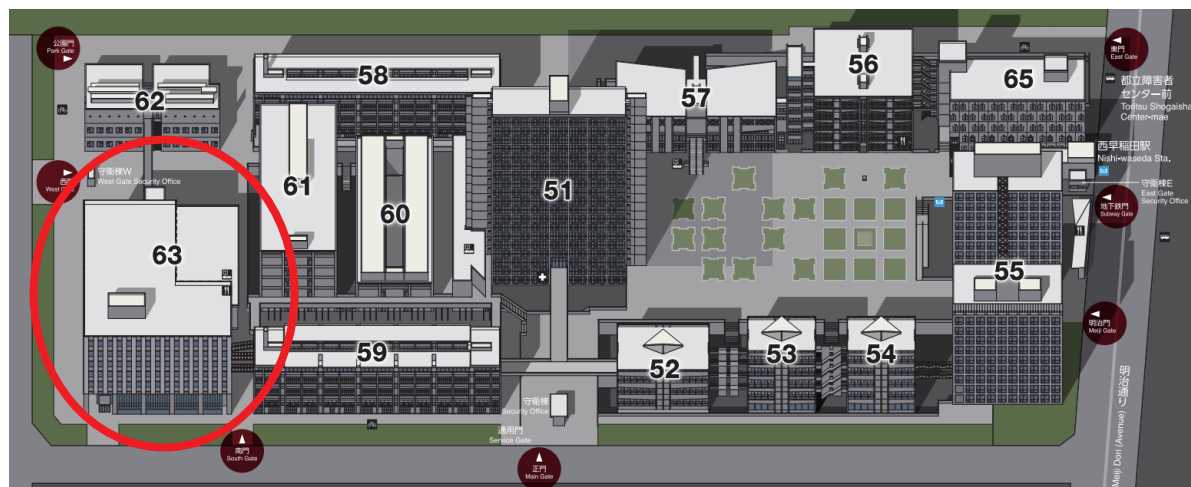# GITW 2024 Program

Global Information and Telecommunication Workshop
December 20th-21st 2024 // Tokyo, Japan (Hybrid)

Dec. 20th (DAY1)

Map (Day 1)

Conference Venue
Room 203/205, 2F, Bldg. 63,
Nishi-Waseda Campus
Waseda University,
Nishi-Waseda Campus
located at 3-4-1 Okubo,
Shinjuku City, Tokyo,
JAPAN.

Presentation

Presentaiton time: 12min (Presentation 10min, and Discussion 2min)

For on-site participants:
   If you would like to use your latest version PPT file for your presentation, please bring your USB flash drive or laptop on the venue. On the other hand, the venue PCs will contain the submitted PPT files, so you can also use the submitted PPT file for your presentation.
For online participants:
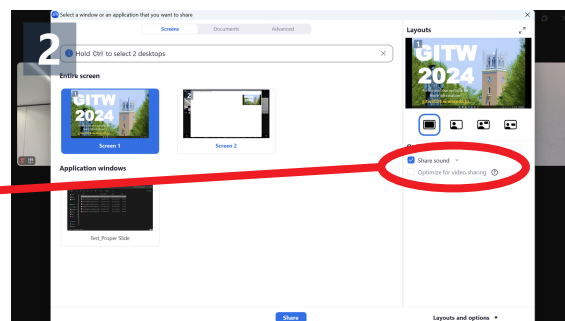   This workshop will use Zoom.
   Therefore, we would like to ask you to share a screen of your PPT in your presentation.

ZOOM

Room A: Meeting ID: 944 0997 0791   Passcode:464018
Room B: Meeting ID: 990 2674 3705   Passcode:221435

If you want to play slides with embedded audio, check the "Share sound" checkbox in zoom.
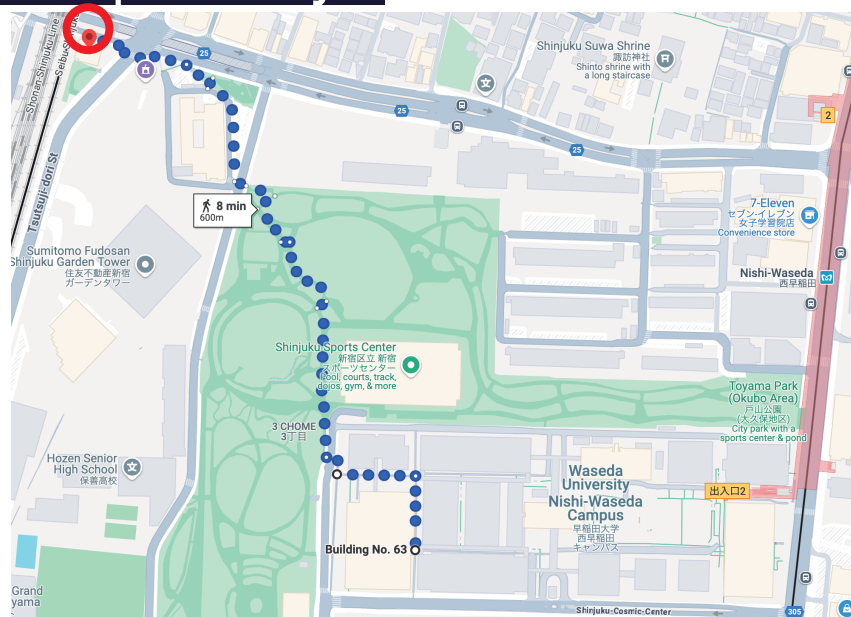

Wi-Fi

SSID: waseda-event007   Password:S6xycH9e

On-site Lunch

Lunch boxes will be distributed at 63-204.   63-203/205 for students, 63-204 for faculties.

Reception Party

18:00-19:30
Cucina Caffe OLIVA
https://cucina-caffe-oliva.jp
map https://g.co/kgs/Tqq9HxP

Opening **9:00-10:45** **(Bldg.63, 2F, Room 203)** **(Zoom Room A)**		Welcome Speech 9:00-9:05 Prof. Shigeru Shimamoto (Director of GITI, Waseda University) 9:05-9:20 Prof. Naoaki Yamanaka (President of IEICE) Group Photo Shooting 9:20-10:45 Introductions of Participant Universities (in coordination) Introduction from Co-Organizers, Prof. Mina Rho, Head of the Department of Computer Science, Hanyang University (4min) Introduction from Co-Organizers, Sheng Zhou, Head of Institute of Communications, Dept. EE, Tsinghua University (4min) Introduction from Co-Organizers, Prof. Fang-Jing Wu (National Taiwan University) (4min)					

Opening 9:00-10:45 (Bldg.63, 2F, Room 203) (Zoom Room A)	Welcome Speech
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	Introduction from GITW Session Universities: Shanghai Jiaotong University; Zhe Jiang University; Yangzhou University; SouthWest Jiaotong University; Institut Teknologi Sepuluh Nopember (ITS); University of Cambridge; Khalifa University; University de Lille (3min per each university)
	Introduction from ASPIRE Session Univerisities: Keio University, University of Houston, Norwegian University of Science and Technology, Queen's University Belfast, Memorial University, Charles Sturt University, University of California, Davis (3min per each university)

Keynote Session 10:45 (Bldg.63, 2F, Room 203) (Zoom Room A)		
	10:45-11:00	Globalization via Regionalization Professor ZhiSheng Niu (Tsinghua University)
	11:00-11:15	Hybrid Quantum-Classical Machine Learning/Optimization for 6G Prof. Trung Q. Duong (Queen's university Belfast / Memorial University)
	11:15-11:30	EarID CAN: A Novel Biometric Inspired Continuous, Active and Non-Intrusive Authentication via Acoustic Ear Scanning Prof. Miao Pan (University of Houston)

11:30-13:00	Lunch Break (63-203/205 for students, 63-204 for faculties), Lunch boxes will be distributed at 204.

		GITW Session 1A (Bldg. 63-203) (ZOOM Room A) Topics 1A Wireless Communication Chair: Fang-Jing Wu ,National Taiwan University)		ASPIRE Session 1B (Bldg.63-205) (ZOOM Room B) Topics 1B Mobile communications, ISAC Chair: Yue Yin , KEIO University		
Session 1 **13:00-15:00**	1	Md. Abir Hossain	Mawlana Bhashani Science and Technology University	B5G/6G IRS-enabled Ultra Reliable Low Latency Communication using Retransmission Mechanism and Reserved Bandwidth	Greetings from Prof. Shimamoto (Waseda Univ.) and Prof. Otsuki (Keio Univ.)	
	2	Yaodan Xu	Tsinghua University	Joint Optimization of Offloading, Batching and DVFS for Multiuser Co-Inference	Sebastian G. Groesvik	Norwegian University of Science and Technology	Parameterizing 5G New Radio: A Comparative Measurement Study on Throughput and Delay
	3	Haowei Cheng	Waseda University	A Systematic Literature Review of Generative AI in Requirements Engineering	Nathanael DANSO-NTIAMOAH	Memorial University	Learned Target Reflection Coefficient Estimation Techniques for RIS-assisted ISAC Systems
	4	Ruiqing Mao	Tsinghua University	DiffCP: Ultra-Low Bit Collaborative Perception via Diffusion Model	Wei Dai	KEIO University	A Clustering-Aided Optimization Algorithm for Antenna Beamforming in Multi-Cell HAPS Systems
	5	OUCHI Hayate	Waseda University	Investigation of Ionospheric Condition Estimation and Representation Methods from a Communication Perspective	Alice Faisal	Memorial University	DRL for Optimizing RIS-assisted FD Systems
	6	I Putu Dody Lesmana	Institut Teknologi Sepuluh Nopember	Ensemble Stacking Deep Convolutional Neural Networks for Classification and Morphological Analysis of Mosquito Genera Based on Multi-View Larvae Images	Khin Than Htay	Waseda University	Communication between Space Elevator Atmospheric Station and Ground Stations
	7	Zhuolong Li	SouthWest Jiaotong University	Research on Wide-Area Mobile Target Tracking and Positioning in Complex Electromagnetic Environments	Aseni Chamandika Jayarathne	Memorial University	Low-Complexity Detection Algorithms for RIS-assisted ISAC Systems.
	8	Shazana Dhiya Ayuni	Institut Teknologi Sepuluh Nopember	Design and Analysis of a 2.45 GHz Rectenna for Maximizing Wireless Power Transfer Efficiency	Mondher BOUAZIZ	KEIO University	A New Multi-Dimensional Semantic Communication Approach for Personalized Visualization of Shared Knowledge

15:00-15:30	Session break (30 min)

		GITW Session 2A (Bldg.63-203) (ZOOM Room A) Topics 2A Digital Contents, Communication Chair: Sheng Zhou, Tsinghua University		ASPIRE Session 2B (Bldg.63-205) (ZOOM Room B) Topics 2B Non-terrestrial communications Chair: Tu Dac Ho, Norwegian University of Science and Technology		
Session 2 **15:30-17:30**	1	Jiaqian XIE	WASEDA Univeristy	Scaled Weight-Sharing Convolutional Network for Memory-Efficient Video Frame Prediction	Thomas Zinner	Norwegian University of Science and Technology	Towards Efficient Resource Dimensioning in QoE-Aware Beyond 5G Networks
	2	Yi-Chia CHEN	National Taiwan University	Combining Present-Only and Present-Absent Data with Pseudo-Label Generation for Species Distribution Modeling	Riku NAGASE	KEIO University	Max-Min Strategy for Handover in LEO based Non-Terrestrial Networks
	3	Mohamad Zaki Azizi	Institut Teknologi Sepuluh Nopember	Driving Innovation: The Role of Digital Transformational Capability and Organizational Ambidexterity in the Automotive Components Industry	Kazutoshi Yoshii	Waseda University	Interference Fading Analysis by Multiple Waves Superposition on Ionospheric Propagation Simulation
	4	Dingjie PENG	WASEDA Univeristy	Waveformer: Innovative Token Mixing for Plug-and-Play Image Restoration	Yue Yin	KEIO University	Joint Optimization of UAV Deployment and NOMA Power Allocation for Multi-UAV-Assisted Emergency Caching Networks
	5	Mohammad Rahman	Federation University Australia	Enhancing Soil Organic Carbon Estimation Using Sequential Band Selection with 1D-CNN	Sicong Li	Waseda University	DRL-based dynamic UAV multi-cell resource allocationoptimization
	6	Usama Khalid	Hanyang University,Seoul	Real-Time Biometric Obfuscation for Enhanced Digital Privacy using YOLOv8n and U-Net	Siyuan Yang	KEIO University	Model-Based DRL for Dynamic Antenna Beamforming in HAPS Communication System
	7				IAHMED AL-HABOB	Memorial University	Network Slicing for Unmanned Aerial Vehicle Networks
	8	Dony Hutabarat	Institut Teknologi Sepuluh Nopember	A CNN-Based Obstacle Avoidance System for Electric Wheelchairs Using LiDAR and Thermal Camera	Selma Yahia	University de Lille	Dynamic 3D UAV Placement Optimization: Improved Bonobo Optimizer for Enhanced Coverage and Communication

Online presentation	Onsite presentation

18:00-19:30	Reception party (Cucina Caffe OLIVA, https://cucina-caffe-oliva.jp, map:https://g.co/kgs/Tqq9HxP),

Dec. 21st (DAY2)

Map (Day 2)
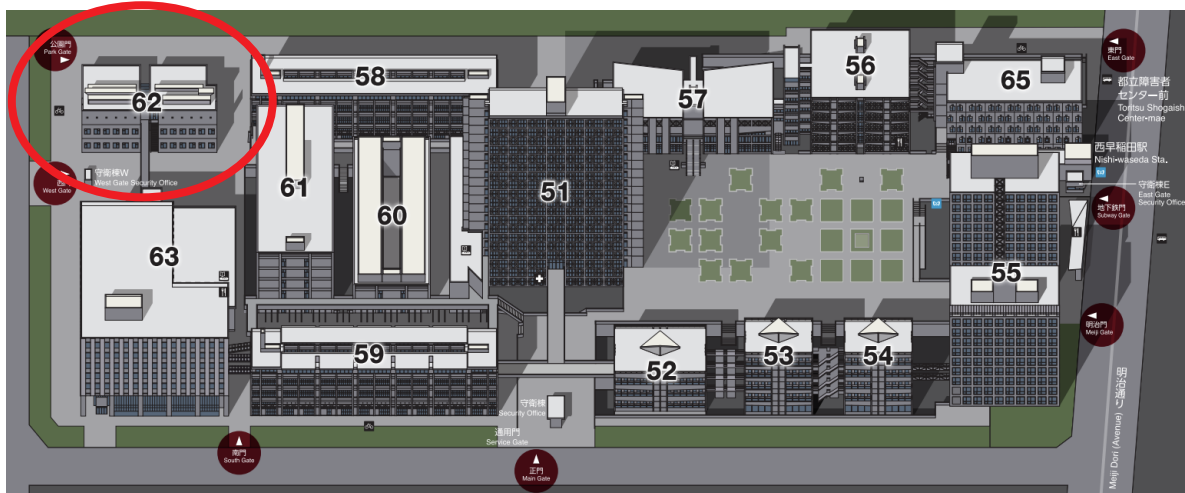
Conference Venue
Room A and B, 1F, Bldg. 62
Nishi-Waseda Campus
Waseda University,
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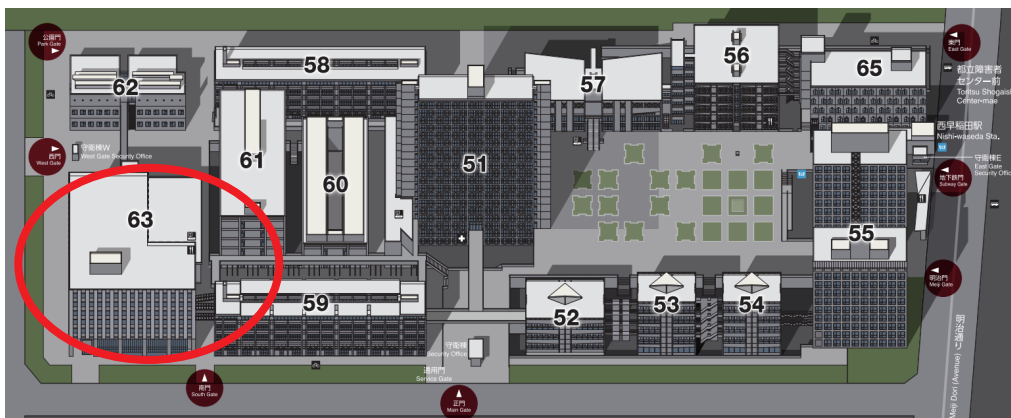check the "Share sound" checkbox in zoom.

Wi-Fi

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On-site Lunch

62-RoomA for students, 62w 1st floor "Morimura memorial lounge" for faculties),
Lunch boxes will be distributed front of RoomA

Dinner and Awards Ceremony

16:30-18:30
Rohm Square, 1F Bldg. 63,
Nishi-Waseda Campus

Session 3 (9:30–11:30)

	GITW Session 3A (Bldg. 62-Large Meeting room A) (ZOOM Room A) Topics: IoT Sensor, AI Chair: Toshitaka Tsuda , Waseda University			ASPIRE Session 3B (Bldg. 62-Large Meeting room B) (ZOOM Room B) Topics 1B Security and AI, Vehicular network Chair: Zhenni Pan, Waseda University		
1	Windi Eka Yulia RETNANI	Institut Teknologi Sepuluh Nopember	Augmenting Code Smell Using Generative Adversarial Network As a Mean To Solve Imbalance Dataset	Quazi Mamun	Charles Sturt University	The Internet of Behavior (IoB): Transforming Human Interaction in the Digital Age
2	Joko Supriyono	ITS (Institut Teknologi Sepuluh Nopember) Indonesia	TE-LSTM: Enhancing Maintenance Strategy from Winding Temperature Prediction for Induction Motors in the Oil and Gas Industry	Abdulmohsen Alsaui	Memorial University	When are Quantum Algorithms Applicable for Signal Decoding in Wireless Communication?
3	Zecheng Li	Zhejiang University	Point Cloud Generation Method for 3D Perception using Monocular Images and Radar	Muhammad Rana	Charles Sturt University	Securing IoT Networks: A Lightweight Cryptographic Solution for Society 5.0
4	JIN Yuxuan	Waseda University	Non-Contact Monitoring of Physiological Parameters Using Wi-Fi Frequency Bands	Megumi Saito	Waseda University	D2D Transmission Scheme in Emergency Situation for Mobile Networks
5	Heyi Zhang	Shanghai Jiao Tong University	BPDL: Toward Byzantine-resilient and Privacy-preserving Distributed Learning	Md Mujibur Rahman	Charles Sturt University	Federated Learning for Secure Spatial Crowdsourcing by Leveraging 6G Communication Technology
6	Kazuma Uesugi	Waseda University	Comparison of Simulation and Experimental Results in OAM Multiplexing with Misalignment-Induced Degradation	Huan Wang	Waseda University	Effects of Driving Behavior-Oriented On-street Parking Schemes on Traffic Efficiency within Urban Road Networks
7	Minseo KIM	HANYANG University	Compositional Video Understanding with Spatiotemporal Structure-based Transformers	Md Ershadul Haque	Charles Sturt University	Novel quantum circuit for image compression utilizing block partitioning and zero connection discarded approach
8	AHMED AL-HABOB	Memorial University of Newfowndland	Network Slicing for Unmanned Aerial Vehicle Networks	Yuki Uetake	Waseda University	Analysis of V2X Communication Performance through the Implementation of Fixed Assignment Window Access with Diversity and SIC

11:30-13:00	Lunch Break (62-RoomA for students, 62w 1st floor "Morimura memorial lounge" for faculties), Lunch boxes will be distributed front of RoomA

Session 4 (13:00–14:30)

	GITW Session 4A (Bldg. 62-Large Meeting room A) (ZOOM Room A) Topics: Machine Learning and AI Chair: Wu Jun , Waseda University			ASPIRE Session 4B (Bldg. 62-Large Meeting room A) (ZOOM Room B) Topics 1B Image Processing, Healthcare, Security Chair: Quazi Mamun, Charles Sturt University		
1	Hyeonseok An	Hanyang university	DeCo-YOLOs: Deformable Convolution	Hiroshi Katada	Waseda University	Performance Analysis of Bio-inspired Load Balancing Routing for Wireless Multi-hop Network
2	Rahmatika Jagad Pramundito	Institut Teknologi Sepuluh Nopember	Development of a System Dynamics Model for Policy Formulation on Investment Feasibility in Corn Land Intensification in East Java	Md Mehedi Hasan	Charles Sturt University	Adaptive Adversarial Attack and Defence Algorithm for Network Intrusion Detection Systems (A3D-NIDS)
3	Hyeonmin Mo	HANYANG University	RCFuzzer: Reinforcement learning-based Collaborative Fuzzer	Joy Dutta	Khalifa University	Transforming Future Healthcare with IoMT and Edge Computing: An Ethical and Transparent Approach to Predictive eHealth
4	Tegar Ganang Satrio Priambodo	Sepuluh Nopember Institute of Technology (ITS)	Ensemble-based Fraud Detection with Imbalanced Data of Indonesian Administrative Health-Records	Faranak TOHIDI	Charles Sturt University	Efficient Dynamic Point Cloud Compression Through Adaptive Hierarchical Partitioning
5	Mao WANG	WASEDA University	Real-Time Data Fusion for PD-ISAC based on Zadoff-Chu OFDM	Hossien Eldeeb	University of Cambridge	Toward Advanced eHealth with Explainable AI: Blockchain-Secured Systems Featuring AI-Driven Block Sensitivity for Adaptive Authentication
6	Mohammad Ovi Sanjaya	Institut Teknologi Sepuluh Nopember	Conv1D-BiLSTM: A Deep Learning-Based Multivariate Model for Multi-Step Stock Index Forecasting	Liu Chenyang	Waseda University	A Study of Pathological Symptoms Detection Employing Voice Analysis towards Daily Healthcare

14:30-15:00	Session break (30min)

Session 5 (15:00–16:00)

	GITW Session 5A (Bldg. 62-Large Meeting room A) (ZOOM Room A) Topics: Wireless Communication and AI Chair: Dong-Kyu Chae, Hanyang University			GITW Session 5B (Bldg. 62-Large Meeting room B) (ZOOM Room B) Topics: Vehicular System and Autonomous Driving Chair: Jiang Liu, Waseda University		
1	Keita IZAWA	WASEDA University	A Consideration on Applying Fine-tuning to Subjective Evaluation Estimation of Videos to Reduce Subjects' Loads	Tan Chen	Tsinghua University	Mobility Accelerates Learning: Convergence Analysis on Hierarchical Federated Learning in Vehicular Networks
2	Ruei En Liang	National Taiwan University	Semi-Supervised Learning for Stomata Detection	Mu Wang	Yangzhou University	An Efficient Cooperative Driving Scheme for Emergency Vehicle Priority through V2X Communications
3	Ke ZHANG	WASEDA Univeristy	3PS: Periodic Partial Policy Sharing for Distributed Cooperative Multi-agent Reinforcement Learning	Yilun Hu	Shanghai Jiaotong University	Artificial Intelligence Empowered Generalizable Personalized Traffic Detection Against Advanced Persistent Threats
4	chengdi jiang	Yangzhou University	An Efficient and Safe Cooperative Driving Strategy to Solve Road Deadlocks through V2V Communication	Simon Choi	Waseda University	Constructing IoT Networks using a Microbial Fuel Cell

Online presentation   Onsite presentation

16:30-18:30	Award Ceremony & Banquet (Rohm Square, 1F Bldg. 63, Nishi-Waseda Campus)