GITW 2023 PROGRAM *DRAFT

Global information and Telecommunication Workshop
December 16th 2023
Tokyo, Japan (Hybrid)

Organizer

Co-Organizers

About GITW 2023

From General Chair of GITW

General chair
Global Information and Telecommunication Institute (GITI)
Shigeru SHIMAMOTO, Director

Research in the ICT field is ever-evolving, and global perspectives are becoming more important due to rapid international developments. The gap between research projects in companies, backed by large research funds and research at universities tends to widen. The tolerance of research at universities, research cooperation among universities, and personnel exchange may help support research in companies. In addition, they also have the advantage of being more flexible than companies in terms of taking on new themes.
Against this backdrop, Waseda University GITI has established GITW with the aim of expanding its existing exchanges with overseas universities and developing a more global presence. The GITW2022 was very successful with more than 80 participants from 20 universities in 10 countries, mainly from Asia.
However, last year, due to problems with the corona, presentations were made remotely, but this year we would like to hold GITW2023 in a hybrid format.
Many new universities from Europe, such as UK, and Canada also participated, making it possible to hold the conference on a more global scale. Through these multinational research presentations and discussions, we hope to achieve international research collaboration and to obtain major international research funds.
Due to the time difference, it may be difficult to adjust the time of presentations to each

Chairs

General Chair : Professor Shigeru SHIMAMOTO (Waseda Univ.)
Co-Chairs :
HANYANG University, Professor Eun-Sol Kim
Universiti Malaysia Kelantan, Professor Rosilah Hassan
Tsinghua University,Professor Zhisheng NIU
National Taiwan University, Professor Robin Bing-Yu Chen

Committee

Shigeru SHIMAMOTO, Jiang LIU, Zhenni PAN,
Megumi SAITO, Kazutoshi YOSHII, Mao WANG, Junlong WANG (Waseda university)

About GITW 2023

Participating Universities

Australia	Charles Sturt University
Bangradish	Mawlana Bhashani Science and Technology University
Canada	Memorial University
China	Tsinghua University, Fudan University, Yangzhou University, Peking University, Shanghai Jiao Tong University, Tongji University, Zhejiang University
Indonesia	Institut Teknologi Sepuluh Nopember, University of Mataram and ITS Surabaya
Kazafstan	Nazarbayev University
Korea	HANYANG University
Malaysia	Malaysia Universiti Kebangsaan Malaysia (UKM)
Norway	NTNU - Norwegian University of Science and Technology, UiT - The Arctic University of Norway
Taiwan	Taiwan National Taiwan University, Chang Gung University
	UK Queen's University Belfast, University of Leeds

Venue and Zoom Information

Location of the event

Classroom 710 and 711, 7F, Building-11, Waseda Campus
Waseda University
1-104 Totsukamachi, Shinjuku-ku, Tokyo, 169-8050, JAPAN
* The nearest station is Waseda Station (T04) on the Tokyo Metro Tozai Line.

- All visitors should register at the reception desk in front of classroom 710 on the 7th floor of Bldg. 11. Please tell the receptionist your name and you will receive a name tag.
- The reception desk opens at 8:30 am.

https://www.waseda.jp/top/en/access/waseda-campus
https://maps.app.goo.gl/bjxYbKxbhsHbr8VN6

▲ Bldg. 11
Photos by
https://www.waseda.jp/fcom/soc/about/facility

Venue and Zoom Information

Zoom Information

[Room A]
https://list-waseda-jp.zoom.us/j/91523603039?pwd=OHNtQzdIRVQrK1k4MEdJanQ5bXJ6UT09
Meeting ID: 915 2360 3039
Passcode: 527403

[Room B]
https://list-waseda-jp.zoom.us/j/97354669490?pwd=UGI1UWhuOG83ZnNmUFc2NXFIb0x4QT09
Meeting ID: 973 5466 9490
Passcode: 053139

- These Zoom rooms will open from 8:30 a.m.
- Only those who have registered will be permitted to enter the Zoom rooms.

About the presentation

Presentation time

Presentation time is 11min. (9 min for presentation + 2 min for question and answer)

Presentation material (PPT)

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.

GITW Award

The GITW Award will be given to the most outstanding presentations of the entire workshop based on the participants' ratings.

The contact staff will give the evaluation sheet via the chat window of the zoom meetings before, during, and at the end of the Session.

All participants, including students and audience members, can vote.

*Only those who have registered will be permitted to enter the Zoom rooms.

For on-site participants

About lunch

Lunch break is 12:05-13:05.
Participants are free to choose their own lunch.
We have prepared lunch for participants.
In addition to regular lunches (beef curry, pork curry, and Japanese lunch box), we have also prepared vegan lunches.
We will be handing out lunches in Room 815 on the 8th floor of Bldg. 11.
You can eat lunch in Classrooms 710 and 711.
(It is also possible to bring your own lunch to the venue.
Also, there are many restaurants around the venue so you can go to the restaurants of your choice.)

About reception party

All participants are welcome to the reception party.
If you answered "absence" when you registered, you can join the party.
Let's have a fruitful and enjoyable party by interacting with each other.
We look forward to having you join us.
The reception party will be held at 7:00 p.m. at the following location.

- Restaurant “Mori no kaze” , 15F, Building 26, Waseda university, 516 Wasedatsurumakicho Shinjuku City Tokyo-to
  https://maps.app.goo.gl/QD1rhc8uSok1G1wc6

▲ Bldg. 26

Program

December 15

18:00	Welcome party (Faculty staff only)

December 16

Opening 9:00 - 9:45	(Room 710, 7F, Bldg.11 and Zoom Room A) 9:00-9:05 Welcome Speech Prof. Shigeru Shimamoto (Waseda University) 9:05-9:45 Introductions of Participant Universities Co-organizers : Korea...HANYANG University Malaysia...Universiti Kebangsaan Malaysia (UKM) Taiwan...National Taiwan University Participating Universities : Australia...Charles Sturt University Bangradish...Mawlana Bhashani Science and Technology University Canada...Memorial University China... Fudan University Yangzhou University Peking University Shanghai Jiao Tong University Tongji University Zhejiang University Indonesia...Institut Teknologi Sepuluh Nopember University of Mataram and ITS Surabaya Kazafstan...Nazarbayev University Norway...NTNU - Norwegian University of Science and Technology Taiwan...Chang Gung University UK... Queen's University Belfast
Keynote Session 9:55 - 10:15	(Room 710, 7F, Bldg.11 and Zoom Room A) Mobility-Enhanced Edge inTelligence (MEET) for Smart and Green 6G Networks Zhisheng Niu (Tsinghua University)

		Session 1A (Bldg.11-710) (ZOOM Room A) (Chair: Zhenni PAN, Waseda University)			Session 1B (Bldg.11-711) (ZOOM Room B) (Chair: Wataru KAMEYAMA, Waseda University)		
Session 1 10:25 - 12:05	1	Leye Wang	Peking University	An LLM-driven System for Constructing Paper-Dataset Networks	Dristi DATTA	Charles Sturt University	Novel Dry Soil and Vegetation Indices to Predict Soil Contents from Landsat 8 Satellite Data
	2	Yejin Yoon	Hanyang University	BlendX: Complex Multi-Intent Detection with Blended Patterns	Jiaqing Sun	yangzhou university	Performance Analysis of the V2V System Based on the Nakagami-m Fading Channel
	3	Yukuan Jia	Tsinghua University	MASS: Mobility-Aware Sensor Scheduling of Cooperative Perception for Connected Automated Driving	Mohamed Elsayed Mohamed Selim	Memorial University	Residual Neural Networks for Learning the Full-Duplex Self-Interference
	4	Heyi Zhang	Shanghai Jiao Tong University	Energy-Saving Privacy Preserving Trustworthy Edge AI Framework in Resource-Constrained IoT Using Zero-Knowledge Proof	Akihito SUETSUNA	WASEDA University	Analysis of physical and communication characteristics for realization of space elevator communication system
	5	Jae-Won Lee	Hanyang University	DeepFold: Enhancing Protein Structure Prediction	Kurnia Paranita Kartika Riyanti	Institut Teknologi Sepuluh Nopember	Artificial Periodic Structures for Bandwidth and Gain Enhancement of Vivaldi Antennas used in GPR Applications
	6	Tomohisa TABUCHI	WASEDA University	Improving Subspace Diffusion Generative Models	Made Sutha Yadnya	University of Mataram and ITS Surabaya	Preliminary Results from Spatial Characterization of Tropical Rain Using Weather Radar Data
	7	Weiping Li	Fudan University	Wireless Communication Outdoors: Achieving 50 Gbit/s at 320 GHz THz-Band with Photonics Assistance across 850 Meters.	Iljung Kim	Hanyang University	Variational Weighting for Kernel Density Ratios
	8	Chenyang LIU	WASEDA University	Speech Audio Based Anomaly Detection towards Mobile Healthcare System	Minseo KIM	HANYANG University	Compositional Video Learning with Spatiotemporal Graph Random Walk
	9						
12:05 - 13:05	Lunch break (Classroom 710 and 711, Lunch will be distributed in Classroom 815)						

		Session 2A (Bldg.11-710) (ZOOM Room A) (Chair: Shih-Wei Li, National Taiwan University)			Session 2B (Bldg.11-711) (ZOOM Room B) (Chair: Zhaojun Nan, Tsinghua University)		
Session 2 13:05 - 14:45	1	Qingyue Wang	Yangzhou University	Cooperative Driving of CAVs on Multi-lane Highways to Resolve Deadlocks	Sadia Sabrin Nodi	Charles Sturt University	Determination of Munsell Soil Colour Using Smartphones
	2	Haruki FURUTANI	WASEDA University	Structural dissimilarity-aware random walk kernel for graph classification	Yi Wei	Fudan University	Demonstration of 60 Gbps 135 GHz Terahertz Signal Transmission over 4600-m Wireless Distance with Photonics-aided Technology
	3	Jongsoo Lee	Hanyang university	DuoGAT: Dual Time-oriented Graph Attention Networks for Accurate, Efficient and Explainable Anomaly Detection on Time-series	MD. Amirul Hasan Shanto	Mawlana Bhashani Science and Technology University	Intelligent reflecting surface assisted ultra reliable low latency communication
	4	YANG YUE	Hanyang University	UV-Texture Map Integration in 3D Facial Modeling using Neural Networks	Haotian Chen	ZHEJIANG Univeristy	Some Key Technologies of Phased Array for LEO Satellite Broadband Communications
	5	Alif Aditya Wicaksono	Sepuluh Nopember Institute of Technology	Patch Cubification for Multi Scale Detection of Tumors in 3D Scans	GANGRAE PARK	Hanyang University	Sample-Efficient Reference-Free Control Strategy for Multi-Legged Locomotion
	6	Feby Artwodini Muqtadiroh	Institut Teknologi Sepuluh Nopember	Intelligent Insights: Safeguarding Education through AI-Enhanced Decision-Making in the Face of COVID-19	Parneet Kaur Dhindsa	Waseda University	RF Signal and Fisheye Camera Fusion for Robust Vehicular Detection
	7	Priscila Ung	Chang Gung University	A Contrastive Adversarial Domain Adaptation Approach for Brain Tumor Segmentation in MRI Images	Riandini	Institut Teknologi Sepuluh Nopember (ITS)	Segmentation of the heart on Cardiac MRI during End-Diastole and End-Systole using U-net
	8	Faranak Tohidi	Charles Sturt University	DYNAMIC POINT CLOUD COMPRESSION APPROACH USING HEXAHEDRON PARTITIONING	Hong-Kyun BAE	Hanyang University	LANCER: A Lifetime-Aware News Recommender System
	9						
14:45 - 14:55	Break (10 min)						

		Session 3A (Bldg.11-710) (ZOOM Room A) (Chair: Hiroyuki Kasai, Waseda University)			Session 3B (Bldg.11-711) (ZOOM Room B) (Chair:ZHOU SHENG, Tsinghua University)		
Session 3 14:55 - 16:35	1	Xun Su	WASEDA University	Feature Visualization based on Inverse Problem Solving with Diffusion Model	Baokang Fan	Tsinghua University	Robust Spatial-Domain Dynamic Coordination for Autonomous Vehicles at Multi-Lane Intersections
	2	Qicheng Zeng	Tsinghua University	Delay Optimization of Coded Computing With Hierarchical Task Partitioning	Jianming Huang	WASEDA University	Basis Optimal Transport for Fast Computation of Optimal Transport Problems on Multiple Distrbutions
	3	Somin Kim	Hanyang University	Effect of Augmented Reality Cues in Autonomous Vehicles: A Comparative Study according to Environment Factors	Micky Prathama	Institut Teknologi Sepuluh Nopember Surabaya Indonesia	Halal Traceability Systems in The Supply Chain for The Indonesia Cosmetics Industry
	4	Refik Caglar KIZILIRMAK	Nazarbayev University	Inter-satellite Relay Network Design and Analysis for Earth-Moon Links	Yuxin Qi	Shanghai Jiao Tong University	Privacy-Preserving Cross-Area Traffic Forecasting in ITS: A Transferable Spatial-Temporal Graph Neural Network Approach
	5	SYED HUSSAIN ALI KAZMI	Universiti Kebangsaan Malaysia (UKM)	Enhanced Framework for Intrusion Detection in Distributed Software Defined Networking using Deep Learning	Muhammad Rana	Charles Sturt University	A Key Management Scheme for Lightweight Block Ciphers in IoT Networks.
	6	Myung-Hwan Jang	Hanyang University	SAGE: A Storage-Based Approach for Scalable and Efficient Sparse Generalized Matrix-Matrix Multiplication	YASIR IBRAHEEM	Universiti Kebangsaan Malaysia (UKM)	FANET Based Data Gathering for Internet of Things Using Non-Dominated Sorting Genetic Algorithm
	7	Hao-Jung Wei	National Taiwan University	Zero-Copy Para-Virtualized I/O for Confidential Virtual Machine	Jungeun BAE	HANYANG University	Research on Motion-Based Autonomous Emotion Recognition System: A Preliminary Study according to Emotional Stimuli
	8	Tanzilal Mustaqim	Institut Teknologi Sepuluh Nopember	Superpixel-Driven Data Augmentation for Improved Deep Learning Performance	Dingjie PENG	WASEDA Univeristy	Simple and Efficient Vision Backbone Adapter for Image Semantic Segmentation
	9				Yunho KIM	Hanyang University	POWERUP: Program Option-Aware Interleaving Fuzzing Platform for High Bug Detection
16:35 - 16:45	Break (10 min)						

		Session 4A (Bldg.11-710) (ZOOM Room A) (Chair: Zheng WEN, Waseda University)			Session 4B (Bldg.11-711) (ZOOM Room B) (Chair: Jiang Liu, Waseda University)		
Session 4 16:45 - 18:25	1	Dongjin Kim	Hanyang University	Learning Controllable Degradation for Real-World Super-Resolution via Constrained Flows	Hiba Abdulrazzaq tarish	Universiti Kebangsaan Malaysia (UKM)	Network Security Multi Stage Automated Detection In IoMT Environment using Deep Learning Approach
	2	Trung Q. Duong	Queen's University Belfast	Edge Intelligence URLLC for 6G Digital Twin: Joint Communications and Computation Design	Yan Jintao	Tsinghua University	V2V-Assisted Transmission Scheme for Federated Learning
	3	Hilya Tsaniya	Institut Teknologi Sepuluh Nopember	Radiology report generator using Transformer with Image Enhancement analysis	Sungmin YOO	HANYANG University	Virtual Reality Mobility Disability Simulator for Implicit Bias of People without Disabilities: A Pilot Study
	4	Liang-Chun Chen & Yu Ting Wang	National Taiwan University	Cross Language Attacks against Rust for Linux	Myungwon KANG	HANYANG University	Advantages of Smartwatch Based Walking-Related Human-Activity-Recognition for People with Mobility Disabilities: A Pilot Study
	5	ABDULSALAM ALSHAQHAA	Universiti Kebangsaan Malaysia	Intrusion Detection in IoT Devices through Deep Learning Algorithm	Xiangxin Ji	TONGJI University	IACTS: An Intelligent Adaptive Communication Topology Switching Approach for SubT UAV
	6	Miyu MATSUDA	WASEDA University	Estimation of blood pressure in a non-contact method using 2.4GHz microwaves signals	Hayate OUCHI	WASEDA University	Estimation of the Ionospheric Environment from a Communications Perspective
	7	Md Ershadul Haque	Charles Sturt University	BLOCK-WISE QUANTUM GRAYSCALE IMAGE REPRESENTATION AND COMPRESSION SCHEME USING STATE CONNECTION	Kangkang Sun	Shanghai Jiao Tong University	Vehicular Digital Twin Context Offloading with Reinforcement Learning and Mean Field Game
	8	Selma Yahia,	NTNU - Norwegian University of Science and Technology	Optimal 3D UAV Deployment for Enhanced Coverage and Reliability of 5G Wireless Communication: An Enhanced Meta-Heuristic Approach	Tu Dac Ho	UiT - The Arctic University of Norway	Expanding the Reach of Vehicle-to-Vehicle Visible Light Communication through Bidirectional Multi-Hop Relay System
	9	Sicong LI	WASEDA Univeristy	Performance Evaluations on UAV optical communication under different weather conditions.			

19:00	Reception party ("Mori no Kaze" (森の風) 15F, Building 26)