

The FGCS 2024 Autumn International Workshop on Future Generation Computer Services

**"Future Generation Computer Services,
AI, Security, Quantum, Cloud, IoT, and Computing"**

October 9-11, 2024
Phnom Penh, Cambodia

Organized by
KCIA & AI+DA & SSL

Message from the FGCS 2024 Autumn Honorary Chairs

The FGCS 2024 Autumn "Future Generation Computer Services, AI, Security, Quantum, Cloud, IoT, and Computing" will be held in Phnom Penh, Cambodia on October 9-11, 2024. The FGCS 2024 Autumn is aimed at address key themes on " Future Generation Computer Services, AI, Security, Quantum, Cloud, IoT, and Computing ". The FGCS 2024 Autumn will be the most comprehensive conference focused on Information Technology, computing, and applications, and will provide an opportunity for academic and industry professionals to discuss the latest issues and progress in the area of future in IT, Applications, and Services (AITA). In addition, the conference will publish high quality papers which are closely related to the various theories and practical applications in future IT. Furthermore, we expect that the conference and its publications will be a trigger for further related research and technology improvements in this important subject.

Accepted and presented papers highlight new trends and challenges of Future Generation Computer Services. The presenters showed how new research could lead to novel and innovative applications. We hope you will find these results useful and inspiring for your future research.

We cordially thank all the authors for their valuable contributions and the other participants of this workshop. The workshop would not have been possible without their support. Thanks are also due to the many experts who contributed to making the event a success.

FGCS 2024 Autumn
Honorary Chairs

Doo-soon Park, SoonChunHyang University, Korea

Organization

Honorary Chair

Doo-Soon Park, Soonchunhyang University, Korea

General Chair

James J.(Jong Hyuk) Park, SeoulTech, Korea

Han-Chieh Chao, National Ilan University, Taiwan

Young-Sik Jeng, Dongguk University, Korea

David Camacho, Universidad Politécnica de Madrid, Madrid, Spain

Program Chair

Ji Su Park, Jeonju University, Korea

Jin Wang, Changsha University of Science and Technology, China

Neil Y. Yen, The University of Aizu, Japan

Stefanos Gritzalis, University of Piraeus, Greece

Sushil Kumar Singh, Marwadi University, India

Program Committee

Jungho Kang, Baewha Women's University, Korea

Hamid Arabnia, University of Georgia, USA

Victor Leung, University of British Columbia, Canada

Mohammad Obaidat, Monmouth University, USA

Ka Man, Xi'an Jiaotong-Liverpool University, China

Sherali Zeadally, University of Kentucky, USA

Arun Kumar Sangaiah, VIT University, India

David Camacho, Universidad Politécnica de Madrid, Madrid, Spain

Hwa-Young Jeong, Kyung Hee University, Korea

Deok-Gyu Lee, Seowon University, Korea

Min Choi, Chungbuk National University, Korea

Kwang-il Hwang, Incheon National University, Korea

PROGRAM SCHEDULE FOR FGCS 2024 AUTUMN

Day 1, October 9, 2024		
Time	Min	HALL A
13:00-13:30	30	Registration
13:30-15:30	120	Session A-1
15:30-16:00	30	Coffee Break
16:00-18:00	120	Session A-2
18:00-20:00	120	Banquet (Only for Invited Members)

Day 2, October 10, 2024		
Time	Min	HALL A
10:00-12:00	120	Session A-3
12:00-13:30	90	Lunch
13:30-15:30	120	Session A-4
15:30~15:50	20	Coffee Break
15:50-17:30	100	Local Arrangement Committee Meeting (Only for Invited Members)

Day 3, October 11, 2024		
Time	Min	HALL A
10:00-12:00	120	Organizing Committee Meeting I
12:00-13:30	90	Lunch
13:30-15:30	120	Organizing Committee Meeting II

1. A paper presentation should be made by one of authors of the paper for 3~40 minutes.
(2~30 minutes for the presentation itself and 10 minutes for Q/A)
2. All speakers of each session should meet the session chair at their room 10 minutes before the session begins.
3. Windows 10 laptops running the Adobe Reader and Microsoft Office for paper presentations will be prepared. Please prepare for your presentation.

DETAILED SCHEDULE FOR THE FGCS 2024 AUTUMN

Day 1, October 9, 2024 (Wednesday)

13:00-13:30 Registration

13:30-15:30 Session A-1 (On & Off)
(HALL A)
(Chair: Sushil Kumar Singh)

- 1. New Truends in IIoT**
Neil Y. Yen
- 2. A comparison of YOLOv8 with YOLOv10 for object detection in head-mounted display environments**
Seyong Jin, Hyeonjoon Moon
- 3. The Potential of Virtual Reality to Support Tele-Rehabilitation for Shoulder Injuries**
Geon-Hee Lee, Hyeonjoon Moon

15:30-16:00 Coffee Break

16:00-18:00 Session A-2 (On & Off)
(HALL A)
(Chair: Jinho Park)

- 1. Multi-Objective Federated DRL-Driven Resource Allocation Strategy for IoMT-Based UAV-Assisted WBANs**
Abir El Azzaoui, Jong Hyuk Park
- 2. A Study on the Analysis of Security Threats and Countermeasures in Quantum Networks**
Sanghyun Choi, Jong Hyuk Park
- 3. FedBlockEdge: Integrating Federated Learning and Blockchain for Trusted Digital Twins in the Industrial Edge of Things (IEoT)**
Jimin Ha, Jong Hyuk Park, Jung Ho Kang

18:00-20:00 Banquet
(Only for Invited Members)

Day 2, October 10, 2024 (Thursday)

10:00-12:00 Session A-3 (On & Off)
(HALL A)
(Chair: Deok Gyu Lee)

- 1. Secure Knowledge Extraction from Sensitive Data: Advances in Privacy-Preserving Data Mining Techniques**
Heeji Park, Jisu Park, Jong Hyuk Park
- 2. Quantum Machine Learning Meets Blockchain: Tackling ChatGPT-Generated Online Misinformation**
Mikail Mohammed Salim, Jong Hyuk Park
- 3. Federated Learning and GAN-Driven Approach for Stealthy Malware Detection in IoT Security Systems**
Tuba Arif, Jong Hyuk Park
- 4. Approaches to Utilizing Generative AI for Vulnerability Analysis**
Ji Su Park

12:00-13:30 Lunch

13:30-15:30 Session A-4 (On & Off)
(HALL A)
(Chair : Ji Su Park)

- 1. Industry Trends in Multi/Hybrid Cloud**
Sung Chul Yu (Ssangyong Information & Communications Corp)
- 2. Methods for Collecting and Analyzing Spatial Data**
Bong Sang Seo (ALL4LAND co.,LTD)

15:30-15:50 Coffee Break

15:50-17:30 Local Arrangement Committee Meeting
(Only for Invited Members)

Day 3, October 11, 2024 (Friday)

10:00-12:00 Organizing Committee Meeting I

12:00-13:30 Lunch

13:30-15:30 Organizing Committee Meeting II

Conference Venue



NagaWorld Hotel, Phnom Penh, Cambodia

Address: Samdach Hun Sen Park, Samdech Techo, Phnom Penh 120101, Cambodia

<https://www.nagaworld.com>

