# ICTC 2024

## October 16th (Wednesday)

| Room | Ramada Ballroom1 (200) | Ramada Ballroom2 (60) | Ramada Ballroom3 (60) | Ramada Ballroom4 (60) | Mara Room (30) | Biyang Room (30) | Udo Room (30) | Chuja Room (30) | Lobby | Tamna Room (120) | Halla Room (90) | Ora Room (60) | Ara Room (60) | Lobby |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Floor | | | 2F | | | | | | | | | 8F | | |
| | | A1 | B1 | C1 | D1 | E1 | F1 | G1 | H1 | I1 | J1 | K1 | L1 | P1 |
| 09:00~10:30 (90min) | SPC Special Session I: Recent progress in B5G/6G wireless communications<br>Chair: Prof. Seung Hyun Jeon (Daejeon Univ., Korea)<br>· Invited Talk 1: Chunguo Li, Professor, National Mobile Communications Research Laboratory, Southeast University, "Over-the-Air Channel Calibration Towards 6G systems"<br>· Invited Talk 2: Taehyoung Kim, Assistant Professor, Kookmin University, "Evolution of duplex operation for 5G-Advanced"<br>· Invited Talk 3: Alaelddin F. Y. Mohammed, Assistant Professor, Dongshin University, "Innovative Bandwidth Allocation in Passive Optical Networks to support Federated Learning" | AI in Computer Vision and Image Processing Prof. Joongheon Kim (Korea University, Korea) | Machine Learning 1 Prof. TBA (TBA, TBA) | Networks 1 Prof. TBA (TBA, TBA) | Algorithms 1 Prof. TBA (TBA, TBA) | ICTC Workshop on 3D Communication Networks (IW3CN) Prof. Jihwan Choi (Korea Advanced Institute of Science & Technology, Korea) | ICTC Workshop on Artificial Intelligence and Applications (IWAIA) 1 Prof. Dong-Seok Han (Kyungpook Nat'l University, Korea) | ICTC Workshop on 6G STAR-MAC (IW6STAR) Prof. Sunghyun Cho (Hanyang University, Korea) | AI Poster 1 Dr. Joo Yong Shim (Korea University, Korea) | No Session | No Session | No Session | No Session | No Session |
| 10:30-10:50 | Coffee Break | | | | | | | | | | | | | |
| | | A2 | B2 | C2 | D2 | E2 | F2 | G2 | H2 | I2 | J2 | K2 | L2 | P2 |
| 10:50~12:20 (90min) | Industrial Session I<br>Chair: Dr. Tae Yeon Kim (ETRI, Korea)<br>· Invited Talk 1: Italo Busi, Principal Optical Transport Network Research Engineer, Huawei, "From Automation to Autonomous: Intelligence in Optical Networks Management"<br>· Invited Talk 2: MoonKook Park, Director, Group Leader, Mobigen, "End-to-End Service Innovation through Autonomous Network Federation in heterogeneous 5G/6G networks"<br>· Invited Talk 3: Zoran Utkovski, Senior Research Scientist, Fraunhofer Heinrich Hertz Institute Berlin, "Next Generation Communication, Sensing and Computation for Edge Intelligence" | AI Application Prof. Soyi Jung (Ajou University, Korea) | Machine Learning 2 Prof. TBA (TBA, TBA) | Convergence 1 Prof. TBA (TBA, TBA) | Mobility 1 Prof. TBA (TBA, TBA) | ICTC Workshop on Intelligent Secure Underwater Communication Technology (IWINSECT) Prof. Namyoon Lee (Korea University, Korea) | ICTC Workshop on Artificial Intelligence and Applications (IWAIA) 2 Prof. Dong-Seok Han (Kyungpook Nat'l University, Korea) | Tutorial 1,2 Prof. TBA (TBA, TBA) | Poster Session 1 Prof. TBA (TBA, TBA) | S6GC General Session I: 6G Radio and Components Dr. Jung Hwan Hwang (Electronics & Telecommunications Research Institute, Korea) | ICTC WORKSHOP OF BIG DATA and 5G&6G COMMUNICATION NETWORKS (IWBCN) 1 Prof. Woongsoo Na (Kongju Nat'l University, Korea) | S6GC General Session II: 6G NTN Dr.JunHwan Lee (Electronics & Telecommunications Research Institute, Korea) | ICTC 2nd Workshop on Native AI for B5G and 6G (IWNA) Prof. Seung-Woo Ko (Inha University, Korea) | No Session |
| 12:20~13:40 | Lunch | | | | | | | | | | | | | |
| | | A3 | B3 | C3 | D3 | E3 | F3 | G3 | H3 | I3 | J3 | K3 | L3 | P3 |
| 13:40~15:10 (90min) | SPC Special Session II: Innovation for ICT convergence<br>Chair: Prof. Hyunbum Kim (Incheon National Univ., Korea)<br>· Invited Talk 4: Sang-Hoon Jeon, Assistant Professor, The University of Suwon, "Cascade Windows-based Multi-stream Convolutional Neural Networks Framework for Early Detecting In-Sleep Stroke using Wristbands"<br>· Invited Talk 5: KaiLin Wan, Senior Engineer, Chang-an Auto, Ltd., "Thoughts And Practices On The Commercial Implementation Of Intelligent Driving"<br>· Invited Talk 6: Paolo Bellavista, Professor, University of Bologna, "Cloud Continuum Digital Twins for Industry 5.0 Apps: the Ultra-Low-Latency Challenge" | AI in Communication, Networks, and Satellite Systems Prof. Youn Kyu Lee (Hongik University, Korea) | Wireless 1 Prof. TBA (TBA, TBA) | Convergence 2 Prof. TBA (TBA, TBA) | IoT 1 Prof. TBA (TBA, TBA) | ICTC Workshop on Vehicle Edge & Cloud Computing (IWVECC) Prof. Ji-Woong Choi (Daegu Gyeongbuk Institute of Science and Technology, Korea) | ICTC Workshop on AJOU 6G Research Center (IWAGRC) Prof. Jae-Hyun Kim (Ajou University, Korea) | Tutorial 3,4 Prof. TBA (TBA, TBA) | Poster Session 2 Prof. TBA (TBA, TBA) | S6GC Opening Ceremony Dr. Namseok Ko (Electronics & Telecommunications Research Institute, Korea) | ICTC WORKSHOP OF BIG DATA and 5G&6G COMMUNICATION NETWORKS (IWBCN) 2 Prof. Laihyuk Park (Seoul Nat'l University of Science & Technology, Korea) | ICTC Workshop on Next Generation Channel Coding and Its Applications (IWNGCCA) Prof. Sang-Hyo Kim (Sungkyunkwan University, Korea) | ICTC Workshop on Quantum Internet (Special Session for ITRC, Korea University) Prof. Jun Heo (Korea University, Korea) | ICTC Workshop on ETRI Human Understanding AI Paper Challenge (IWETRIAI) Dr. Hyun-Tae Jeong (Electronics & Telecommunications Research Institute, Korea) |
| 15:10-15:30 | Coffee Break | | | | | | | | | | | | | |
| 15:30~17:00 (90min) | Plenary Session I: Opening Ceremony and Keynote Speeches (Ramada Ballroom1)<br>Chair: Prof. Kwang Soon Kim (Yonsei Univ., Korea, TPC Chair of ICTC 2024)<br>· Opening Address: TBA<br>· Congratulatory Address: TBA<br>· Keynote Speech 1: Okgee Min, Senior Vice President, ETRI, "Looking at next-generation artificial intelligence technology"<br>· Keynote Speech 2: David Gesbert, Professor and Director of EURECOM, Sophia Antipolis, France, "Learning and sensing in the sky with UAV-aided 6G Networks" | | | | | | | | | | | | | |
| 17:00~18:00 | Coffee Break | | | | | | | | | | | | | |
| 18:00~20:00 (120min) | Banquet (Ramada Ballroom 1, 2, 3, 4)<br>· Welcome Address : Dr. Yongsoon Baek, OC Chair of ICTC 2024<br>· TPC Report : Prof. Kwang Soon Kim, TPC Chair of ICTC 2024<br>· Awards Ceremony<br>· Banquet Course | | | | | | | | | | | | | |

## October 17th (Thursday)

| Room | Ramada Ballroom1 (200) | Ramada Ballroom2 (60) | Ramada Ballroom3 (60) | Ramada Ballroom4 (60) | Mara Room (30) | Biyang Room (30) | Udo Room (30) | Chuja Room (30) | Lobby | Tamna Room (120) | Halla Room (90) | Ora Room (60) | Ara Room (60) | Lobby |
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| Floor | | | 2F | | | | | | | | | 8F | | |
| | | A4 | B4 | C4 | D4 | E4 | F4 | G4 | H4 | I4 | J4 | K4 | L4 | P4 |
| 08:30~10:00 (90min) | SPC Special Session III: AI enables everything !<br>Chair: Prof. Yong-Geun Hong (Daejeon Univ., Korea)<br>· Invited Talk 7: Burak Kantarci, Professor, University of Ottawa, "AI-Enabled Security and Safety of Critical Infrastructures for Beyond 5G"<br>· Invited Talk 8: Jaeik Jeong, Senior Researcher, ETRI, "Time-Varying Constraint-Aware Reinforcement Learning for Energy Storage Control"<br>· Invited Talk 9: Rashid Ahmad, Assistant Professor, Sohar University, "Decentralized Federated Learning: Opportunities and Challenges" | AI Application 2 Prof. Joongheon Kim (Korea University, Korea) | Machine Learning 3 Prof. TBA (TBA, TBA) | Networks 2 Prof. TBA (TBA, TBA) | Algorithms 2 Prof. TBA (TBA, TBA) | ICTC workshop on ERC center (IWERC) Prof. Inkyu Lee (Korea University, Korea) | ICTC Workshop on Wireless Applications (IWWA) Prof. Seung-Hoon Hwang (Dongguk University, Korea) | Tutorial 5,6 Prof. TBA (TBA, TBA) | AI Poster 2 Dr. Joo Yong Shim (Korea University, Korea)+B21:O27 | SCSS Technical Session 1 Prof. Jung Hoon Lee (Hankuk University of Foreign Studies, Korea) | S6GC Special Session I: 6G Fundamental Technology Festival Dr.JungSook Bae (Electronics & Telecommunications Research Institute, Korea) | ICTC WORKSHOP OF BIG DATA and 5G&6G COMMUNICATION NETWORKS (IWBCN) 3 Prof. Hyosu Kim (Chung-Ang University, Korea) | S6GC Special Session II: IITP Next Generation MAC and 3D Communication Technologies Dr.SungHo Choi (IITP, Korea) | S6GC Poster Session 1 Dr.Hoon Lee Dr.Won Seok Han Dr.Seokwon Jang (Electronics & Telecommunications Research Institute, Korea) |
| 10:00~10:20 | Coffee Break | | | | | | | | | | | | | |
| 10:20~11:40 (80min) | Plenary Session II: Keynote Speeches (Ramada Ballroom1)<br>Chair: TBA<br>· Keynote Speech 3: Chirag Patel, Director of Product Management, Globalstar, "Complementary Convergence: How Satellite and Terrestrial Address Challenges of Mobile and Fixed IoT Use Cases"<br>· Keynote Speech 4: Robert W. Sumner, Adjunct Professor, ETH Zurich, "Fun is the Future" | | | | | | | | | | | | | |
| 11:40~13:00 | Lunch | | | | | | | | | | | | | |
| | | A5 | B5 | C5 | D5 | E5 | F5 | G5 | H5 | I5 | J5 | K5 | L5 | P5 |
| 13:00~14:30 (90min) | Industrial Session II<br>Chair: Dr. Taesik Cheung (ETRI, Korea)<br>· Invited Talk 4: Seunghyun Lee, Principal Engineer, Samsung Research, Samsung Electronics, "Technical Evolution Towards 6G"<br>· Invited Talk 5: Minjun Park, Senior Engineer, Hanwha Systems, "Virtual Integrated Operation Platform (VIPP) for UAM Flight Simulation"<br>· Invited Talk6 : Nicola di Pietro, R&I Engineer and Subsidized Project Specialist, Hewlett Packard Enterprise, "From cloud to edge: an industrial overview of private 5G deployments, solutions, and use cases" | Quantum and Reinforcement Learning Prof. Joongheon Kim (Korea University, Korea) | Wireless 2 Prof. TBA (TBA, TBA) | Convergence 3 Prof. TBA (TBA, TBA) | Mobility 2 Prof. TBA (TBA, TBA) | ICTC Workshop on Military Informatics (IWMI) 1 Prof. Taesoo Jun (Kumoh Nat'l Institute of Technology, Korea) | ICTC Workshop on Emerging Topics in Machine Intelligence (IWETMI) Prof. Won-Yong Shin (Yonsei University, Korea) | ICTC Workshop on Communication, Sensing, and Perception for Unmanned Vehicles (IWCSUV) Prof. Igbafe Orikumhi (Hanyang University, Korea) | Poster Session 3 Prof. TBA (TBA, TBA) | SCSS Ooenning Ceremony and Keynote Speeches Prof. Heejung Yu (Korea University, Korea) | S6GC General Session III: 6G RAN Dr.JungSook Bae (Electronics & Telecommunications Research Institute, Korea) | S6GC General Session IV: 6G Mobile Core Dr. Namseok Ko (Electronics & Telecommunications Research Institute, Korea) | S6GC Special Session III: IITP Radio Transmission, Access, and Post-OFDM technologies Dr.SungHo Choi (IITP, Korea) | S6GC Poster Session 2 Dr.Won Seok Han Dr.Minhyup Song (Electronics & Telecommunications Research Institute, Korea) |
| 14:30~14:50 | Coffee Break | | | | | | | | | | | | | |
| | | A6 | B6 | C6 | D6 | E6 | F6 | G6 | H6 | I6 | J6 | K6 | L6 | P6 |
| 14:50~16:20 (90min) | SPC Special Session IV: Future Digital World<br>Chair: Prof. Kyungsik Min (The Univ. of Suwon, Korea)<br>· Invited Talk 10: Jalel Ben-Othman, Full Professor, University of Paris-Saclay, "Transforming Urban Mobility and Vehicle Security: Exploring ICT Advances in Smart City Networks"<br>· Invited Talk 11: Sangkeum Lee, Assistant Professor, Hanbat National University, "AI-Driven Optimization of Sensor Networks for Carbon-Neutral Infrastructure: From Apartments to Factories and Seaports"<br>· Invited Talk 12: Wonhyuk Lee, Director, KISTI, "The Introduction of Research Activities on implementing secure communication based on QKD" | Convergence of AI and 6G (ITRC 6G) Prof. Kyoungjae Lee (Hanbat Nat'l University, Korea) | Machine Learning 4 Prof. TBA (TBA, TBA) | Convergence 4 Prof. TBA (TBA, TBA) | IoT 2 Prof. TBA (TBA, TBA) | ICTC Workshop on Military Informatics (IWMI) 2 Prof. Jaemin Lee (Kumoh Nat'l Institute of Technology, Korea) | ICTC Workshop on Emerging Topics in Wireless Communications (IWETWC) Prof. Jun Won Choi (Seoul Nat'l University) | ICTC Workshop on Information and Communication Strategic Technology for Industry Convergence (IWICST) Prof. Yeonho Chung (Pukyong National University, Korea) | Poster Session 4 Prof. TBA (TBA, TBA) | SCSS Technical Session 2 Dr. Pansoo Kim (Electronics & Telecommunications Research Institute, Korea) | S6GC General Session V: 6G Commercialization R&D Dr. Tae Yeon Kim (Electronics & Telecommunications Research Institute, Korea) | ICTC Workshop on Access Technology, Softwarization, and Ingelligence in Open RAN (IWORAN) Prof. Dong Ku Kim (Yonsei University, Korea) | S6GC Special Session IV: IITP Radio Access and MIMO Technologies Dr.SungHo Choi (IITP, Korea) | SCSS Poster Session 1 Prof. Hu Jin (Hanyang University) Prof. Hyowon Kim (Chungnam National University) |
| 16:20~16:40 | Coffee Break | | | | | | | | | | | | | |
| 16:40~18:00 (80min) | Plenary Session III: Keynote Speeches (Ramada Ballroom1)<br>Chair: TBA<br>· Keynote Speech 5: Wootae Kim, Vice President, KT Network R&D Lab, "AI-Driven Network Operations with Cloud-native Network"<br>· Keynote Speech 6: Bernhard Niemann, Director Communication Systems Division, Fraunhofer IIS, "Our path to 6G: Fraunhofer Lighthouse Project 6G SENTINEL" | | | | | | | | | | | | | |

## October 18th (Friday)

| Room | Ramada Ballroom1 (200) | Ramada Ballroom2 (60) | Ramada Ballroom3 (60) | Ramada Ballroom4 (60) | Mara Room (30) | Biyang Room (30) | Udo Room (30) | Chuja Room (30) | Lobby | Tamna Room (120) | Halla Room (90) | Ora Room (60) | Ara Room (60) | Lobby |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Floor | | | 2F | | | | | | | | | 8F | | |
| | | A7 | B7 | C7 | D7 | E7 | F7 | G7 | H7 | I7 | J7 | K7 | L7 | P7 |
| 08:30~10:00 (90min) | SPC Special Session V: AI, data and related enabler<br>Chair: TBA<br>· Invited Talk 13: Rui Luis Andrade Aguiar, Head of Networks and Services, Instituto de Telecomunicações / Universidade de Aveiro, "Research Opportunities for the future smart society"<br>· Invited Talk 14: Alberto P. Martí, VP of Open Source Innovation & Chair of the IPCEI-CIS Industry Facilitation Group, OpenNebula Systems, "Why is Europe investing €3B in a sovereign edge cloud?"<br>· Invited Talk 15: JeongGil Ko, Professor, Yonsei University, "Migrating the Intelligence from the Cloud to Users"<br>· Invited Talk 16: Song JaeSeung, Professor, Sejong University, "Enabling common service functions for AI to standardized IoT platforms" | Innovations in Nonlinear Theory and Smart Communications Prof. Mikio Hasegawa (Tokyo University of Science, Japan) | Machine Learning 5 Prof. TBA (TBA, TBA) | Wireless 3 Prof. TBA (TBA, TBA) | Networks 3 Prof. TBA (TBA, TBA) | ICTC Workshop on 6G Core Network (IW6GN) Prof. Yun Won Chung (Soongsil University, Korea) | ICTC Workshop on AI-native 6G (IW6AI) Prof. Saewoong Bahk (Seoul Nat'l University, Korea) | ICTC Workshop on Next-generation vRAN for Industrial Applications (IWvRAN) 1 Prof. Seong-Lyun Kim (Yonsei University, Korea) | Poster Session 5 Prof. TBA (TBA, TBA) | No Session | No Session | General AI Applications Prof. Joongheon Kim (Korea University, Korea) | Healthcare, Biomedicine, and AI for Medical Applications Prof. Soyi Jung (Ajou University, Korea) | No Session |
| 10:00-10:20 | Coffee Break | | | | | | | | | | | | | |
| | | A8 | B8 | C8 | D8 | E8 | F8 | G8 | H8 | I8 | J8 | K8 | L8 | P8 |
| 10:20-11:50 (90min) | SPC Special Session VI: Enabling AI Technologies to Smart City<br>Chair: TBA<br>· Invited Talk 17: Antonio Kung, Executive board, Trialog, "Impact of the evolution of standards on the citiverse"<br>· Invited Talk 18: Monique Calisti, CEO, Martel, "Next Generation Internet and Smart City"<br>· Invited Talk 19: Chandra Challagonda, Vice President, Business Development, FIWARE Foundation, "Building Fair and Inclusive AI: Harnessing Global Data Spaces for Collaborative Training"<br>· Invited Talk 20: Jeonghyeok PARK, General Manager, K-water(Korea Water Resources Corporation), "Augmented Cities, Enhanced Capabilities: Improving QoL through Digital Twins" | ICTC Workshop on Satellites & Radars Radio Technologies (IWSRRT) Prof. Sungtek Kahng (Incheon Nat'l University) | Machine Learning 6 Prof. TBA (TBA, TBA) | Wireless 4 Prof. TBA (TBA, TBA) | Convergence 5 Prof. TBA (TBA, TBA) | ICTC Workshop on Network Softwarization (IWNetSoft) Prof. Sangheon Pack (Korea University, Korea) | ICTC Workshop on 6G Research Initiative (IW6RI) Prof. Kyunghan Lee (Seoul Nat'l University, Korea) | ICTC Workshop on Next-generation vRAN for Industrial Applications (IWvRAN) 2 Prof. Seong-Lyun Kim (Yonsei University, Korea) | Poster Session 6 Prof. TBA (TBA, TBA) | No Session | No Session | ICTC Workshop on 6G SRAN (IW6GSRAN) Mr. Yonghwi Kim (Yonsei University, Korea) | Reinforcement Learning, Optimization, and Advanced AI Architectures Prof. Dongwoo Kang (Hongik University, Korea) | No Session |