

## “Data, Network, and AI in the age of 'Untact'”



### ICTConvergence Symposium Program at a Glance

October 21th (Wednesday), 2020

Time	Program
08:30-10:10	<b>Special Session I: AI-based Evolution for Networking</b> (Ramada Ballroom 4) • Invited Talk 1: Prof. Won-Yong Shin, Yonsei University, Korea, “Personalized Preference Learning for Caching: A Data Analytics Perspective” • Invited Talk 2: Dr. Jinsung Lee, University of Colorado Boulder, USA, “Improving Live Video Streaming via Deep Learning-based Cellular Uplink Prediction” • Invited Talk 3: Prof. Rongpeng Li, Zhejiang University, China, “DRL-based Resource Management in Network Slicing for 5G and Beyond”
10:10-10:30	Coffee Break
10:30-11:20	<b>Plenary Session I: Keynote Speeches and Opening Ceremony</b> (Ramada Ballroom 1) • Opening Address: Prof. Saewoong Bahk, President of KICS • Keynote Speech 1: Dr. Sunghyun Choi, Head of Advanced Communications Research Center, Samsung Electronics, Korea, “Challenges and Prospect of Next-Generation Mobile Communications”
11:20-12:40	Lunch
12:40-14:10	<b>Industrial Session I</b> (Ramada Ballroom 1) • Invited Talk 4: Dr. Sungjin (James) Kim, Senior Research Fellow (VP), LG Electronics, Korea, “Connected Intelligence in the Future Intelligent Mobile Communication Systems” • Invited Talk 5: Mr. Satoshi Nagata, Manager, 3GPP TSG-RAN Vice Chairman, NTT DOCOMO, INC., Japan, “5G Standardization and NTT DOCOMO’s Activity” • Invited Talk 6: Mr. Anders Johansson, Head of R&D Ericsson-LG / R&D Site Head of 5G/6G SW Development in Ericsson, Korea/Shanghai, “Internet of Sensors/Thoughts Enabling Industry and Society Transformation”
14:10-14:30	Coffee Break
14:30-16:10	<b>Special Session II: AI-based Evolution for Communications</b> (Ramada Ballroom 4) • Invited Talk 7: Prof. Tony Quek, Singapore University of Technology and Design (SUTD), Singapore, “Learning at the Network Edge – Intelligence and Computation” • Invited Talk 8: Dr. Chulhong Min, Research Scientist, Nokia Bell Labs, UK, “Sensory AI Software Platform for Multi-Device Environments” • Invited Talk 9: Dr. Jaeseong Jeong, Senior Specialist AI for Optimization, Ericsson Research AI, Sweden, “Learning-Based Cellular Softwarization for Network Optimization”
16:10-16:30	Coffee Break
16:30-17:50	<b>Plenary Session II: Keynote Speeches</b> (Ramada Ballroom 1) • Keynote Speech 2: Prof. Lajos Hanzo, University of Southampton, UK, “Rebooting Communications” - A Quantum-Signal Processing Perspective” • Keynote Speech 3: Dr. Yoon Kim, CTO, SK Telecom, Korea, “Human-Centered AI for a Hyperconnected Post-COVID World”
17:50-18:10	Coffee Break
18:10-20:10	<b>Banquet</b> (Ramada Ballroom 1) • Congratulatory Address: Seung Chan Bang, Organizing Committee Chair • TPC Report • Awards Ceremony • Best Paper Award, Excellent Paper Award • Banquet Course

### October 22th (Thursday), 2020

Time	Program
08:30-10:10	<b>Special Session III: New Waves</b> (Ramada Ballroom 4) • Invited Talk 7: Prof. Kangwook Lee, University of Wisconsin-Madison, USA, “Information Theory and Coding for Trustworthy and Scalable Machine Learning” • Invited Talk 8: Dr. Young-Jo Ko, Director, 6G Wireless Technology Research Section, ETRI, Korea, “6G Vision & Enabling Technologies” • Invited Talk 9: Prof. Jihwan Choi, DGIST, Korea, “Satellite Communications in 5G and Beyond”
10:10-10:30	Coffee Break
10:30-12:10	<b>Special Session IV: Future Services and Their Enablers</b> (Ramada Ballroom 4) • Invited Talk 10: Prof. Young-Sung Lee, Chungbuk National University College of Medicine, Korea, “Now and Future in Medicine” • Invited Talk 11: Prof. Jun Han, National University of Singapore, Singapore, “Benefits and Risks of Sensing for IoT Security” • Invited Talk 12: Dr. Kitaeg Lim, Director, Korea Electronics Technology Institute (KETI), Korea, “Trend of V2X Communication Technology for Autonomous Vehicle”
12:10-13:30	Lunch
13:30-15:00	<b>Industrial Session II</b> (Ramada Ballroom 1) • Invited Talk 4: Dr. Jung-Woo Ha, Head of AI Research, NAVER Corp., Korea, “NAVER AI That Everyone Meets in Dailylife” • Invited Talk 5: Dr. Intaik Park, Vice President, Samsung Electronics, Korea, “Softwarization and Intelligence in Mobile Communication Systems” • Invited Talk 6: Dr. Volker Ziegler, 6G Leadership, Nokia Bell Labs & CTO, Germany, “5G and Beyond - Opportunity for Digital Transformation and Leapfrog”
15:00-15:30	Coffee Break
15:30-17:30	<b>Plenary Session III: Keynote Speeches</b> (Ramada Ballroom 1) • Keynote Speech 4: Mr. Edward Zhou, VP of Global Public Affairs, Huawei, China, “ICT for Post Covid-19: From Pandemic Resilience to Economic Recovery” • Keynote Speech 5: Prof. Mohamed-Slim Alouini, King Abdullah University of Science and Technology (KAUST), Saudi Arabia, “Unleashing the Potential of Tethered Networked Flying Platforms” • Keynote Speech 6: Dr. Sang-Kyu Park, Executive Vice President, Electronics and Telecommunications Research Institute (ETRI), Korea, “Technology Strategy of ETRI for x + AI”

### October 23th (Friday), 2020

Time	Program
08:30-10:10	<b>Special Session V: Toward New Spectrum</b> (Ramada Ballroom 4) • Invited Talk 13: Prof. Xiaolong Zheng, Beijing University of Posts and Telecommunications (BUPT), China, “Cross-technology Communication: A Protocol Stack View” • Invited Talk 14: Dr. Seok-Bong Hyun, Director, Communication RF Research Section, ETRI, Korea, “Sub-THz RF Component and System Design Considerations for Wireless Backhaul Links” • Invited Talk 15: Dr. Jin Sam Kwak, CEO, WILUS Inc., Korea, “New Opportunities and Challenges in Unlicensed Spectrum”
10:10-10:30	Coffee Break
10:30-12:10	<b>Special Session VI: Softwarized Radio</b> (Ramada Ballroom 4) • Invited Talk 16: Mr. Valeriy Cherepennikov, Director for Intelligent Computing, Huawei Russia Lab, Russia, “Development of the ARM Ecosystem for Artificial Intelligence, Cloud and High Performance Computing” • Invited Talk 17: Prof. Juyeop Kim, Sookmyung Women’s University, Korea, “Commercializing Software Defined User Equipment for Beyond 5G Systems” • Invited Talk 18: Dr. Kyeongjun Ko, Senior Researcher, Korea Railroad Research Institute (KRRI), Korea, “5G SDR Prototype Based on MATLAB and QualNet”

### October 21th (Wednesday), 2020

**Special Session I : AI-based Evolution for Networking** Ramada Ballroom 4 08:30-10:10

**Personalized Preference Learning for Caching: A Data Analytics Perspective**  
Prof. Won-Yong Shin  
*Yonsei University, Korea*

**Improving Live Video Streaming via Deep Learning-based Cellular Uplink Prediction**  
Dr. Jinsung Lee  
*University of Colorado Boulder, USA*

**DRL-based Resource Management in Network Slicing for 5G and Beyond**  
Prof. Rongpeng Li  
*Zhejiang University, China*

  
  


**Keynote Speeches** Ramada Ballroom 1 10:30-11:20

**Challenges and Prospect of Next-Generation Mobile Communications**  
Dr. Sunghyun Choi  
*Head of Advanced Communications Research Center, Samsung Electronics, Korea*

**Industrial Session I** Ramada Ballroom 1 12:40-14:10

**Connected Intelligence in the Future Intelligent Mobile Communication Systems**  
Dr. Sungjin (James) Kim  
*Senior Research Fellow (VP), LG Electronics, Korea*

**5G Standardization and NTT DOCOMO’s Activity**  
Mr. Satoshi Nagata  
*Manager, 3GPP TSG-RAN Vice Chairman, NTT DOCOMO, INC., Japan*

**Internet of Sensors/Thoughts Enabling Industry and Society Transformation**  
Mr. Anders Johansson  
*Head of R&D Ericsson-LG / R&D Site Head of 5G/6G SW Development in Ericsson, Korea/Shanghai*

  
  


**Special Session II : AI-based Evolution for Communications** Ramada Ballroom 4 14:30-16:10

**Learning at the Network Edge – Intelligence and. Computation**  
Prof. Tony Quek  
*Singapore University of Technology and Design (SUTD), Singapore*

**Sensory AI Software Platform for Multi-Device Environments**  
Dr. Chulhong Min  
*Research Scientist, Nokia Bell Labs, UK*

**Learning-Based Cellular Softwarization for Network Optimization**  
Dr. Jaeseong Jeong  
*Senior Specialist AI for Optimization, Ericsson Research AI, Sweden*

  
  


**Keynote Speeches** Ramada Ballroom 1 16:30-17:50

**‘Rebooting Communications’ - A Quantum-Signal Processing Perspective**  
Prof. Lajos Hanzo  
*University of Southampton, UK*

**Human-Centered AI for a Hyperconnected Post-COVID World**  
Dr. Yoon Kim  
*CTO, SK Telecom, Korea*

  


### October 22th (Thursday), 2020

**Special Session III : New Waves** Ramada Ballroom 4 08:30-10:10

**Information Theory and Coding for Trustworthy and Scalable Machine Learning**  
Prof. Kangwook Lee  
*University of Wisconsin-Madison, USA*

**6G Vision & Enabling Technologies**  
Dr. Young-Jo Ko  
*Director, 6G Wireless Technology Research Section, ETRI, Korea*

**Satellite Communications in 5G and Beyond**  
Prof. Jihwan Choi  
*DGIST, Korea*

  
  


**Special Session IV : Future Services and Their Enablers** Ramada Ballroom 4 10:30-12:10

**Now and Future in Medicine**  
Prof. Young-Sung Lee  
*Chungbuk National University College of Medicine, Korea*

**Benefits and Risks of Sensing for IoT Security**  
Prof. Jun Han  
*National University of Singapore, Singapore*

**Trend of V2X Communication Technology for Autonomous Vehicle**  
Dr. Kitaeg Lim  
*Director, Korea Electronics Technology Institute (KETI), Korea*

  
  


**Industrial Session II** Ramada Ballroom 1 13:30-15:00

**NAVER AI That Everyone Meets in Dailylife**  
Dr. Jung-Woo Ha  
*Head of AI Research, NAVER Corp., Korea*

**Softwarization and Intelligence in Mobile Communication Systems**  
Dr. Intaik Park  
*Vice President, Samsung Electronics, Korea*

**5G and Beyond - Opportunity for Digital Transformation and Leapfrog**  
Dr. Volker Ziegler  
*6G Leadership, Nokia Bell Labs & CTO, Germany*

  
  


**Keynote Speeches** Ramada Ballroom 1 15:30-17:30

**ICT for Post Covid-19: From Pandemic Resilience to Economic Recovery**  
Mr. Edward Zhou  
*VP of Global Public Affairs, Huawei, China*

**Unleashing the Potential of Tethered Networked Flying Platforms**  
Prof. Mohamed-Slim Alouini  
*King Abdullah University of Science and Technology (KAUST), Saudi Arabia*

**Technology Strategy of ETRI for x + AI**  
Dr. Sang-Kyu Park  
*Executive Vice President, Electronics and Telecommunications Research Institute (ETRI), Korea*

  
  


### October 23th (Friday), 2020

**Special Session V : Toward New Spectrum** Ramada Ballroom 4 08:30-10:10

**Cross-technology Communication: A Protocol Stack View**  
Prof. Xiaolong Zheng  
*Beijing University of Posts and Telecommunications (BUPT), China*

**Sub-THz RF Component and System Design Considerations for Wireless Backhaul Links**  
Dr. Seok-Bong Hyun  
*Director, Communication RF Research Section, ETRI, Korea*

**New Opportunities and Challenges in Unlicensed Spectrum**  
Dr. Jin Sam Kwak  
*CEO, WILUS Inc., Korea*

  
  


**Special Session VI : Softwarized Radio** Ramada Ballroom 4 10:30-12:10

**Development of the ARM Ecosystem for Artificial Intelligence, Cloud and High Performance Computing**  
Mr. Valeriy Cherepennikov  
*Director for Intelligent Computing, Huawei Russia Lab, Russia*

**Commercializing Software Defined User Equipment for Beyond 5G Systems**  
Prof. Juyeop Kim  
*Sookmyung Women’s University, Korea*

**5G SDR Prototype Based on MATLAB and QualNet**  
Dr. Kyeongjun Ko  
*Senior Researcher, Korea Railroad Research Institute (KRRI), Korea*

  
  


Online Registration

**Early Registration Deadline: October, 16, 2020, PM 12:00**

**Registration Fee**

		MEMBER / NON-MEMBER	
		USD (International)	KRW (Domestic)*
Regular	Early Birds	\$450	₩450,000
	On-Site	\$500	₩500,000
Student**	Early Birds	\$400	₩400,000
	On-Site	\$450	₩450,000
Extra Banquet Ticket		\$60	₩60,000

If you have any questions, please contact Registration Secretariat of ICTC 2020 at [ictc@kics.or.kr](mailto:ictc@kics.or.kr)

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