SmartCom 2018 Committees:

General co-chairs
- *Kenta Umebayashi*, Tokyo University of Agriculture and Technology, Japan.
- *Matthew Dailey*, Asian Institute of Technology, Thailand.

Executive co-chairs
- *Masayuki Ariyoshi*, NEC, Japan.
- *Osamu Takyu*, Shinshu University, Japan.
- *Attaphongse Taparugssanagorn*, Asian Institute of Technology, Thailand.

TPC co-chairs
- *Kentaro Ishizu*, NICT, Japan.
- *Poompat Saengudomlert*, BU-CROCCS, Thailand.
- *Thomas Haustein*, Fraunhofer HHI, Germany.

Special session co-chairs
- *Suguru Kameda*, Tohoku University, Japan.
- *Teerapat Sanguankotchakorn*, Asian Institute of Technology, Thailand.

Special session organizers
- *Kei Sakaguchi*, Tokyo Institute of Technology, Japan.
- *Kazushi Muraoka*, NTT docomo, Japan.
- *Mikio Hasegawa*, Tokyo University of Science, Japan.
- *Lunchakorn Wuutihisittikulkij*, Chulalongkorn University, Thailand.
- *Thanaruk Theeramunkong*, Sinrinthon International Institute of Technology, Thailand.
- *Azril Haniz*, Tokyo Institute of Technology, Japan.

Poster session co-chairs
- *Koichi Adachi*, The University of Electro-Communications, Japan.
- *Xiaoyang Wang*, Ibaraki University, Japan.
- *Aimaschana Niruntasukrat*, National Electronics and Computer Technology Center, Thailand.
- *Dusit Niyato*, Nanyang Technological U, Singapore.

Exhibition session co-chairs
- *Gia Khanh Tran*, Tokyo Institute of Technology, Japan.
- *Toshiyuki Nakanishi*, Harman International Japan, Japan.
- *Siriporn Nanthasing*, Asian Institute of Technology, Thailand

Keynote session co-chairs
- *Takeo Fujii*, The University of Electro-Communications, Japan.
- *Koji Ishibashi*, The University of Electro-Communications, Japan.
- *Chalie Charoenlarpnopparut*, Sirindhorn International Institute of Technology, Thailand.

Finance co-chairs
- *Mamiko Inamori*, Tokai University, Japan.
- *Shusuke Narieda*, Mie University, Japan.
- *Premma Rao*, Asian Institute of Technology, Thailand.

Local Arrangement co-chairs
- *Teppei Oyama*, Fujitsu Laboratories LTD., Japan.
- *Shinsuke Ibi*, Osaka University, Japan.
- *Amnart Boonkajay*, Tohoku University, Japan.

Partonage co-chairs
- *Mai Ohta*, Fukuoka University, Japan.
- *Koji Oshima*, KKE, Japan.
- *Chantri Polprasert*, Srinakharinwirot University, Thailand

Publication co-chairs
- *Kazuto Yano*, ATR, Japan.

SmartCom 2018

2018 International Workshop on Smart Wireless Communications
Oct., 30–31, 2018, Mandarin Hotel, Bangkok, Thailand

SmartCom 2018 Call For Papers and Exhibitions

Organizer: IEICE Technical Committee on Smart Radio (SR) and IEICE Technical Committee on Radio Communication Systems (RCS)
Joint Host: Asian Institite of Technology (AIT)
Technical Sponsor: IEEE ComSoc Tokyo Joint Chapter

Scope: SmartCom is the international workshop jointly organized by IEICE Technical Committees on SR and on RCS, and jointly hosted by AIT. This is the 5th SmartCom in its history, and hosted in collaboration with academia in Thailand. The workshop targets on smart wireless communications, and provides a great opportunity for discussing smarter wireless world in future. The scope of SmartCom 2018 includes radio technologies, spectrum management, wireless networks, communication theory, flexible hardware, and Artificial Intelligence (AI) technologies for wireless systems, among the others. According to recent advancement of wireless technologies, mobile applications, and ubiquitous connectivity, it is required to support huge volume of wireless data traffic, demanding higher data rates. Hence, smart communication technologies to address this data demand are urgently required to sustain future wireless world. In this workshop, we discuss solutions targeting not only near future but also years beyond 2020, e.g., 5G, beyond 5G and Internet of things (IoT). Expected candidate solutions include small cells, heterogeneous networks including microwave/millimetre wave devices, dynamic spectrum management, machine learning for wireless communications, and so on. The organizing committee expects that the workshop also represents a great opportunity for networking such as for initiating cooperative research and joint proposals. The topics covered by SmartCom 2018 include, but are not limited to:

Topics:

Heterogeneous wireless networks
- Ultra broadband small cell deployment
- C/U splitting, common pilot channel, mobility management
- Dynamic cell structuring, virtual cell, ghost cell, phantom cell
- Backhaul/fronthaul architecture, cloud-RAN, centralized-RAN
- Cloud cooperated radio resource control, energy saving, wake-up

Cognitive radio networks and dynamic spectrum management
- Spectrum sensing and measurement
- MAC and networking protocols
- Applications and services based on TV white space/cognitive radio networks
- Standards, regulatory policies
- Green cognitive radio

Communication theory and its application
- Network information theory
- Coding theory
- Physical-layer security
- Compressed sensing
- Learning for wireless communication

Wireless distributed network,

MAC protocol, and network management
- Cross layer wireless networks
- Wireless LAN, sensor networks, and mesh networks
- High density wireless networks
- Wireless network virtualization and virtual network management
- Software defined networks (SDN)
- Intelligent transportation system (ITS)
- Intelligent and cooperative MAC protocol
- Network controlled D2D communication

Hardware architecture and implementations
- Broadband and multiband antennas
- Multiband and multimode RF/analog circuits
- Reconfigurable baseband circuits
- Implementation of testbeds and prototypes, especially for higher frequency bands including mmWave
- Wireless equipment for 5G, beyond 5G and IoT

Advanced wireless technologies
- Advanced MIMO, Massive MIMO

- Interference control, alignment, management techniques
- Full-duplex communications
- Advances in mmWave, terahertz (THz) wireless communication, and nano sensor networks
- Wireless power transfer
- Visible light communications
- Dynamic TDD
- Wireless sensing technologies and applications
- Radar signal processing

Data Science, AI for wireless communications and others
- Novel design of machine-learning for wireless communication technologies.
- Applications of AI for optimizing wireless communication systems
- Applications of AI for 5G wireless transmission technologies and resource management
- Evaluating the scope for and potential limitations of AI solutions in wireless communications.

Technical exhibitions
- Implementation, prototype, and wireless equipment for smart radio
- Applications and related works of wireless communications

Special Sessions: 1. AI applications in IoT and Telecommunications for Next Generation Smart Society, 2. Complex Communication Sciences and Wireless Commutations, 3. 5G Radio Access Technologies and Service Platforms in 5G Era, 4. Millimeter-Wave 5G and Beyond (Tentative)

Important Dates:	JAPANESE Organization	NON-JAPANESE Organization
~~Registration of paper submission deadline~~	~~Aug. 31 (Extended!)~~	~~Sept. 30 (Extended!)~~
~~Camera-ready paper submission deadline~~	~~Oct. 9~~	~~Oct. 12~~
Participant registration deadline	Oct. 17	Oct. 17
Registration fee payment deadline	Oct. 25	Oct. 25

Registration of paper submission:
In SmartCom 2018, all regular papers will be presented in poster or technical exhibition sessions. Note that manuscripts will not be peer reviewed, and an available equipment in the technical exhibition sessions is strictly limited due to the limitation of power supply.

Contact Information:
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