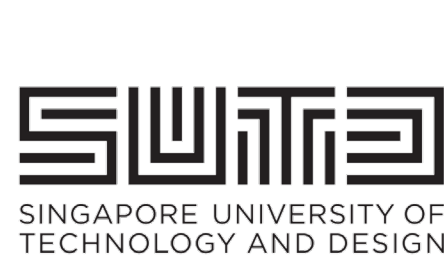


Free Registration



# Asia 6G Research Initiative Open Workshop



May 19, 2022

2:00 ~ 5:30 pm



Youtube

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Auditorium of KICS building

32-3, Nonhyeon-ro 38-gil, Gangnam-gu, Seoul



## Agenda

Time	Title	Speaker
2:00 ~ 2:30pm	Welcome Address + MOU Ceremony	
Session 1		
2:30 ~ 3:00pm	Introduction of Beyond 5G Promotion in Japan	Mr. Takashi Nakamura, NTT DoCoMo, Japan
3:00 ~ 3:30pm	Towards Performance Guaranteed Networking for 6G	Prof. Kyunghan Lee, SNU, Korea
3:30 ~ 4:00pm	Introduction of 6G Research Program in Taiwan	Prof. Tzong-Lin Wu, NTU, Taiwan
4:00 ~ 4:15pm	Break	
Session 2		
4:15 ~ 4:45pm	Future Communications R&D Programme in Singapore	Prof. Tony Quek, SUTD, Singapore
4:45 ~ 5:15pm	Towards 6G Hyper-Connectivity: Integrated Terrestrial and Non-Terrestrial Networks	Prof. Byungju Lee, INU, Korea
5:15 ~ 5:30pm	Closing Remarks	

## Abstracts



### Introduction of Beyond 5G Promotion in Japan

Mr. Takashi Nakamura, NTT DoCoMo, Japan

"Beyond 5G Promotion Consortium" was established in December 2020 in Japan as an organization to promote Beyond 5G Promotion Strategy through industry-academia-government collaboration aiming;

- Holding an international conference for international cooperation
- Discussing among industry-academia-government stakeholders to create the vision for Beyond 5G, etc.

The Consortium is structured by two committees; Committee for Planning and Strategy and International Committee. Under the Committee for Planning and Strategy, White Paper Sub-committee was established. The White Paper Sub-committee developed and published the White Paper in March 2022, capturing vision of beyond 5G based on views of variety of industries, KPI & requirements and technology trends. In this talk, overviews on the White Paper will be explained.



### Towards Performance Guaranteed Networking for 6G

Prof. Kyunghan Lee, SNU, Korea

6G is typically imagined as a performance-enhanced version of 5G. However, through the process of evolution from 4G to 5G, we already have witnessed that improving throughput and latency performance does not necessarily bring a breakthrough to human life. In that regard, what to achieve with 6G and what to provide through 6G should be discussed and planned more carefully than ever in order not to make the society misunderstand the imperativeness of continuous investment and innovations on the communication technologies. In this talk, the following two keys to differentiate 6G from 5G in the users' perspective not in the technologies' perspective are discussed in depth with anticipated technical challenges therein: 1) enabling the vision of end-to-end performance guarantee for 6G in the level of networks not in the level of links, 2) providing interfaces to applications for them to directly benefit from the performance-guaranteed networking.



### Introduction of 6G Research Program in Taiwan

Prof. Tzong-Lin Wu, NTU, Taiwan

As the 5G system broadly deployed over the world, academia and industry devoted to the investigation and conceptualization of the next generation mobile communication (6G). Network operators have identified several key 6G use cases, such as XR, digital twins and 3D network. ITU-R also commenced working on the recommendation "IMT Vision for 2030 and beyond" in March 2021. In Taiwan, a government-sponsored program for 6G researches was kicked off in June, 2021. The program targets developing breakthrough technologies, cultivating communication talents, integrating academic and industrial R&D resources, building collaboration with international research teams and standard organizations. This talk will also briefly introduce the program scope which covers the core technologies to enable the 6G communication with extreme high speed, extreme coverage, and intelligent and diverse capability.



### Future Communications R&D Programme in Singapore

Prof. Tony Quek, SUTD, Singapore

Communications and connectivity have become the critical foundational technology that supports Singapore's economy. Singapore has invested close to S\$70 million through the launch of Singapore's first national Future Communications Research and Development Programme (FCP), to jumpstart cutting-edge communications and connectivity research. This grows local capability, to translate into innovative products, services and companies. The programme is hosted by the Singapore University of Technology and Design. FCP encourages collaboration between industry and research ecosystem. It will provide easy access to testbeds to facilitate development of 5G and future communication technologies. FCP seeks to collaborate with R&D partners both domestically and internationally to explore different opportunities to advance capabilities in future communications.



### Towards 6G Hyper-Connectivity: Integrated Terrestrial and Non-Terrestrial Networks

Prof. Byungju Lee, INU, Korea

One important expectation in the sixth generation (6G) era is that machines and things will be the main consumers of mobile data traffic. Since 6G networks should support a variety of form factors with different service requirements and hardware capabilities, enabling technologies should be distinct from those of 5G in all aspects. To make the visions come true, 6G wireless networks should be hyper-connected, meaning that there should be no constraint on the data rate, coverage, and computing. There are the critical challenges for 6G hyper-connectivity including beyond gigabits-per-second (Gbps) data rates for immersive user experiences, zero coverage-hole networks, and pervasive computing for connected intelligence. In this talk, the key technical issues for achieving zero coverage-hole networks are discussed.

## Registration

- The Workshop registration fee is free.
- Online Participation : You don't need to register. Please click the 'JOIN WORKSHOP' button.
- On-site Participation : Register it by clicking the 'REGISTER NOW' button. It is a first come first serve basis.

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