

NI SDR Hands-on Seminar

일시 2023년 6월 21일(수) 14:00~18:00 **장소** 라마다프라자 제주호텔 2층 볼룸4

[특별세션 소개]

NI SDR 신제품인 X410을 활용한 mmW-SDR(mmWave Technology + Software Defined Radio) 핸즈온 세미나로 시스템 개발자가 프로토콜 개발에서 알고리즘 설계에 이르기까지 무선 시스템을 포괄적으로 평가, 실험 및 설계할 수 있도록 지원합니다.

또한 NI USRP 14세트를 준비한 실습 핸즈-온으로 NI USRP 연결, 초기 세팅, 사용법, 프로그래밍 기법 등의 시간이 포함됩니다.

등록 신청 : <https://forms.gle/dzzWVAmWKQbULmtY7>

프로그램

시간	발표 주제	발표자(소속)
14:00~15:00	mmW-SDR Accelerate Your Wireless Innovations A ready-to-use platform for wireless research and radar sensing applications	Jackrose Kuo (TMYTEK)
15:10~16:10	NI SDR USRP 기술 소개	이동석 (NI), 김기룡 (NUBICOM)
16:10~18:00	NI SDR USRP + LabVIEW 실습	송용우 (NUBICOM)

강연 소개



mmW-SDR Accelerate Your Wireless Innovations

A ready-to-use platform for wireless research and radar sensing applications

Jackrose Kuo (TMYTEK)

Master degree in Engineering Science from National Cheng Kung University. His working experiences are from wireless engineering, new product development to technical marketing. The domain knowledge involves WiFi, sensor IC, IoT and 5G. Achievement is delivering attractive products and transforming into solutions to successful business. Now he is service in TMYTEK contribute in building the mmWave product solutions and developing the business opportunity in antenna-in-package solution for 5G and SATCOM.

The mmW-SDR (mmWave Technology + Software Defined Radio) seminar addresses the challenges faced in mmWave research due to the high cost and limited availability of mmWave instruments. To overcome these barriers, TMYTEK and NI have collaborated to provide a comprehensive and accessible rapid millimeter-wave prototyping solution. This solution integrates TMYTEK's BBox 5G beamformers and UD Box 5G frequency converter with NI's Ettus USRP X410, resulting in a versatile testbed that unlocks the full potential of wireless research in 5G, SATCOM, radar, and Joint Communication and Radar Sensing (JCRS) domains. The mmW-SDR platform empowers system developers to comprehensively evaluate, experiment, and design wireless systems, spanning from protocol development to algorithm design. Whether conducting signaling or non-signaling tests, the solution has been meticulously integrated and validated to ensure system compatibility and performance reliability. By leveraging the TMYTEK mmW-SDR in conjunction with the NI USRP platform, researchers gain access to a wide range of experimentation possibilities in wireless communication prototyping, enabling exploration of cutting-edge topics such as MIMO, communication and sensing, wireless AI, mmWave beamforming, and Reflective Intelligent Surface (RIS) technologies, among others.

NI SDR USRP 기술 소개

이동석(NI), 김기룡(NUBICOM)

NI SDR 솔루션 및 기술 소개 및 제품 라인업, 성공사례 공유

NI SDR USRP와 LabVIEW를 활용한 핸즈온 세미나

송용우(NUBICOM)

USRP 와 LABVIEW를 활용하여 직접 신호를 생성하여 TX,RX 스트리밍하는 실습 및 NI USRP 초기 세팅, 하드웨어 연결, 소프트웨어 실습 및 연구 활용에 대한 세미나