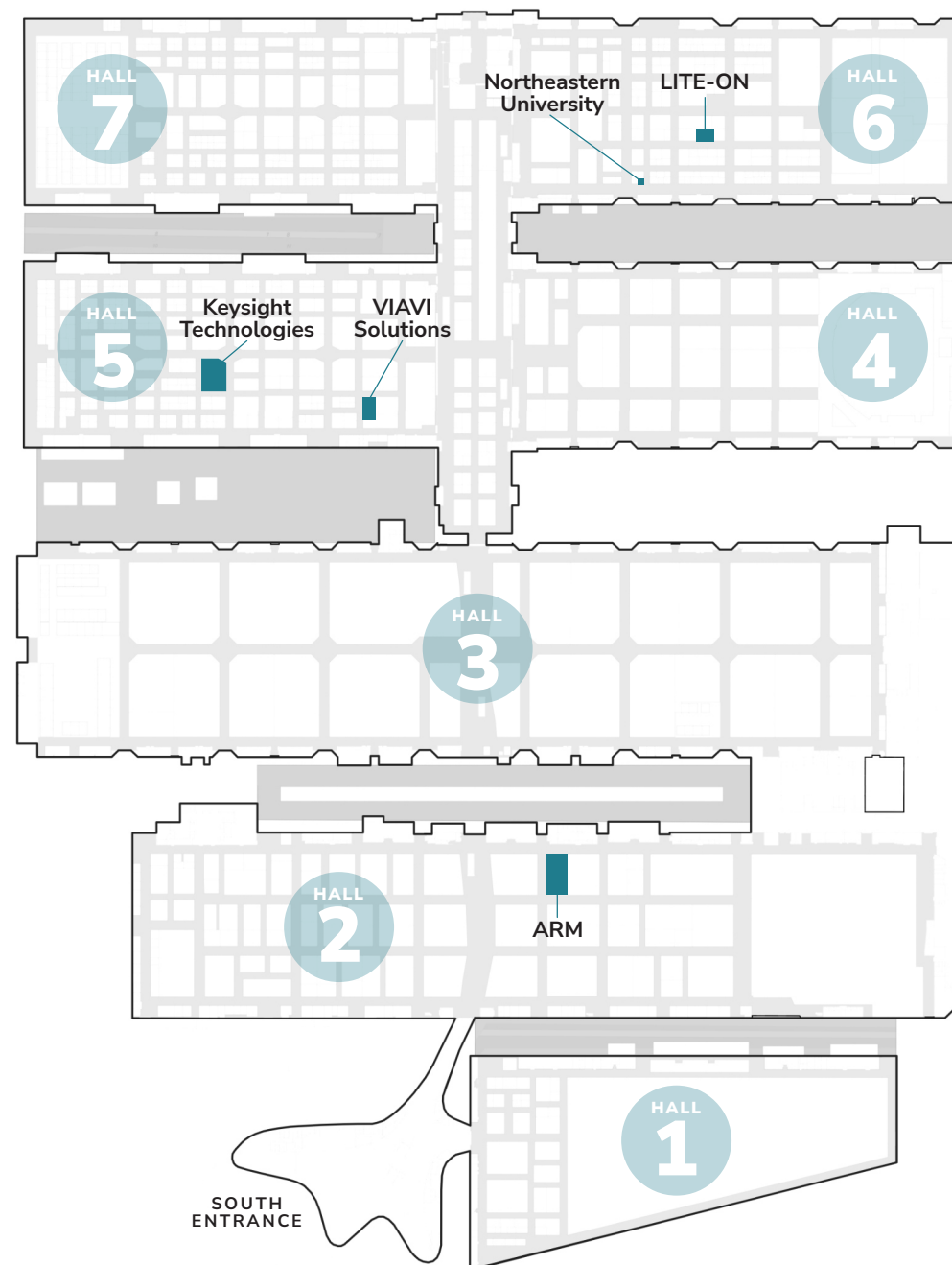


Pioneering the Future of AI-RAN at MWC 2025

Demo	Participants	Booth	Hall	Stand
Demo 1: Learned Air Interface with Online Learning	DeepSig and NVIDIA	ARM Booth	Hall 2	2I60
Demo 2: Realization of Deep Learning for UL Channel Estimation/ Interpolation in Live RAN Testbed	Fujitsu, NVIDIA and SoftBank	ARM Booth	Hall 2	2I60
Demo 3: AI-based PUSCH Channel Estimation	Keysight, NVIDIA and Samsung	Keysight Booth	Hall 5	5F41
Demo 4: AI/ML Optimized Higher-Order Modulations with a Neuromorphic Receiver	NVIDIA, Samsung and VIAVI	VIAVI Booth	Hall 5	5A18
Demo 5: AI-based 5G Beamforming for Mobility-Aware Interference Mitigation and Power Saving	Singapore University of Technology and Design (SUTD), VIAVI, and Yonsei University	VIAVI Booth ARM Booth	Hall 5 Hall 2	5A18 2I60
Demo 6: AI-based Spectrum Sensing in the RAN	Open6G at Northeastern University	Northeastern University Booth	Hall 6	6D1
Demo 7: AI-RAN Orchestration	Keysight and Open6G at Northeastern University	Keysight Booth	Hall 5	5F41
Demo 8: AI-Driven Spectrum Sensing for Dynamic & Privacy-preserving AI Model Partitioning over 5G Network	Keysight, and Singapore University of Technology and Design (SUTD), LITE-ON*, and NeuroRAN*	ARM Booth Keysight Booth LITE-ON* Booth	Hall 2 Hall 5 Hall 6	2I60 5F41 6F38
Demo 9: Integrated Sensing and Communications (ISAC)	Northeastern University and Tiami Networks	ARM Booth	Hall 2	2I60
Demo 10: AI on RAN Object Detection	ARM, Effnet AB*, Phluido*, and Tannera*	ARM Booth	Hall 2	2I60



*Not AI-RAN Alliance members

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Demo 1: “Learned Air Interface with Online Learning”

This demo shows how AI-driven air interface design could enhance wireless performance, improve spectral efficiency, and integrate with existing RANs, making it a useful capability for future AI-RAN deployments.

Participants: DeepSig and NVIDIA

Category: AI-for-RAN

Location: ARM Booth Hall 2 Stand 2I60

Demo 2: “Realization of Deep Learning for UL Channel Estimation/Interpolation in Live RAN Testbed”

The demo showcases a deep learning approach for uplink channel estimation in a real-world over-the-air real-time RAN. The approach could enable network operators to reduce RAN TCO and optimize end-user experience.

Participants: Fujitsu, NVIDIA, and SoftBank

Category: AI-for-RAN

Location: ARM Booth Hall 2 Stand 2I60

Demo 3: “AI-based PUSCH Channel Estimation”

Using an AI-powered uplink (UL) channel estimation (CE), this demo showcases how the uplink throughput can be improved by over 30% in 5G and future 6G networks. We evaluate this novel solution in a real-time commercial testbed with a Samsung developed AI CE algorithm running on a NVIDIA Grace-Hopper GPU server(vDU), Keysight PropSim Channel Emulator and Core Emulator and a Samsung commercial UE. Samsung’s AI algorithm leverages the multi-dimensionality of the received DMRS to enhance channel estimation and hence PUSCH performance, providing a better user experience and a coverage extension for operators.

Participants: Keysight, NVIDIA and Samsung

Category: AI-for-RAN

Location: Keysight Booth Hall 5 – 5F41

Demo 4: “AI/ML Optimized Higher-Order Modulations with a Neuromorphic Receiver”

Samsung, NVIDIA and VIAVI will highlight the transformative potential of AI in RAN. Samsung will showcase AI/ML-based higher-order modulations to deliver improved performance over square QAMs. VIAVI will showcase energy-efficient neuromorphic receivers that replace several signal-processing blocks—channel estimation, equalization, and symbol de-mapping—with a single neural network, optimized for AI-based modulations. NVIDIA will feature its high-performance GPUs for training and validation.

Participants: NVIDIA, Samsung and VIAVI

Category: AI-for-RAN

Location: VIAVI Booth Hall 5 Stand 5A18

Demo 5: “AI-based 5G Beamforming for Mobility-Aware Interference Mitigation and Power Saving”

This demo is for AI-powered beamforming and energy-efficient RAN control in 5G networks. By leveraging realistic mobility data and hierarchical reinforcement learning, it showcases how AI could enhance interference management, optimize power use, and improve network efficiency in real-time mobility scenarios.

Participants: Singapore University of Technology and Design (SUTD), VIAVI, and Yonsei University

Category: AI-for-RAN

Location: VIAVI Booth Hall 5 Stand 5A18 • ARM Booth Hall 2 Stand 2I60

Demo 6: “AI-based Spectrum Sensing in the RAN”

This demo highlights the potential of AI-enhanced RAN sensing for dynamic spectrum sharing, showing how AI could enable smarter interference avoidance, improved spectral efficiency, and adaptive radio resource management in real-world 5G deployments.

Participant: Northeastern University

Category: AI-for-RAN

Location: Northeastern University Booth Hall 6 Stand 6D1

Demo 7: “AI-RAN Orchestration”

This demo showcases AI-driven RAN orchestration, highlighting how AI and RAN could coexist on a shared infrastructure while maintaining high performance, efficiency, and quality of service.

Participants: Keysight and Northeastern University

Category: AI-and-RAN

Location: Keysight Booth Hall 5 Stand 5F41

Demo 8: AI-Driven Spectrum Sensing for Dynamic & Privacy-preserving AI Model Partitioning over 5G Network

This demo highlights adaptive AI-driven ML model partitioning for privacy-focused image processing over 5G networks, addressing the inefficiencies of fixed model partitioning in dynamic wireless environments.

Participants: Keysight, and Singapore University of Technology and Design (SUTD), LITE-ON*, and NeuroRAN*

Category: AI-on-RAN

Location: ARM Booth Hall 2 Stand 2I60 • Keysight Booth Hall 5 Stand 5F41 • LITE-ON* Booth Hall 6 Stand 6F38

Demo 9: “Integrated Sensing and Communications (ISAC)”

This demo highlights the use of integrated sensing and communications (ISAC) over existing 5G networks. By repurposing a commercial 5G waveform as a radar signal, it can detect and track unconnected objects—such as pedestrians—without relying on cameras or RF tags. Potential commercial applications include occupancy sensing, drone detection, and perimeter security.

Participants: Northeastern University and Tiami Networks

Category: AI-on-RAN

Location: ARM Booth Hall 2 Stand 2I60

Demo 10: “AI on RAN Object Detection”

This demo showcases a powerful, cost-effective solution for deploying AI workloads on Private 5G networks, making them more accessible for industries requiring real-time processing, scalability, and low latency.

Participants: ARM, Effnet AB*, Phluido*, and Tannera*

Category: AI-on-RAN

Location: ARM Booth Hall 2 Stand 2I60