Tech Mahindra and Northeastern University collaborate to drive innovation in ORAN and 6G connectivity solutions

Technology

Pune, August 08, 2024: Tech Mahindra (NSE: TECHM), a leading global provider of technology consulting and digital solutions to enterprises across industries, has signed a Memorandum of Understanding (MoU) with Northeastern University to accelerate innovation in Open Radio Access Networks (ORAN) and 6G connectivity. The collaboration will focus on the research, development, and testing of next-generation wireless networks for global customers.

Tech Mahindra and Northeastern University will develop industry-leading solutions in ORAN and 6G, focusing on large-scale testing and certification of the ORAN ecosystem. The joint efforts will leverage Tech Mahindra's deep domain expertise in telecom, and Northeastern University's Open6G Open Testing and Integration Center (OTIC), to provide comprehensive testing services, for compliance, interoperability, performance, and functionality of ORAN products. This collaboration will enable end-to-end testing in both virtual and real-world environments, using innovative solutions like digital twin technology to replicate real-world conditions accurately.

Manish Mangal, Chief Technology Officer, Telecom and Global Business Head, Network Services, Tech Mahindra, said, " *Today, we start a journey of innovation towards a connected future through this MoU with Northeastern University. By combining our expertise, we will create new technology, focusing on testing and verification, enabling our customers to scale at speed. Together, we will advance Open RAN and 6G, transforming ideas into reality and delivering exceptional value.*"

This collaboration will serve as a trusted avenue for industry ORAN vendors, Communication Service Providers (CSPs), and start-ups to transform their new concepts and ideas into reality by utilising artificial intelligence and ORAN technology. It will provide a collaborative, vendor-independent environment where customers can test their products and solutions against ORAN specifications. Additionally, it will enable the vendors to evaluate network energy efficiency in ORAN deployments and ensure that their products meet the highest standards of performance, security, and interoperability.

Tommaso Melodia, Director - Institute for the Wireless Internet of Things (WIoT) and William L. Smith Professor, Northeastern University, said, *"We are thrilled to see Northeastern Institute for the Wireless Internet of Things Open6G R&D Center partnering with Tech Mahindra. This collaboration is aimed at enriching the partnership portfolio of both the organisations and promises to drive significant advancements in R&D, testing, and system integration for Open RAN, accelerating innovation, testing, and deployment of intelligent wireless networks. Together, we will push the boundaries of what is possible and pave the way for future open, programmable, and AI-powered wireless networks."*

The collaboration aligns with Tech Mahindra's expertise as a trusted transformation partner, leveraging its capabilities in network, engineering,

and customer experience. Tech Mahindra is a leading solutions provider in the ORAN ecosystem, with expertise in planning, deploying, and managing large-scale ORAN networks.

About Open6G R&D Center at Northeastern University

Open6G R&D Center is a Government-Industry-University cooperative research, development, testing, and commercialisation hub to jumpstart future open, programmable, disaggregated, and AI-powered 6G systems. It is housed within the Institute for the Wireless Internet of Things at Northeastern University. The Open6G OTIC is a one-stop shop for innovation, development and testing of Open RAN technology and products. It offers a comprehensive range of testing services including: end-to-end automated full stack testing, leveraging both emulated and real-world environments; Digital Twinning technology for virtualised testing, accurately replicating real-world conditions; network energy efficiency evaluation in Open RAN deployments; interoperability and conformance testing of disaggregated base stations and RICs across different RAN implementations; and massive MIMO radios testing, as a key enabler for improving the spectral efficiency of Open RAN. These services are accessible on state-of-the-art facilities, including RAN and RIC emulators; private 5G RANs with programmable protocol stacks; and Colosseum – the Open RAN Digital Twin and the world's largest wireless network emulator.

Open6G OTIC: https://wiot.northeastern.edu/otic/ Email: open6g.otic@northeastern.edu

The Institute for the Wireless Internet of Things (WIoT) at Northeastern University is an interdisciplinary research center, a think tank, and a technology incubator promoting advancement in the areas of connected systems and their societal applications and implications. More Info: https://wiot.northeastern.edu/ Email: wiot@northeastern.edu

About Tech Mahindra

Tech Mahindra (NSE: TECHM) offers technology consulting and digital solutions to global enterprises across industries, enabling transformative scale at unparalleled speed. With 147000+ professionals across 90+ countries helping 1100+ clients, TechM provides a full spectrum of services including consulting, information technology, enterprise applications, business process services, engineering services, network services, customer experience & design, AI & analytics, and cloud & infrastructure services. It is the first Indian company in the world to have been awarded the Sustainable Markets Initiative's Terra Carta Seal, in recognition of actively leading the charge to create a climate and nature-positive future. Tech Mahindra is part of the Mahindra Group, founded in 1945, one of the largest and most admired multinational federation of companies. For more information on how TechM can partner with you to meet your scale at speed imperatives, please visit https://www.techmahindra.com/

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  Mahindra Group   Tech Mahindra   Open Radio Access Networks
  ORAN   6G connectivity   Communication Service Providers-CSP
  Open6G Open Testing and Integration