



PROGRAM

Open Source 6G Networks for Connecting the Unconnected Workshop

June 23, 2025

Budapest, Hungary

Supporters:



Technische Universität Berlin, Berlin, Germany

Next Generation Networks Chair



Open Research Infrastructures and Toolkits for 6G

IEEE Open6GNet Workshop, June 23, 2025 - IEEE Netsoft Sessions

13:30-13:50

Opening Session: Pathways to Universal Access - Welcome to Open6GNet

Prof. Thomas Magedanz, Technische Universität Berlin, Germany

13:50-15:00

Technical Session: Advanced Network Features and Performance Optimization

Session Chair: Elena-Ramona Modroiu

FedAvgen: Metadata for Model Aggregation In Communication Systems

Anthony Kiggundu (German Research Center for Artificial Intelligence, Germany); Dennis Krummacker (German Research Center for Artificial Intelligence (DFKI GmbH), Germany); Hans Dieter Schotten (Deutsches Forschungszentrum für Künstliche Intelligenz GmbH, Germany)

Shortcuts: A Simple Mechanism for Reducing the Data Path Delay in 6G/5G RAN

Lais Al-Khalaf (Germany); Marius Corici and Eric Troudt (Fraunhofer FOKUS, Germany); Thomas Magedanz (Fraunhofer Institute FOKUS / TU Berlin, Germany)

Bridging TSN and 5G: Synchronization and Flow Mapping for Smart Manufacturing

Sérgio Rossi Brito da Silva (Universidade Estadual de Campinas (UNICAMP), Brazil); Francisco Germano Vogt (University of Campinas - UNICAMP, Brazil); Fabricio E Rodriguez Cesen (Telefonica Research, Spain); Marcelo Caggiani Luizelli (Federal University of Pampa, Brazil); Christian Esteve Rothenberg (University of Campinas - UNICAMP, Brazil); Gyanesh Patra (Ericsson Research, USA)

15:00-15:30

Coffee Break

15:30-16:10 Technical Session: Next Generation Network Architecture and Optimization

Session Chair: Elena-Ramona Modroiu

Inside Open6GCore: From Concept to Code with the First 6G Core Network

Hauke Buhr, Eric Troudt, Pousali Chakraborty and Christian Scheich (Fraunhofer FOKUS, Germany); Hemant Zope (Fraunhofer Fokus, Germany); Fabian Eichhorn, Gunnar Westerling, Lucie Naundorf, Felix Von Oertzen, Saarujaan Sritharan, Philip Kaleße, Erik Rygiel and Marius Corici (Fraunhofer FOKUS, Germany); Thomas Magedanz (Fraunhofer Institute FOKUS / TU Berlin, Germany)

Auto-BSP: Automated Balancing-Scaling- Provisioning Architecture for 5G Cloud-Native

Khaled Zeraoulia (USTHB University & LSI, Algeria); Chafika Benzaid (University of Oulu, Finland); Manel Kennouche (USTHB, Algeria)

16:10-17:00 Pannel Session: Open Source Innovation for Global 6G Connectivity

Session Chair: Prof. Joyce Mwangama

Panelists: Prof. Cicek Cavdar, Prof. Thomas Magedanz, Prof. Christian Esteve Rothenberg

Welcome Message from Open6GNet-2025 Organizers

Welcome to the 1st Open source 6G Networks for Connecting the Unconnected Workshop (Open6GNet-2025).

The Open Source 6G Networks for Connecting the Unconnected Workshop belongs to the international Open Research Infrastructures and Toolkits for 6G ([OpenRIT-6G](#)) initiative, which was established in 2023 to support the vision of an Open 6G for all.

Our [Open6GNet](#) activity focuses on connecting the unconnected, as outlined in the IMT-2030 vision, by leveraging accessible, low-cost, open-source technologies and commercial off-the-shelf (COTS) hardware. The aim is to enable ecosystem players from academia and industry to create self-sovereign, customized end-to-end networks for diverse application domains. These networks will be based on a rapidly growing suite of open, modular 5G and 6G components and related toolkits.

We are particularly proud and honored to host distinguished experts in our panel discussion on Open Source Innovation for Global 6G Connectivity, which promises to deliver valuable insights into the future of inclusive telecommunications infrastructure. Throughout the workshop, we encourage active participation in our technical sessions and engagement with the IEEE NetSoft conference proceedings. Your contributions to this important discussion will help shape the future of accessible 6G networks worldwide.

We hope you will enjoy the IEEE Netsoft 2025 conference proceedings and readings.

IEEE Open6GNet-2025 - Organizing Committee

Thomas Magedanz, Technische Universität Berlin, Germany

Ramona Modroiu, Technische Universität Berlin, Germany

Joyce Mwangama, University of Cape Town, South Africa

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