

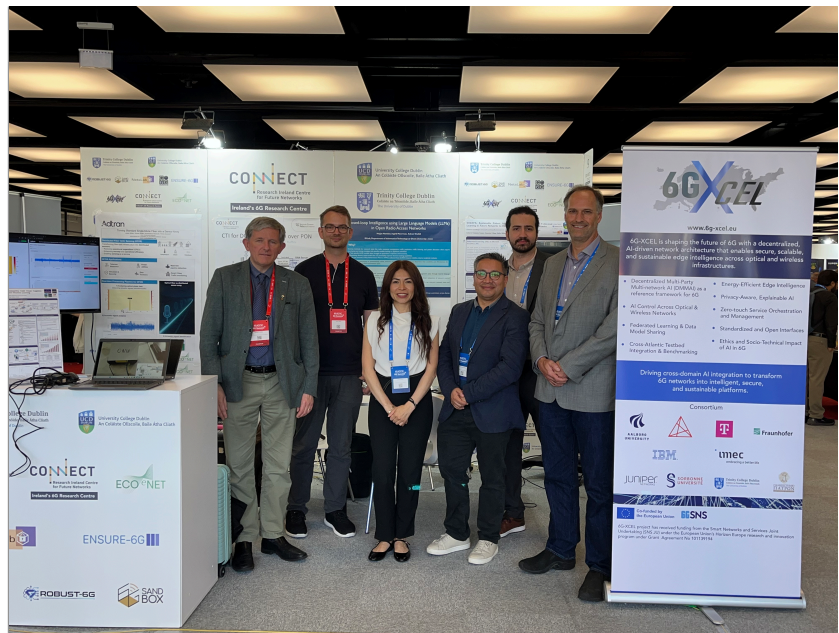
6G-XCEL NEWS

Dissemination | Communication | Exploitation

Japan NICT at Connectivity section of AAU

On June 6, 2025, 6G-XCEL team from Aalborg University had a visit from the National Institute of Information and Communications Technology (NICT) <https://www.nict.go.jp/en/>, which is Japan's sole National Research and Development Agency.

Assistant Professor Shashi Raj Pandey, together with Prof. Petar Popovski and Dr. Junya Shiraishi, presented 6G-XCEL project to the delegation, detailing the research activities. Lot of questions and discussion were held on AI Controller (AIC), its compatibility with other AI initiatives in 6G Networks. Focusing on use cases and their end-to-end performance analysis (with siloed heterogeneous network elements, networks, and KPIs) with AI deployment, in 6G is the main target going forward. Read more in [post](#).



EuCNC & 6G Summit 2025

6G-XCEL project participated in EuCNC & 6G Summit 2025 June 3-6 in Poznań. This flagship conference is one of Europe's leading events for future communication technologies, while it brings together over 900 global delegates and more than 50 exhibitors to explore the future of communications.

6G-XCEL is enabling resilient, energy-efficient, and high-capacity edge networks across Europe. [CONNECT Centre](#) Director and 6G-XCEL Coordinator Professor [Dan Kilper](#) has been presenting key project insights as part of the programme — spotlighting Europe's collaborative path toward 6G leadership. Several partners from the consortium including TCD, imec, Sorbonne (SLICES-RI) and DT were present, doing live demonstrations, sharing latest project findings and attending workshops.

6G-XCEL project has received funding from the Smart Networks and Services Joint Undertaking (SNS JU) under grant agreement No. 101139194. The JU receives support from the European Union's Horizon Europe research and innovation programme.





Collaborative work in OpenIreland Testbed

TCD and University of Patras team joined forces and managed to set up an end-to-end 5G network. Team have configured the e2 interface to expose KPM, exchanged experiences around different hardware and software architectures and made plans on the next steps in the DMMAI development. This work is collaborative and part of WP3 and WP5, while both target use-cases are under development / integration:

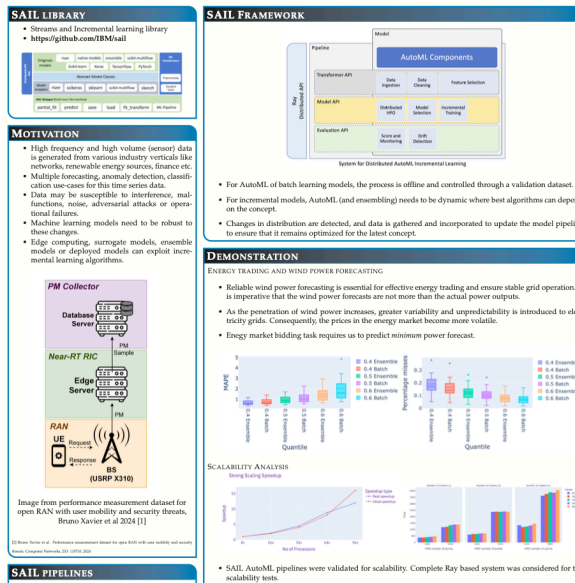
1. AI-powered Spectrum Management
2. AI-enhanced Resource management

Read: <https://www.6g-xcel.eu/building-dmmai-blocks-onsite-collaboration-with-tcd-and-uop/>



DISTRIBUTED AUTOMLOFINCREMENTAL MACHINE LEARNING ALGORITHMS

Seshu Tirupathi (IBM Research), Dhaval Salwala (IBM Research)



ICLR Workshop on Advances in Financial AI: Distributed AutoML of incremental ML algorithms

Our IBM Research team presented in ICLR Workshop on Advances in Financial AI. Work has been focused on Distributed AutoML for Incremental Machine Learning Algorithms — a key outcome of our ongoing EU research project. The research focuses on energy trading and wind power forecasting, addressing the critical need for reliable, scalable, and dynamic prediction models to support the energy market as it adapts to renewable integration. Highlights from this session:

1. Accurate minimum wind power forecasting to support stable grid operation and energy market bidding
2. A novel AutoML framework built using the SAIL (Streams and Incremental Learning) library, optimized for high-volume structured and time-series data
3. Proven scalability using Ray-based pipelines and NYC datasets - with strong and weak scalability tested across drift events

This work supports more robust forecasting tools that adapt over time, ensuring grid stability and market efficiency.

Post: <https://www.6g-xcel.eu/6g-xcel-at-iclr2025-workshop/>

IFIP Networking 2025: SLICES-RI Workshop

6G-XCEL has been featured at the IFIP Networking SLICES-RI Workshop (May 26-29 in Cyprus). Our collaborative work on "Domain Adaptation and Transfer Learning applied to 5G datasets" – led by TCD, IBM, and AAU – was highlighted as a key example of experimentally-driven research and transatlantic cooperation.

Curious? See <https://www.6g-xcel.eu/6g-xcel-featured-at-the-ifip-networking-slices-ri-workshop-on-may-26-2025/>



www.6g-xcel.eu

6G-XCEL is shaping the future of 6G with a decentralized, AI-driven network architecture that enables secure, scalable, and sustainable edge intelligence across optical and wireless infrastructures.

- Decentralized Multi-Party Multi-network AI (DMMAI) as a reference framework for 6G
- Energy-Efficient Edge Intelligence
- Privacy-Aware, Explainable AI
- AI Control Across Optical & Wireless Networks
- Zero-touch Service Orchestration and Management
- Federated Learning & Data Model Sharing
- Standardized and Open Interfaces
- Cross-Atlantic Testbed Integration & Benchmarking
- Ethics and Socio-Technical Impact of AI in 6G

Driving cross-domain AI integration to transform 6G networks into intelligent, secure, and sustainable platforms.

Consortium



Demos at EuCnC & 6G Summit 2025

The 6G-XCEL project had a strong presence at EUCNC 2025, showcasing several demonstrations directly aligned with its core research objectives. The presented activities included:

1. **Cooperative Transport Interface over Open-Source Solutions** – presenting advancements in transport orchestration and open-source integration.
2. **Closed-loop Intelligence Using Foundation Models** – demonstrating the application of large language models (LLMs) for real-time traffic context analysis and automated network control.
3. **Zero-Touch Management Demonstrators** – illustrating comprehensive network automation capabilities based on zero-touch management (ZSM) principles.

The participation at EUCNC 2025 provided an excellent

Upcoming Plenary

- 4th plenary Meeting, July 10-11, hosted by DT and HHI, Berlin, Germany

In addition, 6G-XCEL will be participating in a variety of public events in 2025 including SIGCOMM 2025, Berlin Open RAN Working Week (BOWW) and FYUZ#25.

See you in one of our venues!

Project Publications

6G-XCEL has published in a number of conferences and has several articles in prestigious journals. Visit our website to review full list of publications: <https://www.6g-xcel.eu/publications/>