

## Special Session: Artificial Intelligence-Based Autonomous, Energy-Efficient, and Resilient Communication Systems in 5G and 6G Networks

Next-generation 5G and 6G networks necessitate artificial intelligence-enabled, autonomous, and self-adaptive network architectures. This special session focuses on AI-based network intelligence through real-world use cases developed within the scope of the RAI-6GREEN project.

Original academic and industrial research contributions on the following topics are invited:

- Artificial intelligence and machine Learning, deep learning in 5G/6G networks
- AI/ML-based anomaly detection
- Cell outage and network failure detection
- Self-healing network architectures
- Digital twin-based network monitoring and observability
- AI applications based on O-RAN and RIC architecture
- Resilient communications under disaster scenarios
- Distributed network intelligence using federated learning
- AI-based optimization for energy efficiency