

# Workshop on Advances in Telecommunications Research (WATR)

June 16-18, 2025 | Queen’s University, Kingston, Ontario

*Generously supported by the IEEE Sections in Kingston and Waterloo-Kitchener*

## Program

### Day 1 – AI and 6G: Towards Native Intelligence

Time	Speaker	Details
Pre		Opening Remarks
9:00 AM	Nizar Zorba (Qatar University)	Beyond the Horizon: Terahertz Communications Innovations for 6G Networks
9:45 AM	Hatem Abou-Zeid (University of Calgary)	Foundation Models for 6G: The Next Frontier of Native-AI
10:30 AM		Coffee Break
11:00 AM	Salimur Choudhury (Queen's University)	Large Language Models for Resource Allocation in Networks
11:45 AM	Ahmad Nagib (Queen's University)	Pathways to Trustworthy Reinforcement Learning: Generalization Strategies for Next-Generation Wireless Networks
12:30 PM		Lunch Break
1:30 PM	Panel (Moderator: Ahmad Nagib)	Future of Network Intelligence
2:45 PM	Abdallah Shami (Western University)	My Journey Through IEEE: A Personal Reflection
3:30 PM		Day 1 Highlights & Takeaways

## Day 2 – The Transformative Network

<b>Time</b>	<b>Speaker</b>	<b>Details</b>
Pre		<i>Opening Remarks</i>
9:00 AM	Qamar Bader (Queen's University)	Next-Gen PNT: Harnessing NTN, LEO Satellites, and HAPS for the Future of Global Positioning, Navigation and Timing
9:45 AM	Ning Lu (Queen's University)	Backlogged Bandits: Cost-Effective Learning for Utility Maximization in Queueing Networks
10:30 AM		<i>Coffee Break</i>
11:00 AM	Hesham Elsayy (Queen's University)	Communications, Computing, and Security in 5G/6G Networks
11:45 AM	Jelena Mistic (Toronto Metropolitan University)	Scalable Quantum-Based Solutions for Blockchain Systems
12:30 PM		<i>Lunch Break</i>
1:30 PM	Sherif Azmy (Queen's University)	Incentive-Based Extreme Edge Computing
2:15 PM		<i>Day 2 Highlights &amp; Takeaways</i>

## Day 3 – Advances in IoT

<b>Time</b>	<b>Speaker</b>	<b>Details</b>
Pre		<i>Opening Remarks</i>
9:00 AM	Sharief Oteafy (DePaul University)	Architecting the Tactile Internet
9:45 AM	M. Fatima Domingues (Khalifa University for Science and Technology)	Biomedical Sensing as an Enabler for Next-Generation e-Health Systems
10:30 AM		<i>Coffee Break</i>
11:00 AM	Khalid Elgazzar (Ontario Tech University)	Robust Pedestrian Intent Prediction in Challenging Environments for Autonomous Vehicles
11:45 AM	Panel (Moderator: Ayman Radwan)	Human-Centered IoT
1:00 PM		<i>Lunch Break</i>
2:00 PM	Walaa Hamouda (Concordia University)	Advancements and Challenges in Massive MIMO
2:45		Day 3 & Workshop Wrap-Up