

## 2020–2021 Carleton 6G Workshops

**AI/ML FOR WIRELESS COMMUNICATIONS AND NETWORKS**

Tuesday, 16 February 2021, 10:00 - 15:30 EST (Ottawa time)

Zoom Link: <https://carleton-ca.zoom.us/j/94481150543>

**Workshop Chairs:** Dr. Halim Yanikomeroglu, Carleton University  
**Program Chair:** Dr. Wael Jaafar, Carleton University

This is the third edition of the 2020–2021 Carleton 6G Workshops

- Workshop #1: Faster-than-Nyquist Signaling, 27 Jul 2020
- Workshop #2: Satellite Mega-Constellations, 16 Dec 2020
- Workshop #3: **AI/ML for Wireless Communications and Networks, 16 Feb 2021**
- Workshop #4: PHY-FEST, April 2021
- Workshop #5: HAPS (High Altitude Platform Station) Networks, June 2021

Time	Speaker	Affiliation	Title
10:10–10:20	Dr. Halim Yanikomeroglu	Carleton University, Canada	Opening Remarks
10:20–11:00	Dr. Gunes Karabulut Kurt	Istanbul Technical University, Turkey	<b>Keynote:</b> Learning-Driven Physical Layer: Opportunities and Challenges through a Measurement-based Perspective
11:00–11:20	Dr. Wael Jaafar	Carleton University, Canada	Green Resource Provisioning for Next Generation Networks: A Machine Learning Approach
11:20–11:40	Dr. Ali Murat Demirtas	TOBB University of Economics and Technology, Turkey	Autonomous UAV BSs for Next Generation Wireless Networks: A Deep Learning Approach
11:40–12:00	Amir Mehrabian	University of Tehran, Iran	Spectrum Sensing for Symmetric $\alpha$ -stable Noise Model with Convolutional Neural Networks
12:00–12:30	<b>Q&amp;A and Discussion</b>		
12:30–13:30	<b>Break</b>		
13:30–13:50	Najmeh Banitalebi	Tarbiat Modares University, Iran	Distributed Learning based Resource Allocation for Self-organizing D2D Communication in Cellular Networks
13:50–14:10	Dr. Ferdi Kara	Zonguldak Bulent Ecevit University, Turkey	Deep Learning Aided Multi-user Detection in Grant-free NOMA IoT Networks
14:10–14:25	<b>Q&amp;A and Discussion</b>		
14:25–14:45	Medhat Elsayed	University of Ottawa, Canada	Transfer Reinforcement Learning for 5G-NR mm-Wave Networks
14:45–15:05	Oussama Ghdiri	ESPRIT Engineering School, Tunisia	Offline and Online UAV-enabled Data Collection in Time-constrained IoT Networks
15:05–15:20	<b>Q&amp;A and Discussion</b>		