Al-Enabled 5G/6G Networks: Automation, Openness, and Radio Access IEEE GLOBECOM 2020 Workshop 13 – Date: 11 December 2020 (Friday)

Web: https://globecom2020.ieee-globecom.org/workshop/ws-13-ai-enabled-5g6g-networks-automation-openness-and-radio-access

Workshop Organizers

- Robert W Heath Jr., The University of Texas, Austin, USA (rheath@utexas.edu)
- Amin Azari, Ericsson Research, Sweden (<u>amin.azari@ericsson.com</u>)
- Kai Liang, Xidian University, China (kliang@xidian.edu.cn)

Call for Workshop Papers

Artificial intelligence (AI) is leading to an automation revolution in 5G, beyond 5G, and 6G cellular networks. AI is also empowering the trend to open up the 5G/6G network capabilities by leveraging universal infrastructure, open network architectures, open-source software/hardware, and other state-of-the-art technologies (such as software-defined networking, network function virtualization, multi-access edge computing, network slicing, etc.). AI can impact all aspects of cellular network design from the physical layer waveform to radio resource management to the network core to the network applications. This workshop will provide a platform for exchanging ideas on how AI techniques lead to a revolution in 5G and 6G cellular communication networks. Topics include AI (planning, reasoning, knowledge representation, etc.) and machine learning (e.g. deep, reinforcement, federated, distributed and transfer learning) aspects of:

- Automation Applications of AI and machine learning in automation of cellular networks.
- Openness Rethinking cellular networks using open architectures in the device, radio access, and the network.
- Radio access Beamforming, scheduling, modulation, coding, channel estimation, power control, handoff, open radio access, mmWave / THz, and massive MIMO.
- **Experimental** Testbeds, experimental measurements, performance evaluation of AI-enabled open 5G/6G networks, and applications like V2X, virtual reality and UAVs.
- **Computation** Integrated allocation of communication, computing and storage resources in open 5G/6G networks, multi-access edge computing and fog computing.
- **Networking** Slicing including agile instantiation, QoS/QoE service assurance, traffic prediction and classification, and anomaly detection.

Technical Chairs

- Whai-En Chen, National Ilan University, Taiwan
- Aldebaro Klautau, Federal Univ. of Pará, Brazil

Keynote Chairs

- Xiaoli Chu, University of Sheffield, UK
- Neiva Linder, Ericsson Research, Sweden

Submission Guidelines

Prospective authors are invited to submit technical papers of their previously unpublished work. Accepted

workshop papers will be part of the Conference Proceedings and will be uploaded to IEEE Xplore. Papers should be submitted via EDAS. Papers should follow the same Author Guidelines of the general symposium, which are available at https://globecom2020.ieee-globecom.org/.

Important Dates

Paper submission: 15 July 2020

Acceptance notification: 1 September 2020

Final paper due: 1 October 2020