

Call For Papers
IEEE Second International Workshop on Data Driven Intelligence for Networks and Systems
(DDINS)

Organized in conjunction with
IEEE International Conference on Computer Communications (INFOCOM 2020)
27-30 April 2020 // Beijing, China

Network traffic is expected to grow exponentially in the next decade thanks to the advances in smart devices, Internet of Things (IoT) and cloud computing. Not only the volume of the traffic is increasing, the characteristics of the traffic are also becoming more diverse. While many advanced communication technologies have been proposed to push up the network capacity, increasing capacity alone is inadequate to deal with the traffic diversity. To properly manage traffic diversity, different but coherent strategies are needed at different protocol layers, and this often results in complex designs in the network which are difficult to deploy and manage. The recent advancement in artificial intelligence (AI) technology has provided a promising approach to deal with complex problems faced in the network design and operation.

The trend towards highly integrated networks with diverse underlying access technologies to support simultaneously multiple vertical industries has demanded complex operation in the network. This represents a great challenge in network design. This Workshop focuses on applying AI technologies to deal with the design complexity in wireless networks, particularly the machine learning techniques that are based on empirical or simulated data. Topics that may apply data driven intelligence to manage the complexity of a smart wireless network include, but not limited to:

- Quality of Service (QoS) and Quality of Experience (QoE) support
- Radio resource allocation and transmission scheduling
- Medium access control design
- Data centers and cloud systems
- Radio access technology selection
- Spectrum sharing in intra- and inter-tier HetNets
- Traffic load estimation and resource reservation
- User mobility prediction and handover support
- Network fault detection and self-healing
- Network self-configuration and self-organization
- Intrusion detection and self-protection

Submission Procedure

Submitted papers must represent original material which is not currently under review in any other conference or journal and has not been previously published. Paper length should not exceed nine-page standard IEEE conference two-column format (including all text, figures, and references). Full details of submission procedures and requirements for authors of accepted papers are available at <http://infocom2020.ieee-infocom.org>. All submitted papers will go through a peer review process. All accepted and presented papers will be included in the IEEE INFOCOM 2020 proceedings and submitted to IEEE Xplore®. IEEE reserves the right to exclude an accepted and registered but not presented paper from the IEEE digital library.

General Chairs:

- Periklis Chatzimisios, International Hellenic University, Greece
- Chuan Heng Foh, University of Surrey, UK
- Muhammad Imran, University of Glasgow, UK

Technical Program Chairs:

- Jinsong Wu, Universidad de Chile, Chile
- Celimuge Wu, University of Electro-Communications, Japan

Keynote and Panel Chairs:

- Dr Hasan Farooq, Ericsson, Silicon Valley, USA

Publicity Chairs:

- William Liu, Auckland University of Technology, New Zealand
- Chunguo Li, Southeast University, China

Important Dates:

Paper submission deadline:	January 15, 2020
Author notification:	February 15, 2020
Camera ready:	March 6, 2020