



## Call for Papers

The 4<sup>th</sup> IEEE International Conference on Network Softwarization (NetSoft 2018) will be held on June 25-29, 2018 in the heart of Montreal, Quebec, Canada. IEEE NetSoft has been created as a flagship conference aiming at addressing “Softwarization” of networks and systemic trends concerning the convergence of Cloud Computing, Software-Defined Networking (SDN), and Network Function Virtualization (NFV). IEEE Netsoft is technically co-sponsored by the IEEE Communications Society and the IEEE Computer Society.

### Scope

The telecommunications landscape is expected to change radically in the next few years. Pervasive ultra-broadband, programmable networks, and cost reduction of IT systems are paving the way to new services and commoditization of telecommunications infrastructure while lowering entrance barriers for new players and giving rise to new value chains. While this results in considerable challenges for service providers, this transformation also brings unprecedented opportunities for the Digital Society and the Digital Economy related to emerging new services and applications. Examples include Tactile Internet of Things, Industry 4.0, Cloud Robotics, and Artificial Intelligence. 5G will both accelerate and exploit this huge transformation, and as such, smart networking with embedded AI techniques leveraging NFV and SDN becomes essential. This will be made possible through the exploitation of massive network data with analytic tools and machine learning, allowing for proactive management of softwarized infrastructures.

This trend will be reflected in NetSoft 2018 in the various topics of interest under the theme “Achieving smart network softwarization” and the conference will serve as a forum to discuss the latest advances in this area.

### Topics of Interest

Researchers are invited to submit technical papers, tutorial, and demo proposals that fall into the conference’s topics of interest including, but are not limited to:

- Programmable SDN and NFV
- Softwarized cloud, fog, and edge infrastructures
- Cognitive and autonomic networking
- Network slicing and slice management
- Policy-Based Networking (PBN) and Intent-Based Networking (IBN) in Software-Defined Infrastructures (SDI)
- Centralized vs Distributed control, management & orchestration/choreography)
- Abstractions and virtualization of resources, services, and functions
- Service function chaining
- Container/microservice-based network functions
- Real-time operations and efficient network/service monitoring in SDN/NFV
- Analytics and big data approaches for managing softwarized networks
- QoS and QoE in softwarized infrastructures
- Resilience, reliability, and robustness of softwarized networks
- Mobility/Security/Safety/Trust support in virtualized environments
- SDN switch/router architecture and design
- APIs, protocols, and languages for programmable networks
- Lifecycle management of network software
- Debugging and introspection of software-defined virtualized systems
- Transition strategies from existing networks to SDN/NFV
- Softwarized platforms for Internet of Things (IoT)
- New service models and paradigms enabled by softwarization
- New value chains and business models
- Socio-economic impact and regulatory implications for softwarization
- Energy efficient and green SDI
- Experience reports from experimental testbeds and deployments

For more information, please check <http://ieee-netsoft.org>

### Important Dates

**Technical Papers:** January 11, 2018 (firm)

**Acceptance notification:** March 9, 2018

**Camera-ready paper:** April 6, 2018

### General Co-Chairs:

Prosper Chemouil, Orange Labs, France  
Noura Limam, University of Waterloo, Canada

### Technical Program Co-Chairs:

Chadi Assi, Concordia University, Canada  
Lisandro Zambenedetti Granville, UFRGS, Brazil  
Imen Grida Ben Yahia, Orange Labs, France