

# **Call for Papers**

# http://ieee-netsoft.org

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).

#### 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**

Topics of interest include, but are not limited to, the following:

- 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

#### **Paper submission**

Authors are invited to submit original contributions that have not been published or submitted for publication elsewhere. Papers should be prepared using the IEEE 2-column conference style and are limited to 9 pages (full papers) or 5 pages (short papers). They have to be submitted electronically in PDF format through JEMS. Papers exceeding page limits, multiple submissions, and self-plagiarized papers will be rejected without further review. All other papers will be subject to a peer-review process. Accepted and presented papers will be published in the conference proceedings and submitted for publication to IEEE Xplore.

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

#### **Important Dates**

Paper Submission: December 1, 2017
Acceptance Notification: March 9, 2018
Camera Ready due: April 6, 2018
Conference: June 25-29, 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