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Call for Papers

The 7th IEEE International Conference on Network Softwarization (IEEE NetSoft 2021) will be held in Tokyo, Japan from June 28 to July 2, 2021 just before the Tokyo 2020 Olympic and Paralympic Games. IEEE NetSoft has been created as a flagship conference aiming at addressing softwarization of networks and systemic trends raised by the convergence of Cloud Computing, Software-Defined Networking (SDN) and Network Function Virtualization (NFV), leading to a significant evolution of networks and services.

*** Scope ***

Over the years, software has become the core value provider in the telecommunications industry. Boosted by scientific breakthroughs, continuous innovation and stringent requirements for new services, network softwarization is currently transforming telecommunications and networking industry and is bringing several opportunities, while raising new challenges, from both conceptual and operational perspectives. To move ahead cognitive network softwarization, NetSoft 2021 will serve as a forum to discuss the latest advances in network softwarization technologies, AI-based software-defined networks, autonomic networking, intent/policy-based network management, network slicing, and other related research areas that are anticipated to radically transform today's networks. The need for further advances in these topics is reflected in the overall theme of NetSoft 2021: "Accelerating Network Softwarization in the Cognitive Age".

NetSoft 2021 will feature technical paper presentations, keynotes, tutorials, workshops, demos, and exhibitions from world-leading experts representing service providers, vendors, research institutes, open source projects, and academia.

*** Topics of Interest ***

The topics of interest include, but are not limited to:

- Softwarized cloud, fog, and edge infrastructures
- Cognitive and autonomic networking
- Centralized vs distributed control, management & orchestration
- Abstractions and virtualization of resources, services and functions
- AI techniques to support network automation
- Big data analytics for managing softwarized networks
- Network slicing and slice management
- Mobility management in softwarized networks
- Programmable SDN and NFV: languages and architectures
- Policy-based and intent-based networking
- Service Function Chaining (SFC)
- Mapping and scheduling of SFC
- Container/microservice-based network functions
- Efficient network/service monitoring in SDN/NFV
- QoS and QoE in softwarized infrastructures
- Resilience, reliability, and robustness of softwarized networks
- Network softwarization for 5G
- Network management at the edge
- Cooperative multi-domain, multi-tenant SDN/NFV environments

- Security, Safety, Trust and Privacy in virtualized environments
- SDN switch/router architecture and design
- Dynamic resource discovery and negotiation schemes
- Lifecycle management of network software
- DevOps methodologies for network softwarization
- Debugging and introspection of software-defined systems
- Softwarized platforms for Internet of Things (IoT)
- Energy-efficient and green software-defined infrastructures (SDI)
- Transition strategies from existing networks to SDN/NFV
- New value chains and service models enabled by softwarization
- Socio-economic impact and regulations for softwarization
- Experience reports from experimental testbeds and deployments

*** Paper Submission ***

Prospective authors are invited to submit original contributions as technical papers using the IEEE 2-column conference style with no more than 9 pages (Full papers) or 5 pages (Short papers), including tables, figures and references. Deadlines are:

- Paper submission deadline: December 14, 2020
- Acceptance notification: March 8, 2021
- Camera-ready paper: April 11, 2021
- Conference: June 28 – July 2, 2021

Important: NetSoft 2021 is enforcing a strict publication and no-show policy as stated by IEEE. Please check the NetSoft 2021 website for details.

*** TCP Co-Chairs ***

Christian Esteve Rothenberg, University of Campinas, Brazil
Barbara Martini, CNIT, Italy
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