

Call for Papers

2017 IEEE International Workshop on NETwork programmability: From the data center to the Ground (NetFoG 2017) (website: <http://sites.ieee.org/netsoft/workshops/>)

in conjunction with the 3rd IEEE Conference on Network Softwarization (NetSoft 2017)
July 3-7, 2017 Bologna, Italy

Scope

The proliferation of pervasive *mobile devices* (such as sensors, smartphones, and tablets) generating big amount of data to be stored and processed, coupled with emerging *virtualization and programmability* technologies promoting the softwarized deployment of network functions and applications on top of cloud infrastructures, highly challenge the cloud. Several research initiatives are mushrooming worldwide which promise to cope with the huge computing and networking needs (e.g., high scalability, low latency, flexible orchestration and management, mobility support and location awareness) of many emerging applications and systems, such as the Internet of Things (IoT), 5G systems, big data analytics. Solutions in those directions are still at their infancy and contributions are highly required which encompass: (i) the development of innovative *architectures, algorithms, and abstractions for more flexible, scalable and configurable provisioning and orchestration of programmable networks*; (ii) the design of *novel (mobile) edge/fog computing solutions* meeting the growing local and distributed computing requirements, by leveraging the available resources in the edge networks and sometimes diffused onto end user devices (e.g., smartphones, vehicles, IoT devices); (iii) the deployment of new technologies for *high-performance processing*, among which solutions tackling sustainable virtualization technologies; (iv) the design of *new cloud service models beyond typical IaaS, PaaS and SaaS*, e.g., inspired by the edge/fog computing paradigms, and their prototyping and implementation, especially as open source projects.

In this respect, NetFoG aims at bringing together researchers, engineers, and practitioners to present and discuss the latest advances on both *theoretical and practical key technology enablers for the network programmability, spanning the data centers and descending to the edge and the ground, in upcoming future Internet and 5G systems*.

Topics of interest

Authors are invited to submit papers that fall in the area of programmability of cloud networks and applications. Topics of interest include, but are not limited to, the following:

- extensions to IaaS, PaaS and SaaS concepts, interfaces and platforms
- management and monitoring of QoS/QoE over programmable networks
- architectures for virtualization and programmability in legacy and 5G networks
- orchestration and management frameworks for SDN/NFV
- big data for orchestration and management operations in programmable networks
- fog/mobile edge computing architectures and solutions
- SDN/NFV enablers for fog/mobile edge computing
- addressing, discovery and networking techniques for fog/edge computing
- fog/mobile edge computing support to IoT, 5G, autonomous and connected vehicles
- innovative fog/edge cloud services and applications
- incentives/business models for fog/edge cloud services
- security in fog/mobile edge computing scenarios
- SDN/NFV solutions to support user mobility and application/service proximity
- sustainability and energy efficiency for programmable networks
- microservices and containerization technologies
- emulation/simulation platforms, experimental testbeds, open source projects, prototypes implementation, modeling and performance analysis

Paper Submission

Authors are invited to submit original contributions (written in English) in PDF format. Only original papers not published or submitted for publication elsewhere can be submitted. Papers can be of two types: full (up to 6 pages) or short (up to 4 pages) papers. Full Papers accepted as short Papers will be required to be reduced to 4-pages length. Papers should be in IEEE 2-column US-Letter style using IEEE Conference template (http://www.ieee.org/conferences_events/conferences/publishing/templates.html) and submitted in PDF format via JEMS at: <https://submissoes.sbc.org.br/home.cgi?c=2764>. Papers exceeding these limits, multiple submissions, and self-plagiarized papers will be rejected without further review. All submitted papers will be subject to a peer-review process. Accepted and presented papers will be published in the conference proceedings and submitted to IEEE Xplore as well as other Abstracting and Indexing (A&I) databases.

Important dates

- Paper Submission: March 10, 2017
- Notification of Acceptance: April 18, 2017
- Camera-ready Submission: May 3, 2017

Workshop co-chairs

- Roberto Bruschi, Consortium for Telecommunications (CNIT), Genova, Italy, roberto.bruschi@cnit.it
- Claudia Campolo, University Mediterranea of Reggio Calabria, Italy, claudia.campolo@unirc.it
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TPC members

- Chiara Lombardo, Consortium for Telecommunications (CNIT), Italy
- Christian Esteve Rothenberg, University of Campinas, Brasil
- Daniel Corujo, Instituto de Telecomunicações, Aveiro, Portugal
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