



SWFAN 2017

2nd International Workshop on Software-Driven Flexible
and Agile Networking

In conjunction with **IEEE INFOCOM 2017**

Atlanta, GA, USA

May 1, 2017

<http://www.swfan.org>



CALL FOR PAPERS

The NFV/SDN paradigms promote the deployment of Network Functions (NF) as software components into cloud infrastructures, and the identification of relevant abstractions for their configuration, control and management. Such NFs can comprise processing elements in the data plane (*e.g.*, packet inspection, filtering, flow-level monitoring, or access control) as well as control-plane components (*e.g.*, signaling, routing, load balancing, mobility management). This paradigm shift enables new cloud service models, *i.e.*, NF-as-a-service (NFaaS), which can lead to significant operational and technology investment cost savings for service providers. Beyond that, telecom operators can greatly benefit from NFV/SDN, considering the increasing trend to implement mobile communication network functions in software.

Software-based networks can mitigate problems and shortcomings of today's networks, such as long provisioning times, with wasteful over-provisioning used to meet variable demand, and reliance on rigid and cost-ineffective hardware devices. Therefore, there is an increasing need for more flexibility and agility that can be attained via the architectural decomposition of network components and network services into elementary, reusable primitives as well as the virtualization of network processing elements.

In this respect, SWFAN aims at bringing together researchers, engineers, and practitioners to discuss the latest advances on architectures, algorithms, abstractions, and technologies for fluidity, flexibility, and agility in software-based networks. We particularly solicit submissions of unpublished work on (i) the rapid and elastic provisioning of computing, storage, and network resources for NF deployment and scaling in virtualized infrastructures, (ii) the development of new models, protocols, algorithms, and abstractions for more flexible and agile network control, (iii) the specification and development of elementary and reusable primitives for flexible network processing, and (iv) new technologies for high-performance processing.

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

- Algorithms and methods for NF placement
- Dynamic NF state management
- Service chaining
- Abstractions and techniques for network service reconfiguration and scaling
- Architectures and interfaces for NF configuration and control
- NF verification, systematic testing, fault management, and protection
- New models, protocols, and abstractions for flexible and agile network operations
- Flexible management, control, and slicing in 5G
- Programmable data planes
- Network updates for software-based networks
- Radio Access Network (RAN) virtualization
- Mobile Edge Computing
- Experiences from NFV/SDN deployments in production networks

Papers should not exceed 6 pages in IEEE format (double-column, 10pt font) and should be submitted via EDAS in PDF (formatted for 8.5x11-inch paper). Reviews will be single-blind, *i.e.*, the papers should include the author names and affiliations.

TPC Co-Chairs

Lefteris Mamatas, University of Macedonia, Greece

Stefano Salsano, University of Roma Tor Vergata, Italy

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Giuseppe Bianchi, University of Roma Tor Vergata, Italy

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Torsten Braun, University of Bern, Switzerland

Lefteris Mamatas, University of Macedonia, Greece

Panagiotis Papadimitriou, University of Macedonia, Greece

Danny Raz, Technion, Israel

Important Dates:

Submission deadline: January 10, 2017

Acceptance notification: February 22, 2017

Camera ready: March 12, 2017

Workshop: May 1, 2017

