IEEE NFV-SDN

2019 IEEE Conference on Network Functions Virtualization & Software Defined Networks

Dallas, TX, USA   November 12th – 14th, 2019   https://nfvsdn2019.ieee-nfvsdn.org   #IEEE #NFV #SDN

CALL FOR PAPERS

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Network Functions Virtualization (NFV) and Software Defined Networks (SDN) are an accepted evolution in all areas of network concepts and technologies. They are expected to further radically and dramatically transform not only telecommunication networks, campus, enterprise and data centers networks, but accelerate the introduction of smart cities/homes/cars/businesses and green infrastructures. Currently, NFV and SDN are in the transition phase from development into first trials, evaluation and early deployments, too.

A major impact for the rapid adoption is the shift to openness and knowledge exchange during the transition process. Open source software and hardware development, the convergence of IT and telco development and alignment of operation processes as well as integration of latest research results in algorithms, hardware design, etc. together with a continuous competition of the best ideas for acceptance in the community has supported the widespread acceptance of NFV and SDN.

The 2019 IEEE NFV-SDN conference understands itself as one accelerator of the continuous exchange on the latest ideas, developments and results between all ecosystem partners in the academia and industry area. The conference is highly encouraged to foster discussion on new approaches as well as dedicated work on missing aspects for improvements of NFV and SDN enabling architectures, algorithms, frameworks and operation of virtualized network functions and infrastructures.

IMPORTANT DATES

April 19th, 2019	Workshop proposal deadline
June 14th, 2019 (extended!)	Full paper submission deadline
July 8th, 2019	Demo / tutorial / panel proposal submission deadline
July 15th, 2019	Fast-track paper submission deadline
August 9th, 2019	Acceptance notification (full papers, tutorials)
August 26th, 2019	Acceptance notification (fast-track papers, demos)
September 13th, 2019	Camera-ready papers

TOPICS

The IEEE NFV-SDN conference brings together researchers from around the world to share ideas influencing the evolution and operation of NFV and SDN technologies. We encourage submission of innovative work on NFV and SDN. This is a non-exhaustive list of topics:

NFV and SDN Architectures, Infrastructure and Elements
- Emerging improvements including Network Slicing and unikernel paradigm
- Impact of "open X"
- Improvements in design of forwarding elements, e.g. switches/routers, wireless systems
- Optimizing NFV infrastructures including hardware acceleration technologies
- Heterogeneous server platform and the detailed element-level CPU and GPU mapping of NFV functions

NFV and SDN Operations
- Dynamic license management, autonomics, machine learning, monitoring, resiliency, fault management and self-healing
- Security and isolation impacts of virtualization technologies
- Advanced tools for automated design, deployment, validation and management
- Application of machine learning and big data analytics to manage virtualized networks

Performance Analysis and Optimization
- Costs of migration of application containers and workloads
- Data/control plane performance, interoperability and scalability studies
- Resource dimensioning and optimization (e.g. cloud-native design), workload isolation and tradeoffs
- Design guidelines for modularity, scalability, high availability and interoperability (e.g. container and micro services implementations)

Results and Evaluations in Application Scenarios

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- Comparative studies on different virtualization technologies
- Usage scenarios such as SD-WAN, IoT, Smart Grid, Smart Cities, etc.
- Improvements in future communication infrastructure enabled by SDN and NFV including RAN, evolution to 5G, public, private and hybrid clouds

DEMOS, TUTORIALS AND WORKSHOPS

Call for Demos: The IEEE NFV-SDN 2019 conference also invites demonstration papers in the NFV and SDN realms addressing (but not limited to) the topics above. The demonstrations should be configured to run in a cloud environment accessible via Internet and presented from the exhibition space floor on the demonstrator's laptop. Also, an author of an accepted demo is required to register for the conference at the full or limited rate and present the demo at the IEEE NFV-SDN 2019 conference. Demonstration proposals can be submitted at https://edas.info/newPaper.php?c=26183&track=97150

Call for Tutorials: The organizing committee invites proposals for tutorials to be held prior to the main conference. Tutorials should serve one or more of the following objectives: introducing students and newcomers to major topics in NFV and SDN research; providing instructions on established practices and methodologies; surveying a mature area of NFV and SDN research and/or practice; motivating and explaining an NFV and SDN topic of emerging importance; introducing expert non-specialists to an NFV and SDN research area. Proposals should be submitted by electronic mail to the Tutorial Program Co-Chairs. For information on submission, please visit http://www.ieee-nfvsdn.org/

Call for Workshop Proposals: The committee solicits proposals for one full-day or two half-day workshops to be held at the beginning of the main technical program. The Scope of the workshops aims to complement the main conference program with forums for exchange of technical expertise, development, integration and standardization efforts on particularly focused areas of interest within the frame of NFV and SDN. Proposals from industry and academia are welcome. Proposals should be submitted by electronic mail to the Workshop Program Co-Chairs. For information on submission, please visit https://nfvsdn2019.ieee-nfvsdn.org/authors/call-for-workshop-proposal

AUTHOR & SUBMISSION GUIDELINES

Prospective authors are invited to submit original full technical or fast-track papers for publication in the IEEE NFV-SDN 2019 Conference Proceedings and for presentation in the technical sessions. We solicit submission of high-quality full papers reporting original and novel research results on all above topics. Papers must be written in English, unpublished and not submitted elsewhere. Full papers must be formatted as the standard IEEE double-column conference template

FULL TECHNICAL PAPERS should have a maximum paper length of six (6) printed pages (10-point font), including figures, without incurring additional page charges (maximum 1 additional page with over length page charge of USD100 if accepted). Papers exceeding 7 pages will not be accepted at EDAS. Full technical papers can be submitted at https://edas.info/newPaper.php?c=26183&track=97149

FAST-TRACK PAPERS: In addition, we welcome fast-track papers from the research community up to four (4) pages in length (10pt font); max. one additional page with over length page charge of USD100 if accepted. These papers should focus more on recent and newly-developing results. FAST-TRACK papers will be reviewed with a more open mind towards the scope of evaluation or breadth of topics compared to longer papers. We recommend that authors check both calls for papers before submitting. Fast-track papers can be submitted at https://edas.info/newPaper.php?c=26183&track=97151

To be published in the IEEE NFV-SDN 2019 Conference Proceedings and to be eligible for publication in IEEE Xplore, an author of an accepted paper is required to register for the conference at the FULL (member or non-member) rate and the paper must be presented by an author of that paper at the conference. For authors with multiple accepted papers, one FULL registration is valid for up to 3 papers. Accepted and presented papers will be published in the IEEE NFV-SDN 2019 Conference Proceedings and submitted to IEEE Xplore®.

The IEEE reserves the right to exclude a paper from distribution after the conference (including its removal from IEEE Xplore) if the paper is not presented at the conference. Papers are reviewed on the basis that they do not contain plagiarized material and have not been submitted to any other conference at the same time (double submission). These matters are taken very seriously and the IEEE Communications Society will take action against any author who engages in either practice.