

2016 IEEE Conference on Network Function Virtualization and Software Defined Networks (NFV-SDN) Program



Monday, November 7

Monday, November 7, 08:35 - 12:30

Tutorial 1: P4: A Hands-on Introduction

Room: Oak

Monday, November 7, 08:35 - 17:30

Tutorial 3: NFV & Data Plane Optimizations

Room: Sequoia

Monday, November 7, 08:30 - 08:35

O4SDI Workshop Welcome

Room: Spruce

Monday, November 7, 08:35 - 09:35

O4SDI Technical Session 1

Room: Spruce

Chair: Walter Cerroni

Towards a Modular Interactive Management Approach for SDN Infrastructure Orchestration

Cirios Santhiago Gomes, Felipe Sampaio Dantas da Silva, Emídio Neto, Kevin Costa and João Batista

Resilient Orchestration of Service Functions Chains in a NFV Environment

Ahmed M. Medhat, Giuseppe Carella, Marcello Monachesi, Michael Pauls, Marius Corici and Thomas Magedanz

Distributed Service Orchestration: Interweaving Switch and Service Functions Across Domains

Qiong Zhang, Xi Wang, Paparao Palacharla and Tadashi Ikeuchi

Monday, November 7, 09:35 - 10:15

O4SDI Invited Talk 1 - Dr. Ishan Vaishnavi, Huawei Technologies Dusseldorf GmbH, Germany

Room: Spruce

Chair: Walter Cerroni

Monday, November 7, 10:30 - 11:10

O4SDI Invited Talk 2 - Dr. Flavio Esposito, Saint Louis University, USA

Room: Spruce

Chair: Walter Cerroni

Monday, November 7, 11:10 - 12:10

O4SDI Technical Session 2

Room: Spruce

Chair: Flavio Esposito

Efficient Service Graph Embedding: A Practical Approach

Balázs Németh, Balázs Sonkoly, Matthias Rost and Stefan Schmid

Efficient Service Auto-Discovery for Next Generation Network Slicing Architecture

Salvatore Talarico, Kiran Makhijani and Padma Esnault

Co-Scaler: Cooperative Scaling of Software-defined NFV Service Function Chain

Bin Zhang, Pengfei Zhang, Yusu Zhao, Yongkun Wang, Luo Xuan and Yaohui Jin

Monday, November 7, 13:45 - 17:30

Tutorial 2: Open Baton

Room: Sequoia

Monday, November 7, 13:30 - 13:35

Welcome to the First International Workshop on Security in NFV-SDN

Room: Spruce

Monday, November 7, 13:35 - 14:15

SNS2016 Keynote 1 "5G & virtualization security challenges"

Room: Spruce

Monday, November 7, 14:15 - 15:15

SNS2016: Paper Session 1

Room: Spruce

A Security Services Platform for Software Defined Networks

Sinan Tatlicioglu, Seyhan Civanlar, Burak Gorkemli, Erhan Lokman, Ali Balci and C. Bora Eliacik

Policy Based Virtualised Security Architecture for SDN/NFV enabled 5G Access Networks

Muhammad Shuaib Siddiqui, Eduard Escalona, Eleni Trouva, Michail Alexandros Kourtis, Dimitrios Kritharidis, Konstantinos V. Katsaros, Spiros Spirou, Carolina Canales and Lorenzo Manuel

Towards Policy Enforcement Point as a Service (PEPS)

Arash Shaghaghi, Mohamed Ali (Dali) Kaafar, Sandra Scott-Hayward, Salil S Kanhere and Sanjay Jha

Monday, November 7, 15:30 - 16:10

SNS2016 Keynote 2 "SDN & NFV : new security challenges & expected transformation"

Room: Spruce

Monday, November 7, 16:10 - 17:10

SNS2016: Paper Session 2

Room: Spruce

Security Policy Transition Framework for Software Defined Networks

Jacob Cox, Jr, Russell J Clark and Henry Owen

Network-wide Virtual Firewall using SDN/OpenFlow

Jarrold N. Bakker, Ian Welch and Winston K.G. Seah

BotD: A Scalable Anomaly-Based Bot Detection Architecture for Securing Web Services

KrishnaTeja Yadavalli and Shatrunjay Rawat

Monday, November 7, 17:10 - 17:15

SNS2016: Closing

Room: Spruce

Tuesday, November 8

Tuesday, November 8, 07:30 - 08:30

Registration - Breakfast

Tuesday, November 8, 08:30 - 08:45

Welcome to the 2016 IEEE NFV-SDN

Room: Cypress

Tuesday, November 8, 08:45 - 09:30

Keynote 1 by Geng Lin, Head - Infrastructure Engineering and Operations for Emerging Markets, Google

Room: Cypress

Tuesday, November 8, 09:30 - 10:30

Panel 1: What's the Right Deployment Architecture for NFV?

Room: Cypress

What's the Right Deployment Architecture for NFV?

Moderator: Puneet Sharma (Hewlett Packard Labs)

Panelist: Tom Anschutz (AT&T), Geng Li (Google), Tetsuya Nakamura (CableLabs), Kaladhar Voruganti (Equinix)

Tuesday, November 8, 10:45 - 12:30

NFV-SDN Distributed System Design

Room: Cypress

Chair: James Kempf

A Comparison of SDN and NFV for Re-designing the LTE Packet Core

Aman Jain, Sadagopan Nattamai Sathiyamoorthy, Sunny Lohani and Mythili Vutukuru

VirtPhy: A Fully Programmable Infrastructure for Efficient NFV in Small Data Centers

Cristina Dominicini, Gilmar Vassoler, Moises R. N. Ribeiro and Magno Martinello

The Role of Inter-Controller Traffic in SDN Controllers Placement

Andrea Bianco, Paolo Giaccone and Tianzhu Zhang

Robust Embedding of VNF/Service Chains with Delay Bounds

Varun S Reddy, Andreas Baumgartner and Thomas Bauschert

CAR: Cloud-Assisted Routing

Prasun K Dey and Murat Yuksel

Tuesday, November 8, 13:45 - 15:30

Best Papers Session

Room: Cypress

Chairs: Dilip Krishnaswamy, Kurt Tutschku, A. Selcuk Uluagac

Revisiting NFV orchestration with routing games

Mathis Obadia, Jean-Louis Rougier, Luigi Iannone, Vania Conan and Mathieu Bouet

Orchestrating Network Control Functions via Comprehensive Trade-off Exploration

Alan Bairley and Geoffrey G Xie

An Empirical Case for Container-driven Fine-grained VNF Resource Flexing

Amit Sheoran, Xiangyu Bu, Lianjie Cao, Puneet Sharma and Sonia Fahmy

Resilient Allocation of Service Function Chains

Michael Beck, Juan Felipe Botero and Kai Samelin

SFC-Checker: Checking the Correct Forwarding Behavior of Service Function Chaining

Brendan Tschaen, Ying Zhang, Theophilus Benson, Sujata Banerjee, Jeongkeun Lee and Joon-Myung Kang

Tuesday, November 8, 15:45 - 17:30

Performance Analysis, Monitoring, and Security

Room: Cypress

Chair: Steven Wright

Performance Evaluation and Tuning of Virtual Infrastructure Managers for (Micro) Virtual Network Functions

Pier Luigi Ventre, Claudio Pisa, Stefano Salsano, Giuseppe Siracusano, Florian Schmidt, Paolo Lungaroni and Nicola Blefari-Melazzi

MeDICINE: Rapid Prototyping of Production-Ready Network Services in Multi-PoP Environments

Manuel Peuster, Holger Karl and Steven Van Rossem

NFVPerf: Online Performance Monitoring and Bottleneck Detection for NFV

Priyanka Naik, Dilip Kumar Shaw and Mythili Vutukuru

Statistical-based Anomaly Detection for NFV Services

Michail Alexandros Kourtis, George K Xilouris, Georgios Gardikis and Ioannis Koutras

Predicting Network Attack Patterns in SDN using Machine Learning Approach

Saurav Nanda, Faheem Zafari, Casimer DeCusatis, Eric Wedaa and Baijian Yang

Tuesday, November 8, 17:30 - 19:00

NFV-SDN Demonstrations

Room: Justines

Tuesday, November 8, 19:00 - 20:30

Reception

Room: Justines

Wednesday, November 9

Wednesday, November 9, 08:30 - 08:35

Welcome Day 2

Room: Cypress

Wednesday, November 9, 08:40 - 09:25

Keynote 2: Platform transformation for NFV and SDN by Brian Skerry and Ilango Ganga, Intel

Room: Cypress

Wednesday, November 9, 09:25 - 10:25

Panel 2: The Role of NFV and SDN in 5G Network Transformation

Room: Cypress

The Role of NFV and SDN in 5G Network Transformation

Moderator: Tetsuya Nakamura (CableLabs)

Panelist: Ulas Kozat (Huawei R&D), Katia Obraczka (UCSC), Anit Lohtia (Tech Mahindra), Brian Skerry (Intel)

Wednesday, November 9, 10:40 - 12:25

Fault Tolerance and Flow Management in SDNs

Room: Cypress

Chair: Tetsuya Nakamura

Fault Tolerant Mechanisms for SDN Controllers

Liran Sidki, Yehuda Ben-Shimol and Akiva Sadvovski

Backup rules in Software-Defined Networks

Niels L. M. van Adrichem, Farabi Iqbal and Fernando A. Kuipers

High Performance Flow Matching Architecture for OpenFlow Data Plane

Viduranga Wijekoon, Mahesh Dananjaya, Pramodaya Kariyawasam, Sasika Iddamalgoda and Ajith Pasqual

EPL: an Efficient Passive Lightweight Estimator for SDN Packet Loss Measurement

Chunyan Fu, Wolfgang John and Catalin Meirosu

FOCUS: Function Offloading from a Controller to Utilize Switch Power

Ji Yang, Zhenyu Zhou, Theophilus Benson, Xiaowei Yang, Xin Wu and Chengchen Hu

Wednesday, November 9, 13:40 - 15:25

Advanced Topics in NFV-SDN Systems

Room: Cypress

Chair: Christos Koliass

Automated Virtual Network Functions Onboarding

Christian Makaya and Douglas Freimuth

COMPARE: COMParative Advantage driven REsource allocation for Virtual Network Functions

Puneet Sharma and Bernardo Huberman

An Extensible Autoscaling Engine (AE) for Software-based Network Functions

Giuseppe Carella, Michael Pauls, Lars Grebe and Thomas Magedanz

Optimizing Service Chain ID Generation for Flow Rule Compression

Om Prakash Nirankari, Prakash Pawar and Kotaro Kataoka

A Model to Select the Right Infrastructure Abstraction for Service Function Chaining

Thomas Soenen, Sahel Sahhaf, Wouter Tavernier, Pontus Sköldström, Didier Colle and Mario Pickavet

Load Balancing - Towards Balanced Delay Guarantees in NFV/SDN

Hao Wang and Jens Schmitt

Wednesday, November 9, 15:25 - 15:30

Closing of 2016 IEEE NFV-SDN

Room: Cypress

EDAS at 172.30.1.223 (Thu, 03 Nov 2016 21:03:58 +0100 CET) [User 11544 using MacOSX:Chrome 0.0 cached 0.420/0.860 s] [Request help](#)