

ManSDN/NFV 2017 Program (Tentative)

10:00-11:00 Keynote: Global Industry Status on Cloud Orchestration Evolution and Challenges, Dharma Rajan (Solutions Architect Leader, VMware) (Room: Ono Memorial Hall, B2F, Bldg. 27)

The evolution of software-defined networking (SDN) and network functions virtualization (NFV) from different sources has led the way to the programmable networks of the future. Globally, NFV deployments using multi-vendor virtual network functions to carry the live mobile traffic of millions of subscribers have been deployed in production and are growing exponentially. The future evolution of SDN/NFV, and the challenges that exist across a multitude of new use cases, such as 5G, micro data centers, mobile edge computing, IOT, and others, are of immense interest architecturally and from an operational management point of view.

This keynote will address how orchestration and automation are playing key roles in production deployments today and in the evolution of telco, IT, and converged OneCloud architectures. It will cover how one-touch service creation and zero-touch orchestration are evolving. A perspective on the direction the industry is heading and areas of research that academia can help solve in this fast-moving wave of network transformation will be a highlight.

11:00-11:30 Poster Session and Coffee break: Wireless Networks (Room: Lobby, B1F, Bldg. 27)

Auto Scaling of Data Plane VNFs in 5G Networks	Tulja Vamshi Kiran Buyakar (Indian Institute of Technology Hyderabad, India); Anil kumar Rangiseti (IIT HYDERABAD, India); Antony Franklin A (Indian Institute of Technology Hyderabad, India); Bheemarjuna Reddy Tamma (IIT Hyderabad, India)
Resource Allocation for Network Slicing in WiFi Access Points	Matias Richart (Universidad de la República, Uruguay); Javier Baliosian (University of the Republic, Uruguay); Joan Serrat (Universitat Politècnica de Catalunya, Spain); Juan-Luis Gorrioch (Polytechnic University of Catalonia, Spain); Ramón Agüero (University of Cantabria, Spain); Nazim Agoulmine (University of Evry Val d'Essonne, USA)
Design of SDN based End-to-end Routing over Multiple Domains for Mobility Management	Misumi Hata (Tohoku University, Japan); Mustafa Soylu (Istanbul Technical University, Turkey); Satoru Izumi, Toru Abe and Takuo Suganuma (Tohoku University, Japan)
SDN Enhancements for the Sliced, Deep Programmable 5G Core	Fabian Eichhorn (Fraunhofer FOKUS & Technische Universitaet Berlin, Germany); Marius Corici (Fraunhofer FOKUS, Germany); Thomas Magedanz (Fraunhofer Institute FOKUS / TU Berlin, Germany); Ping Du and Yoshiaki Kiriha (The University of Tokyo, Japan); Akihiro Nakao (University of Tokyo, Japan)
Agent composition approach to 5G management and orchestration	Vilho Räisänen (Nokia Bell Labs, Finland)

11:30-13:00 Technical Session 1: Implementation (Room: Ono Memorial Hall, B2F, Bldg. 27)

[Invited talk] Progress toward Network Softwarization	Katsuhiro Shimano (NTT, Japan)
Architecture for Building Hybrid Kernel-User Space Virtual Network Functions	Tu Van Nguyen, KyungChan Ko and James W. Hong (POSTECH, Korea)
InFEP - Lightweight Virtualization of Distributed Control on White-box Networking Hardware	Thomas Kohler, Frank Dürr, Christian Bäumlisberger and Kurt Rothermel (University of Stuttgart, Germany)

13:00-14:30 Lunch (Mori-no-Kaze)

14:30-16:00 Technical Session 2: Optimization of Controller and NFV (Room: Ono Memorial Hall, B2F, Bldg. 27)

Design of Virtual Gateway in Virtual Software Defined Networks	Doyoung Lee, Yoonseon Han and James W. Hong (POSTECH, Korea)
DiMob: Scalable and Seamless Mobility in SDN Managed Wireless Networks	Ian Vermeulen (University of Antwerp - imec, Belgium); Patrick Bosch (University of Antwerp - iMinds, Belgium); Tom De Schepper (University of Antwerp - iMinds, Belgium); Steven Latré (University of Antwerp - imec, Belgium)
Performance Evaluation of Selective Flow Monitoring in the ONOS Controller	Anh Nguyen-Ngoc (University of Würzburg, Germany); Stanislav Lange and Thomas Zinner (University of Würzburg, Germany); Michael Seufert (University of Würzburg, Germany); Phuoc Tran-Gia (University of Würzburg, Germany); Nieke Aerts and David R. Hock (Infosim GmbH & Co. KG, Germany)
An evolutionary algorithm-based technique for controllers' and NFV's placement in Telco networks	Jean-Michel Sanner (Orange Labs, France); Gerardo Rubino (Inria/Irisa, France); Meryem Ouzzif (Orange Labs, France); Yassine Hadjadj-Aoul (University of Rennes 1, France)

16:00-16:30 Poster Session 2 and Coffee break: Design and Control in SDN (Room: Lobby, B1F, Bldg. 27)

	SDN implementation of multipath discovery to improve network performance in Distributed Storage Systems	Luis Guillen Barja, Satoru Izumi, Toru Abe, Takuo Suganuma and Hiroaki Muraoka (Tohoku University, Japan)
	Managing the Availability of VNFs with the Availability Management Framework	Pradheba Rangarajan and Ferhat Khendek (Concordia University, Canada); Maria Toeroe (Ericsson, Canada)
	Scalability and Reliability Aware SDN Controller Placement Strategies	Fetia Bannour (UPEC University, France); Sami Souihi (University Paris Est UPEC, France); Abdelhamid Mellouk (UPEC, University Paris-Est Creteil Val de Marne, France)
	Reliable Service Function Chain Provisioning in Software-Defined Networking	Yansen Xu (The University of Electro-Communications, Japan); Ved P. Kafle (National Institute of Information and Communications Technology, Japan)
	Deadline-aware and Energy-Efficient Dynamic Flow Scheduling in Data Center Network	Zan Yao, Ying Wang and Junhua Ba (Beijing University of Posts and Telecommunications, P.R. China); Junran Zong (Beijing University of Posts and Telecommunications & State Key Laboratory of Networking and Switching Technology, P.R. China); Sixiang Feng (Beijing University of Posts and Telecommunications, P.R. China); Zhanwei Wu (Beijing University of Posts and Telecommunications & State Key Laboratory of Networking and Switching Technology, P.R. China)

16:30-18:00 Technical Session 3: Traffic Engineering (Room: Ono Memorial Hall, B2F, Bldg. 27)

	NeuRoute: Predictive Dynamic Routing for Software-Defined Networks	Abdelhadi Azzouni (UPMC & LIP6, France); Raouf Boutaba (University of Waterloo, Canada); Guy Pujolle (University Pierre et Marie Curie - Paris 6, France)
	Software-Defined Multipath-TCP for Smart Mobile Devices	Tom De Schepper (University of Antwerp - iMinds, Belgium); Jakob Struye (University of Antwerp, Belgium); Ensar Zeljkovic (University of Antwerp - imec & IDLab, Belgium); Steven Latré (University of Antwerp - imec, Belgium); Jeroen Famaey (University of Antwerp & Imec, Belgium)
	On demand QoS with a SDN Traffic Engineering Management (STEM) module	Cédric Morin (IMT Atlantique & TéléDiffusion de France, France); Geraldine Texier (IRISA/IMT Atlantique & BCOM, France); Cao Phan (BCOM, France)
	Pre-provisioning of Local Protection for Handling Dual-failures in OpenFlow-based Networks	Pankaj Thorat (Sungkyunkwan University); Seil Jeon (Sungkyunkwan University, Korea); Syed Muhammad Raza (Sungkyunkwan University, Korea); Hyunseung Choo (Sungkyunkwan University, Korea)