

## The First International Workshop on "Smart network Technologies and Edge computing for the Tactile Internet"

# @STET2018

### **STET 2018**

www.cs.slu.edu/stet2018/

in conjunction with IEEE NetSoft 2018 (http://netsoft2018.ieee-netsoft.org/)

25-29 June 2018 - Montreal, Canada

In the recent years, we have witnessed an increasing interest towards new networking trends such as *cloud computing*, providing virtually unlimited resources for enterprises and end users, and *smart systems* such as sensors, smartphones, used to generate and elaborate data produced in human life contexts and leading to the problem of big data processing and storage.

Additionally, the introduction of the *Software Defined Networking* (SDN) paradigm and *Network Function Virtualization* (NFV) are deeply modifying the Internet towards the new concept of softwarized network, where network nodes are realized with general-purpose standard servers, and network functions are implemented as software pieces running on servers according to the data center and cloud computing paradigms. These technologies, combined with the emerging standard of Multi-Access Edge Computing (MEC), will be the enablers of the forthcoming 5G mobile network for the Tactile Internet, a framework that is likely to change every segment of the society in the future.

Tactile Internet is foreseen to represent the next step in the Internet of Things (IoT) paradigm thanks to its property of supporting extremely low latency, high availability, reliability and security, so building real-time interactive systems and physical tactile experiences remotely. Relevant application areas for Tactile Internet include real-time gaming, industrial automation, transportation systems, health and education. However, technical solutions to Tactile Internet 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 Tactile Internet applications; (ii) the design of novel (mobile) edge/fog computing solutions meeting the growing local and distributed very low-latency computing requirements, and their integration with other technologies, like for example SDN and NFV, MEC and 5G in using the available resources at the edge of the network; (iii) the deployment of new smart technologies for high-performance processing, among which solutions tackling sustainable virtualization technologies.

The STET 2018 Workshop aims at bringing together researchers, engineers, and practitioners to present and discuss the latest advances on architectural, theoretical and practical enablers for the realization of the Tactile Internet vision in future 5G smart systems. Authors are invited to submit papers that fall in the area of smart networks for Tactile Internet and Multi-Access Edge Computing.

#### **Topics of interest** include but are not limited to:

- Resource management and orchestration for the Tactile
- SDN, NFV as enabling technologies for the Tactile Internet
- Edge Computing strategies in support of the Tactile Internet
- Protocols and Architectures for the Tactile Internet
- System design and modeling for the Tactile Internet
   Small and large scale Testbed for the Tactile Internet
- Performance evaluation and reliability for the Tactile Internet
- Security and privacy for the Tactile Internet
- Use cases and application domains for Tactile Internet
- Prototypes and demonstrators of the Tactile Internet
- Measurement studies for the Tactile Internet
- Enabling Technologies for the Tactile Internet
- Economic impact of the Tactile Internet paradigm
- Game theory and optimization for Tactile Internet

#### \*\*\* Important Dates \*\*\*

applications

- Workshop Paper Submission: 46 March, 2018 23 March, 2018 (firm deadline)

Notification of Acceptance: 6 April, 2018
Camera-ready Submission: 20 April, 2018

#### \*\*\* 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 must be prepared in IEEE 2-column US-Letter style using IEEE Conference template (see <a href="http://www.ieee.org/conferences\_events/">http://www.ieee.org/conferences\_events/</a> conferences/publishing/templates.html) with a maximum length of six (6) pages and submitted via JEMS at:

https://jems.sbc.org.br/home.cgi?c=3008. If necessary, up 2 extra pages are allowed with no charge.

Authors of accepted papers will be invited to submit an extended version to the <u>Special Issue</u> "Softwarization at the Network Edge for the Tactile Internet" of the MDPI Journal of Sensor and Actuator Networks (<u>JSAN</u>).

#### \*\*\* Workshop General co-chairs \*\*\*

- Giovanni Schembra, University of Catania, Italy, schembra@dieei.unict.it
- Laura Galluccio, University of Catania, Italy, laura.galluccio@dieei.unict.it
- Flavio Esposito, Saint Louis University, USA, flavio.esposito@slu.edu