Call for Papers

5GArch: The 5th International Workshop on 5G Architecture

Thursday, May 24th, 2018

An unprecedented reengineering of the mobile networking architecture is required if the mobile industry is to remain competitive. Mobile data traffic is predicted to increase globally 11-fold from 2013 to 2018, and grow three times faster than fixed IP traffic. The growth in mobile traffic will not be homogenous: busy hour Internet traffic is expected to grow more rapidly than average Internet traffic. The uptake of Machine Type Communication (MTC) services will, in addition, result in spatially and temporally varying demand. Thus, a future mobile infrastructure will not only have to support a fast growing overall mobile data volume and a significantly increased number of connected mobile devices demanding significantly improved efficiencies, but it also has to flexibly adapt to dynamically fluctuating traffic demands and a broad range of potentially new requirements of future service portfolios. To satisfy the above trends, future 5G networks will have to meet a wide array of diverse and extreme requirements. There will be the need for super-fast and reliable connectivity with virtually zero latency for use cases such as remote control of robots, and support for billions of sensors and things. 5G will provide consistent and high quality connectivity for people and things, creating the perception of infinite capacity. Furthermore, 5G networks will combine revolutionary technologies with legacy existing mobile radio generations, as well as Wi-Fi, into a new system. Those technologies and layers will need to be managed as one. Hence, it is essential to introduce a programmable, software-driven end-to-end architecture that allows for a cost- and time-efficient introduction of 5G, that integrates a variety of novel technologies rolled out in various stages, and that is sufficiently flexible to accommodate applications and services that are yet to be envisioned.

This workshop is organized by the 5GPPP project **5G-MoNArch**. Topics of Interest include (but not limited to):

- Network slice control and orchestration
- Inter/intra slice resource and context management
- C-RAN and D-RAN flexible architectures
- Functional split and function placement
- Cross-domain management
- Multi-service architectures
- Cloud-based mobile architectures and protocol stack
- Network Function Virtualization (NFV)
- Network reliability and resilience
- Robust cooperative designs, Massive MIMO architectures
- Advanced radio link management with multiservice interface
- Network elasticity and scaling
- Orchestration-driven elasticity
- Convergence of RAN and Core Network
- SDN for radio access
- Orchestration and management mechanisms
- Joint computation/communication architectures and algorithms
- Mobile edge computing
- Standardization activities by 3GPP and ETSI
- 5G network prototypes and testbed

Submission Guideline: see http://icc2018.ieee-icc.org/authors/call-workshop-papers
Submission link: http://edas.info/N24158
Deadlines:

Paper Submission Deadline: 3 January 2018
Acceptance Notification: February 21, 2018
Final Paper submission: March 5, 2018

Workshop Organizers & TPC Chairs

General Chairs

- Dr. David M. Gutierrez Estevez, Samsung, United Kingdom
- Dr. Diomidis Michalopoulos, Nokia Bell Labs, Germany

TPC Chair

- Prof. Vincent Wong, The University of British Columbia, Canada