The Electrical and Computer Engineering Program presents
ECEN Seminar Series

On Network Softwarization

Prof. Tarik Taleb
Aalto University, Finland

Thursday, 7th April, 2016
12 – 1 PM
Lecture Hall 144
Light lunch will be served

The telecom industry keeps reinventing itself. Soon, the world will be experiencing the 5th generation mobile networks (5G), also referred to as beyond 2020 mobile communications systems. Major obstacles to overcome in 5G systems are principally the highly centralized architecture of mobile networks along with the static provisioning and configuration of network nodes built on dedicated hardware components. This has resulted in lack of elasticity and flexibility in deployment of mobile networks; rendering their run-time management costly, cumbersome and time-consuming. Software Defined Networking, Network Function Virtualization, and Cloud Computing, along with the principles of the latter in terms of service elasticity, on-demand features, and pay-per-use, could be important enablers for various mobile network enhancements, to specifically virtualize and decentralize mobile networks using general-purpose COTS (commercial off the shelf) hardware. For this purpose, different requirements have to be met and numerous associated challenges have to be subsequently tackled. This talk will touch upon the recent trends the mobile telecommunications market is experiencing and discuss the challenges these trends are representing to mobile network operators. To cope with these trends, the talk will then showcase the feasibility of on-demand creation of cloud-based elastic mobile networks, along with their lifecycle management. The talk will introduce a set of technologies and key architectural elements to realize such vision, turning end-to-end mobile networking into software engineering.

FOR MORE INFORMATION:
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