# The First International Workshop on Heterogenous Mobile/Multi-Access Edge Computing (HMEC'19)

in conjunction with <u>IEEE VTC 2019 Spring</u> (28 April – 1 May 2019 in Kuala Lumpur, Malaysia)



The recent development of wireless networking and mobile cloud

computing initiates an emerging cyber system called mobile/multi-access edge computing (MEC). MEC moves computing and data processing capability from distant cloud datacenters to edge servers that are closer to the mobile devices to offer users the lowest possible latency, the highest possible bandwidth, and direct access to real-time network services.

Although MEC is expected to largely improve the QoE for mobile users, it is challenging to realize and utilize the MEC systems effectively and efficiently due to its inherent heterogeneities. First, since a typical MEC datacenter is composed of heterogenous resources such as CPU/GPU clusters, FPGAs, programable network routers, etc., this heterogeneity is big challenge to the traditional orchestration systems. In addition, due to the differences in scales, architectures, and Internet access technologies, it is challenging to realize the coordination of multiple MEC datacenters for conducting complicated tasks. Finally, the applications using MEC are also heterogenous. Different applications have different objectives and metrics, and correspondingly different flavors to specific MEC servers. Therefore, joint optimization of multiple applications and the MEC orchestration has to be considered. Addressing these issues efficiently will have significant importance to the future mobile computing and communications technologies.

The objective of this workshop is to identify and address the challenges and opportunities of developing and utilizing HMEC. Potential topics include but are not limited to the following:

- Theory, architecture, platform, application, and tools for MEC
- Cloud computing and MEC in heterogenous envoriment
- Novel network architecture, protocol, and the other related technologies for MEC
- Vehicular network technologies employing MEC
- Heterogenous networks

- Theory, platform, and applications of Internet of things based on MEC
- Energy harvesting technologies and communications related to MEC
- Safety, security, and privacy for MEC
- Cooperative computing and communications for heterogenous MEC
- The practice and experience of Proof-of-Concept projects of MEC
- Related future trends and emerging technologies of MEC

All manuscripts should be converted to PDF format and uploaded to the Trackchair system via <u>https://vtc2019s-rr-wks.trackchair.com/track/1748/submit</u>. Each submission must be *at most 5* pages in length and conforms to the double-column template provided by IEEE. You can download a template here: <u>LaTeX or MS-Word</u>. Accepted and presented papers will be published in the IEEE VTC Spring 2018 Conference Proceedings (*Ei Compendex indexed*) and submitted for inclusion in *IEEE Xplore*.

#### **Important Dates**:

- Paper submission: 22 January 2019
- Paper acceptance: 16 February 2019
- Final paper submission: 28 February 2019

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