Title:

Container-Based Approaches to Mobile Edge Computing in 5G Networks

Abstract:

Edge computing provides highly responsive computing services to various applications of Internet of Things (IoT). When IoT applications demand mobility support, it is indispensable to offer edge computing services through a mobile network. So far 5G networks have become the major network infrastructure for IoT applications. However, several challenging issues remain to be resolved by taking into account the special features of 5G networks. This talk is dedicated to a few solutions to these issues. Particularly, as container, a cloud-native technology, has been recognized as a cornerstone for edge computing, such solutions are developed based on containers.

Bio:

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Dr. Xudong Wang received the PhD degree in electrical and computer engineering from the Georgia Institute of Technology in 2003. He is currently the John Wu and Jane Sun Chair Professor with the UM-SJTU Joint Institute, Shanghai Jiao Tong University. He is also an affiliate professor with the Department of Electrical and Computer Engineering, University of Washington. He was a senior research engineer, a senior network architect, and a R&D manager with several companies. He was the editor of the IEEE Transactions on Mobile Computing, IEEE Transactions on Vehicular Technology, Elsevier Ad Hoc Networks, and China Communications, and was also the guest editor for several international journals. He was the general chair of 2017 IEEE 5G Summit in Shanghai and a TPC co-chair of the 32nd International Conference on Information Networking. He was also the demo co-chair of the ACM International Symposium on Mobile Ad Hoc Networking and Computing (ACM MOBIHOC 2006), a technical program co-chair of Wireless Internet Conference (WICON) 2007, and a general co-chair of WICON 2008. He was a voting member of IEEE 802.11 and 802.15 Standard Committees. He was elected to IEEE Fellow in 2017. His current research interests include wireless communication networks, joint communications and sensing, edge computing, and distributed machine learning.