Editorial

Advances in Infrastructure Mobility for Future Networks

Lu Wang ¹, **Ziming Zhao** ², and **Wei Wang**³

¹*Shenzhen University, Shenzhen, China*

²*Arizona State University, Tempe, USA*

³*Huazhong University of Science and Technology, Wuhan, China*

Correspondence should be addressed to Lu Wang; wanglu@szu.edu.cn

Received 30 August 2018; Accepted 30 August 2018; Published 17 September 2018

Copyright © 2018 Lu Wang et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

During the last decade, the pervasive use of mobile devices has triggered various changes in network usage and infrastructures. Remarkable advances of autonomous systems have made ubiquitous connectivity no longer a futuristic promise, but rather an attainable technology to meet the imminent communication demands in emergency situations, harsh environments, and remote areas. The growth of Autonomous Vehicles (AVs) and Unmanned Aerial Vehicles (UAVs) empowers the wireless infrastructure with the ability to move physically and thus provides on-demand network services and multiple grid connections, alleviating unpredictable problems such as sudden traffic hotspots, poor coverage, and natural disasters. Researchers are making efforts to benefit from infrastructure mobility. The next breakthrough in network performance will emerge from new ways of organizing networks by merging wireless networking and robotics technologies.

Realizing such a vision needs various pieces to come together, spanning from network architecture to protocol design to communication techniques. This special issue talks about related topics in wireless networks and paves the way for binging mobility as a new degree of freedom (DoF) to the network design. Particularly, it focuses on advances in infrastructure mobility to cover the most recent ideas and research based on wireless networks, including intelligent and effective coordination in the dynamic environments, mobility enabled accurate indoor localization algorithms, and security and privacy issues regarding the mobile data. These advanced technologies in communication and networking ensure the

communication robustness, information reliability, and user-privacy protection against a wide range of cyber-attacks.

Conflicts of Interest

The authors declare that they have no conflicts of interest.

Lu Wang
Ziming Zhao
Wei Wang