Real-Time Applications Support in Wi-Fi

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Message from the Guest Editors

The development of computer and telecommunication technologies is giving rise to new scenarios of Wi-Fi usage, such as virtual and augmented reality, haptic technology, remote control, industrial control, and high-quality video streaming. Traffic generated by the corresponding applications — the real-timeapplications (RTA) — has stringent quality of service requirements, demanding very low delays, limited jitter, and very high reliability.

This Special Issue aims to present and investigate new approaches to RTA support in Wi-Fi networks. We invite researchers to contribute original articles on topics which include, but are not limited to:

- Real-time applications support in IEEE 802.11be and IEEE 802.11ax
- Real-time video streaming over Wi-Fi
- Adapting time-sensitive networking to Wi-Fi
- Interactive VR/AR and Cloud-gaming applications over Wi-Fi
- New PHY and MAC features to improve latency in Wi-Fi
- OFDMA approaches to guarantee low latency in Wi-Fi
- Usage of multilink transmissions to improve reliability and latency in Wi-Fi
- Wi-Fi network cooperation and coordination to provide a controlled environment for RTA
- WebRTC and streaming transport protocols over Wi-Fi

Special Issue