

Wireless Innovations for Smartphones

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Abstract: The ever increasing demand for fast mobile internet connectivity continues to set challenges for research in radio communications. On one hand the capacity demand can be served by offloading data traffic to local networks; on the other hand using more bandwidth, and possibly dynamically allocating spectrum in a flexible way, will improve the usage of the available spectrum. The future of wireless access continues to be defined by the 3GPP and IEEE standards setting bodies. Radios can also provide innovative features that offer new functionalities for consumers, such as ultra fast local connectivity, sensing and positioning. This talk will present examples of various radio innovations and the challenges related to commercializing them.