ICWS Seminar Series

OVERVIEW OF 3GPP LTE/LTE-A

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Abstract: This talk provides an overview of the 4G Long-Term Evolution (LTE) and LTE-Advanced (LTE-A) mobile communication standard developed within the Third-Generation Partnership Project (3GPP). In this talk, the structure and working procedure of the 3GPP standard body are described. The evolution from UTRA to LTE is illustrated with the new features introduced in LTE. Key technologies that have been adopted to reach the data throughput and delay target are explained in general terms. The physical layer and higher layer designs specific to LTE are then explained. Finally the enhancements adopted in LTE-A are described.

Biography: Yufei Blankenship received the B.S. and M.S. degrees from Northwestern Polytechnical University, Xi'an, Shaanxi, China in 1993 and 1996, respectively, and the Ph.D. degree from Virginia Tech, Blacksburg, VA, in 2000, all in Electrical Engineering.

After graduating from Virginia Tech, she joined Motorola Labs and worked on a variety of wireless standards including IEEE WiMAX/WLAN and 3GPP HSPA/LTE. Her experience with Motorola also includes a year working on intellectual property management for the Mobile Device business unit (now Motorola Mobility). She then joined the Wireless Standard and Research department of Huawei Technologies (USA), working on 3GPP LTE-Advanced and leading the Patent Review Board. Currently Yufei is a Senior Member of Technical Staff at the Advanced Technology lab of RIM.

Yufei holds 23 issued US patents with more pending. She is also a registered patent agent with the USPTO.

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