Abstract

Most wireless LAN implementations in use today follow IEEE 802.11b standard. However, the popularity of IEEE 802.11a is on the rise and most future implementations are likely to be IEEE 802.11a-compliant. The goal of this presentation is to describe the main technology used in IEEE 802.11a and explain its advantages. The emphasis will be on the PHY layer but the main features of MAC layer will also be covered. We will present each main functional block of an IEEE 802.11a implementation and highlight the distinguishing features of 802.11a.

Biography of Speaker

Dr. Xiaoshu Qian has 15 years of experience in technical work and management positions. He is presently an engineering manager at Intel Corporation, where he works in communication and DSP system design. He has taught numerous graduate courses in electrical engineering and computer science at several universities. He received a Ph.D. degree in Electrical Engineering, M.S. in Computer Science, and M.S. in Mathematics, all from the University of Rhode Island, and B.S. in Physics from Hangzhou University (currently part of Zhejiang University) in China. He has published numerous technical papers and is the main author of one U.S. patent.