Learn about Ultra-wideband (UWB) transmission - the most talked about application in wireless communications.

UWB wireless communication is a revolutionary technology for transmitting large amounts of digital data over a wide spectrum of frequency bands with very low power for a short distance. This exciting new text covers the fundamental aspects of UWB wireless communications systems for short-range communications. It also focuses on more advanced information about networks and applications. Chapters include: Radio Propagation and Large Scale Variations, Pulse Propagation and Channel Modelling, MIMO (Multiple Input, Multiple Output) RF Subsystems and Ad Hoc Networks.

- Focuses on UWB wireless communications rather than UWB radar, which has been covered before.
- Provides long and short-term academic and technological value.
- Teaches readers the fundamentals, challenges and up-to-date technical processes in this field.

ABOUT THE AUTHOR

Professor Xuemin Shen works in the Department of Electrical and Computer Engineering at the University of Waterloo, Canada. His research interests are Wireless/Internet interworking, Resource and mobility management, Voice over mobile IP, WiFi, WAP, Bluetooth, UWB wireless applications, ad hoc wireless networks.
Dr. Mohsen Guizani is Professor and Chair of the Department of Computer Science at Western Michigan University. Dr. Guizani's research interests include Computer Networks, Wireless Communications and Computing, Design and Analysis of Computer Systems, and Optical Networking. He is the founder and Editor-In-Chief of Wireless Communications and Mobile Computing Journal, published by John Wiley.

Professor Robert Caiming works in the Center for Manufacturing Research/Electrical and Computer Engineering Department at Tennessee Technological University, USA. His research interests include Wireless communications and systems (3G, 4G, UWB), Radar/communications signal processing and Time-domain Electromagnetics.

Professor Tho Le-Ngoc works in the Department of Electrical and Computer Engineering at McGill University. His research interests include Broadband Communications: Advanced Transmission, Multiple-Access and Dynamic Capacity Allocation Techniques.

For additional product details, please visit https://www.wiley.com/en-us