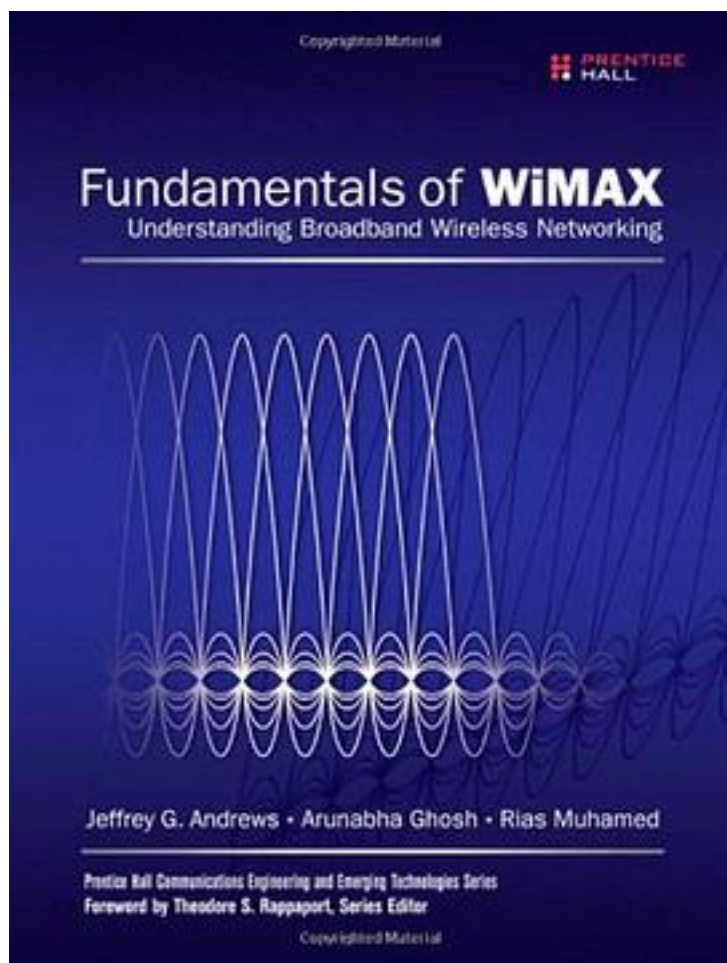


Fundamentals of WiMAX



[Fundamentals of WiMAX 下载链接1](#)

著者:Andrews, Jeffrey, Ph.D./ Ghosh, Arunabha, Ph.D./ Muhamed, Rias

出版者:Prentice Hall

出版时间:2007-2

装帧:HRD

isbn:9780132225526

Praise for Fundamentals of WiMAX "This book is one of the most comprehensive books I have reviewed ...it is a must-read for engineers and students planning to remain current or who plan to pursue a career in telecommunications. I have reviewed other

publications on WiMAX and have been disappointed. This book is refreshing in that it is clear that the authors have the in-depth technical knowledge and communications skills to deliver a logically laid out publication that has substance to it." --Ron Resnick, President, WiMAX Forum "This is the first book with a great introductory treatment of WiMAX technology. It should be essential reading for all engineers involved in WiMAX. The high-level overview is very useful for those with non-technical background. The introductory sections for OFDM and MIMO technologies are very useful for those with implementation background and some knowledge of communication theory. The chapters covering physical and MAC layers are at the appropriate level of detail. In short, I recommend this book to systems engineers and designers at different layers of the protocol, deployment engineers, and even students who are interested in practical applications of communication theory." --Siavash M. Alamouti, Chief Technology Officer, Mobility Group, Intel "This is a very well-written, easy-to-follow, and comprehensive treatment of WiMAX. It should be of great interest." --Dr. Reinaldo Valenzuela, Director of Wireless Research, Bell Labs "Fundamentals of WiMAX is a comprehensive guide to WiMAX from both industry and academic viewpoints, which is an unusual accomplishment. I recommend it to anyone who is curious about this exciting new standard." --Dr. Teresa Meng, Professor, Stanford University, Founder and Director, Atheros Communications "Andrews, Ghosh, and Muhamed have provided a clear, concise, and well-written text on 802.16e/WiMAX. The book provides both the breadth and depth to make sense of the highly complicated 802.16e standard. I would recommend this book to both development engineers and technical managers who want an understating of WiMAX and insight into 4G modems in general." --Paul Struhsaker, VP of Engineering, Chipset platforms, Motorola Mobile Device Business Unit, former vice chair of IEEE 802.16 working group "Fundamentals of WiMAX is written in an easy-to-understand tutorial fashion. The chapter on multiple antenna techniques is a very clear summary of this important technology and nicely organizes the vast number of different proposed techniques into a simple-to-understand framework." --Dr. Ender Ayanoglu, Professor, University of California, Irvine, Editor-in-Chief, IEEE Transactions on Communications "Fundamentals of WiMAX is a comprehensive examination of the 802.16/WiMAX standard and discusses how to design, develop, and deploy equipment for this wireless communication standard. It provides both insightful overviews for those wanting to know what WiMAX is about and comprehensive, in-depth chapters on technical details of the standard, including the coding and modulation, signal processing methods, Multiple-Input Multiple-Output (MIMO) channels, medium access control, mobility issues, link-layer performance, and system-level performance." --Dr. Mark C. Reed, Principal Researcher, National ICT Australia, Adjunct Associate Professor, Australian National University "This book is an excellent resource for any engineer working on WiMAX systems. The authors have provided very useful introductory material on broadband wireless systems so that readers of all backgrounds can grasp the main challenges in WiMAX design. At the same time, the authors have also provided very thorough analysis and discussion of the multitudes of design options and engineering tradeoffs, including those involved with multiple antenna communication, present in WiMAX systems, making the book a must-read for even the most experienced wireless system designer." --Dr. Nihar Jindal, Assistant Professor, University of Minnesota "This book is very well organized and comprehensive, covering all aspects of WiMAX from the physical layer to the network and service aspects. The book also includes insightful business perspectives. I would strongly recommend this book as a must-read theoretical and practical guide to any wireless engineer who intends to investigate the road to fourth generation wireless systems." --Dr. Yoon Chae Cheong, Vice President, Communication Lab, Samsung "The authors strike a wonderful balance between theoretical concepts, simulation performance, and practical implementation, resulting in a complete and thorough exposition of the standard. The book is highly recommended for engineers and

managers seeking to understand the standard." --Dr. Shilpa Talwar, Senior Research Scientist, Intel "Fundamentals of WiMAX is a comprehensive guide to WiMAX, the latest frontier in the communications revolution. It begins with a tutorial on 802.16 and the key technologies in the standard and finishes with a comprehensive look at the predicted performance of WiMAX networks. I believe readers will find this book invaluable whether they are designing or testing WiMAX systems." --Dr. James Truchard, President, CEO and Co-Founder, National Instruments "This book is a must-read for engineers who want to know WiMAX fundamentals and its performance. The concepts of OFDMA, multiple antenna techniques, and various diversity techniques--which are the backbone of WiMAX technology--are explained in a simple, clear, and concise way. This book is the first of its kind." --Amitava Ghosh, Director and Fellow of Technical Staff, Motorola "Andrews, Ghosh, and Muhamed have written the definitive textbook and reference manual on WiMAX, and it is recommended reading for engineers and managers alike." --Madan Jagernauth, Director of WiMAX Access Product Management, Nortel

The Definitive Guide to WiMAX Technology WiMAX is the most promising new technology for broadband wireless access to IP services. It can serve an extraordinary range of applications and environments: data, voice, and multimedia; fixed and mobile; licensed and unlicensed. However, until now, wireless professionals have had little reliable information to guide them. Fundamentals of WiMAX is the first comprehensive guide to WiMAX--its technical foundations, features, and performance. Three leading wireless experts systematically cut through the hype surrounding WiMAX and illuminate the realities. They combine complete information for wireless professionals and basic, accessible knowledge for non-experts. Professionals will especially appreciate their detailed discussion of the performance of WiMAX based on comprehensive link- and system-level simulations. Whether you're a wireless engineer, network architect, manager, or system designer, this book delivers essential information for succeeding with WiMAX--from planning through deployment. Topics include

- * Applications, history, spectrum options, technical and business challenges, and competitive technologies of WiMAX
- * 802.16 standards: physical and MAC layers, channel access, scheduling services, mobility, advanced antenna features, hybrid-ARQ, and more
- * Broadband wireless channels: pathloss, shadowing, cellular systems, sectoring, and fading--including modeling and mitigation
- * OFDM: from basic multicarrier concepts to synchronization, PAR reduction, and clipping
- * MIMO: Multiple antennas, spatial diversity, beamforming, and a cutting-edge treatment of the use of MIMO in WiMAX
- * OFDMA: multiple access, multiuser diversity, adaptive modulation, and resource allocation
- * Networking and services aspects: architecture and protocols for IP QoS, session management, security, and mobility management
- * Predicting performance using link-level and system-level simulations
- * WiMAX network architecture: design principles, reference models, authentication, QoS, and mobility management

Foreword Preface Acknowledgments About the Authors Part I Overview of WiMAX Chapter 1 Introduction to Broadband Wireless Chapter 2 Overview of WiMAX Part II Technical Foundations of WiMAX Chapter 3 The Challenge of Broadband Wireless Channels Chapter 4 Orthogonal Frequency Division Multiplexing Chapter 5 Multiple-Antenna Techniques Chapter 6 Orthogonal Frequency Division Multiple Access Chapter 7 Networking and Services Aspects of Broadband Wireless Part III Understanding WiMAX and Its Performance Chapter 8 PHY Layer of WiMAX Chapter 9 MAC Layer of WiMAX Chapter 10 WiMAX Network Architecture Chapter 11 Link-Level Performance of WiMAX Chapter 12 System-Level Performance of WiMAX Acronyms index

作者介绍:

目录:

[Fundamentals of WiMAX 下载链接1](#)

标签

wimax

通信

编程

无线

下一代互联网

wireless

rias

muhammed

评论

比协议好看多了

[Fundamentals of WiMAX 下载链接1](#)

书评

[Fundamentals of WiMAX_下载链接1](#)