

NEW BOOKS

Raymond Yeung

Digital Communications,

by Andy Bateman. Addison-Wesley, 1998, 400 pp., ISBN 0-201-34301-0.

Contents: Introduction & background; Data transmission fundamentals; Baseband data pulse shaping; Sources of channel degradation; Bandpass Digital Modulation – basic techniques; Advanced multi-symbol bandpass modulation systems; Coding theory & practice.

Synchronization Techniques for Digital Receivers,

by Umberto Mengali and Aldo N. D’Andrea. Plenum, 1997, 534 pp., \$125, ISBN 0-306-45725-3.

Contents: Introduction; Principles; Methods and performance limits; Carrier frequency recovery with linear modulations; Carrier frequency recovery with CPM modulations; Carrier phase recovery with linear modulation; Carrier phase recovery with CPM modulation; Timing recovery in baseband transmission; Timing recovery with linear modulations; Time recovery with CPM modulations; Index.

Mobile Multimedia Communications,

Edited by David J. Goodman and Dipankar Raychauduri. Plenum, 1997, 324 pp., \$95, ISBN 0-306-45772-5.

Contents: Networks (12 chapters, including): Limits and challenges for wireless ATM, An active network architecture for ATM WANs, Cellular communication systems with voice and background data, Fast handoffs using virtual paths in mobile ATM networks, Comparison of multicast flow control algorithms over combined wireless/wired networks; Protocols (8 chapters, including): End-to-end programmability for QOS controlled mobility in ATM networks and their wireless extension, Loss profiles at the link layer, security for a connectionless peer-to-peer link; Media Access (7 chapters, including): Adaptive packet reservation multiple access (A-PRMA) for broadband wireless ATM, Performance of PBMA with contiguous slot assignment for wireless multimedia networks, Protocol for wireless DS-CDMA network carrying multirate traffic; Signal Processing (9 chapters): Design experience with an integrated testbed for wireless multimedia computing, Impact of antenna choices on the reliability of mobile broadband transmission at millimeter-wave frequencies, content-based video transmission over wireless channels, Video coding with adaptive block update; Index.

Satellite Communications Systems: Systems, Techniques and Technology,

by Gerard Maral and Michel Bousquet. Wiley, 1997, 720 pp., ISBN 0-471-97037-9.

Contents: Introduction; Link analysis; Transmission techniques for a satellite channel; Multiple access; Multibeam satellite networks; regenerative satellite networks; Earth stations; The communication payload; Organization of telecommunication platforms; Satellite installation and launchers; Reliability of satellite communication systems; Index.

Introduction to Digital Mobile Communication,

by Yoshihiko Akaiwa. Wiley, 1997, 512 pp., ISBN 0-471-17545-5.

Contents: Introduction; Signal & noise analysis; The elements of digital communication systems; Elements of digital modulation; Digital modulation systems for mobile radio communication; Additional topics related to digital communication systems; Equipment and circuits for digital mobile radio; Digital mobile radio communication systems.

Multi-Carrier Spread-Spectrum,

Edited by Khaled Fazel. Kluwer, 1997, 260 pp., £82.50, ISBN 0-7923-9973-0.

Contents: I. General issues of multi-carrier spread-spectrum; II. Applications of multi-carrier spread-spectrum; III. Coding and detection for MC-SS; IV. Synchronization and channel estimation; V. MC-SS for the uplink of a cellular system.

Dictionary of Acronyms and Technical Abbreviations,

by J. Vliestra. Springer-Verlag, 1997, 692 pp., \$49.95, ISBN 3-540-76152-7.

Number Theory in Science and Communication with Applications in Cryptography, Physics, Digital Information, Computing, and Self-Similarity, 3rd Ed.,

by M.R.Schroeder. Springer, 1997, 362 pp., GBP 49.50, ISBN 3-540-62006-0.

Graphical Models,

by Steffen L. Lauritzen. Oxford University Press, 1996, 298 pp., \$89.50, ISBN 0-19-852219-3.

Introduction to ATM Networks and B-ISDN,

by Koichi Asatani. Wiley, 1997, 258 pp., \$69.95, ISBN 0-471-967661-1.

Networks and Telecommunications, 2nd Ed.,

by Martin Clark. Wiley, 1997, 830 pp., \$125, ISBN 0-471-97346-7.

Introduction to Scientific Computing,

by B. Lucquin and O. Pironneau. Wiley, 1997, 350 pp., £29.95, ISBN 0-471-

92391-5.

GSM and Personal Communications Handbook,

by Siegmund Redl, Matthias Weber and Malcolm Oliphant. Artech House, 1998, 500 pp., \$107, ISBN 0-89006-957-3.

Universal Wireless Personal Communications,

by Ramjee Prasad. Artech House, 1998, 600 pp., \$107, ISBN 0-89006-958-1.

Introduction to Wireless Local Loop,

by William Webb. Artech House, 1998, 318 pp., \$83, ISBN 0-89006-702-3.

Spread Spectrum CDMA Systems for Wireless Communications,

by Savo Glisic. Artech House, 1997, 383 pp., \$107, ISBN 0-89006-858-5.

IS-136 and IS-54 TDMA Technology, Economics, and Services,

by Lawrence Harte. Artech House, 1997, 305 pp., \$102, ISBN 0-89006-713-9.

Land-Mobile Radio System Engineering,

by Garry C. Hess. Artech House, 1997, 495 pp., \$95, ISBN 0-89006-680-9.

Understanding Cellular Radio,

by William Webb. Artech House, 1998, 280 pp., \$71, ISBN 0-89006-994-8.

The Satellite Communication Applications Handbook,

by Bruce Elbert. Artech House, 1997, 490 pp., \$95, ISBN 0-89006-781-3.

Multimedia Communications Networks: Technologies and Services,

by Malakarjun Tatipamula and Bhumip Khasnabish. Artech House, 1998, 564 pp., \$107, ISBN 0-89006-936-0.

Internet E-Mail: Protocols, Standards, Implementation,

by Lawrence Hughes. Artech House, 1998, 365 pp., \$95, ISBN 0-89006-939-5.

Video Camera Technology,

by Arch C. Luther. Artech House, 1998, 342 pp., \$90, ISBN 0-89006-556-X.

Secure Electronic Transactions: Introduction and Technical Reference,

by Larry Loeb. Artech House, 1998, 326 pp., \$83, ISBN 0-89006-992-1.

Voice Recognition,

by Richard L. Klevans. Artech House, 1997, 171 pp., \$83, ISBN 0-89006-927-1.

Selections from Cryptologia: History, People, and Technology,

Edited by Cipher A. Deavours, David Khan, Louis Kruh, Greg Mellen, and Brian J. Winkel. Artech House, 1998, 540 pp., \$95, ISBN 0-89006-862-3.

Mobile Computing,

Edited by Prathima Agrawal. Kluwer, 1997, 144 pp., £76, ISBN 0-7923-9929-3.

Information Systems and Data Compression,
by Jerzt A. Seidler. Kluwer, 1997, 496 pp., £108.80, ISBN 0-7923-9953-6.