

Introduction to Linear Optimization,

by Dimitris Bertsimas and John Tsitsiklis. Athena Scientific, 1997, 608 pp., US\$69, ISBN 1-886529-19-1.

Contents: Introduction; The Geometry of Linear Programming; The Simplex Method; Duality Theory; Sensitivity Analysis; Large Scale Optimization; Network Flow Problems; Complexity of Linear Programming and The Ellipsoid Method; Interior Point Methods; Integer Programming Formulations; Integer Programming Methods; The Art in Linear Optimization.

Neuro-Dynamic Programming,

by Dimitri P. Bertsekas and John N. Tsitsiklis. Athena Scientific, 1997, 512 pp., US\$79, ISBN 1-886529-10-8.

Contents: Introduction; Dynamic Programming; Neural Network Architectures and Training; Stochastic Iterative Algorithms; Simulation Methods for a Lookup Table Representation; Approximate DP with Cost-to-Go Function Approximation; Extensions; Case Studies.

Spread Spectrum CDMA Systems for Wireless Communications,

by Savo Gusic and Branka Vucetic. Artech House, 1997, 383 pp., US\$107, ISBN 0-89006-858-5.

Contents: Fundamentals of Spread Spectrum Systems; Code Acquisition; Code Tracking; Spread Spectrum System Technology; CDMA Systems; Multiuser CDMA Receivers; Adaptive Interference Suppression and CDMA Overlay Systems; Multiple Access Protocols in Spread Spectrum Packet Radio Networks.

Phase and Phase-Difference Modulation in Digital Communications,

by Yuri Okunev. Artech House, 1997, 380 pp., US\$114, ISBN 0-89006-937-9.

Contents: Principles of Digital Transmission by Phase-Modulated Signals; General Algorithms of PDM Signals Forming and Processing; Coherent Processing of PM and PDM Signals; Optimum Incoherent Processing of PDM Signals; Autocorrelated Processing of PDM Signals; Noise Immunity of PM and PDM Systems.

Vehicle Location and Navigation Systems,

by Yilin Zhao. Artech House, 1997, 345 pp., US\$95, ISBN 0-89006-861-5.

Contents: Digital Map Database Module; Positioning Module; Map-Matching Module; Route Planning Module; Route Guidance Module; Human-Machine Interface Module; Wireless Communication Module; Autonomous Location and Navigation; Centralized Location and Navigation; A Case Study: ADVANCE.

Signaling in ATM Networks,

by Raif O. Onvural. Artech House, 1997, 420 pp., US\$88, ISBN 0-89006-871-2.

Contents: Signaling; Point-to-Point Signaling; Point-to-Multipoint Signaling; Signaling Support for ATM Transfer Capabilities; Supplementary Services; Interworking; ATM Forum P-NNI Signaling; How Does It Get Together?

Performance Evaluation of Communication Networks,

by Gary Higginbottom. Artech House, 1997, 352 pp., US\$95, ISBN 0-89006-870-4.

Contents: Introduction; Communication Networks and Protocols; Mathematical Analysis; Computer Simulation; Hybrid Techniques; Markov Analysis; LANs and WANs; Telecommunication Networks; Multimedia Traffic Networks; Solutions to Problems.

Convolutional Coding,

by L.H. Charles Lee. Artech House, 1997, 336 pp., US\$114, ISBN 0-89006-914-X.

Contents: Introduction of Coded Digital Communication Systems; Structures of Convolutional Codes; Sub-Optimal and Optimal Decoding of Convolutional Codes; Sequential Decoding of Convolutional Codes; Encoding and Decoding of Punctured Convolutional Codes; Majority-Logic Decoding of Convolutional Codes; Combined Convolutional Coding and Modulation; Combined Coding; Modulation, and Equalization. Applications of Convolutional Codes.

Principles of Digital Audio and Video,

by Arch C. Luther. Artech House, 1997, 408 pp., US\$90, ISBN 0-89006-892-5.

Contents: Digital Concepts; Video Fundamentals; Audio Fundamentals; A/V Systems; Analog/Digital Conversion; Video Cameras; Digital Transmission and Video Processing; Data Compression; Video Displays; Digital Recording; Postproduction Systems; Digital Multimedia; A Digital World; Glossary.

Digital Video Communications,

by Martyn J. Riley. Artech House, 1997, 215 pp., US\$83, ISBN 0-89006-890-9.

Contents: Applications for Digital Video Communications; Video Compression Techniques; Internet; B-ISDN and Asynchronous Transfer Mode (ATM) Networks; QoS for Video Communications; The Effect of Bit Errors and Packet Loss on Compressed Video; Forward Error Correction; Layered Video Coding; Rate Control; Conclusions.

Smart Card Security and Applications,

by Mike Hendry. Artech House, 1997, 210 pp., US\$78, ISBN 0-89006-953-0.

Contents: Problem Definition; Specifying the Requirements; Card Technology; Encryption; Passwords and biometrics; Smart Card Types and Characteristics; Chip Card Components; System Components; Processes and Procedures; Telephony and Telecommunications; Financial; Health; Transport; User Identification; Multi-Application Cards; Current Trends and Issues; Security Model; The Way Forward; Appendices.

Impossible Minds: My Neurons, My Consciousness,

by Igor Aleksander. Imperial College Press, 1996, 388 pp., US\$25, ISBN 1-86094-030-7.

Contents: Yet Another Book on Consciousness?; Who's Afraid of Magnus?; Neurons and Thought; Automata and Brains; The Inner Eye of Consciousness: Who Am I?; Beginnings of Words; Give Me a Teddy...; Qualia, Instinct and Emotion; What's the Use of Artificial Minds?; Magus 2030 AD; An Interview.

Electronic Payment Systems,

by Donal O'Mahony, Michael Peirce and Hitesh Tewari. Artech House, 1997, 272 pp., US\$71, ISBN 0-89006-925-5.

Broadband Networking: ATM, SDH, and SONET,

by Mike Sexton and Andy Reid. Artech House, 1997, 584 pp., US\$102, ISBN 0-89006-578-0.

ATM Switches,

by Edwin R. Coover. Artech House, 1997, 352 pp., US\$90, ISBN 0-89006-783-X.

Simulation Techniques: Models of Communication Signals and Processes, Volume 1,

by Floyd M. Gardner and John D. Baker. Wiley, 1997, 536 pp., ISBN 0-471-51964-2.

Understanding Data Communications From Fundamentals to Networking, 2nd Ed.,

by Gil Held. Wiley, 1997, ISBN 0-471-96820-X.

Introduction to Random Signals and Applied Kalman Filtering with MATLAB Exercises and Solutions, 3rd Ed.,

by Robert Grover Brown and Patrick Y.C. Hwang. Wiley, 1997, 560 pp., ISBN 0-471-12839-2.

Digital Networks,

by Frances Coakley. Wiley, 1997, 180 pp., ISBN 0-471-94373-8.

Telecommunication Systems Engineering, 3rd Ed.,

by Roger Freeman. Wiley, 1997, 1024 pp., ISBN 0-471-13302-7.

Genetic Algorithms for Control and Signal Processing,

by K.F. Man, K.S. Tang, S. Kwong and W.A. Halang. Springer-Verlag, 1997, 211 pp., US\$77, ISBN 3-540-76101-2.

A Theory of Learning and Generalization,

by M. Vidyasagar. Springer-Verlag, 1997, 383 pp., US\$88, ISBN 3-540-76120-9.

Intelligent Methods in Signal Processing and Communications,

by D. DoCampo, F. Pérez-González and A.-R. Figueiras-Vidal. Birkhäuser-

Verlag, 1997, 332 pp., sFr. 128, ISBN 3-7643-3960-8.

Dictionary of Telecommunication Technology (3rd Rev. Ed.),
by R. Neuhold and E. Schmid. Springer-Verlag, 1997, 610 pp., US\$109, ISBN
3-540-62068-0.

Cellular Communications: Worldwide Market Development,
by Garry Garrard. Artech House, 1997, 528 pp., US\$102, ISBN 0-89006-923-
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GSM System Engineering,
by Asha Mehrotra. Artech House, 1997, 450 pp., US\$90, ISBN 0-89006-860-
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