

Digital Communications 5th Edition

Right here, we have countless book **Digital Communications 5th Edition** and collections to check out. We additionally present variant types and furthermore type of the books to browse. The pleasing book, fiction, history, novel, scientific research, as well as various additional sorts of books are readily easy to use here.

As this Digital Communications 5th Edition , it ends up mammal one of the favored book Digital Communications 5th Edition collections that we have. This is why you remain in the best website to look the amazing ebook to have.

Fundamentals of Communication Systems - John G. Proakis 2014
For one- or two-semester, senior-level undergraduate courses in Communication Systems for Electrical and Computer Engineering majors. This text introduces the basic techniques used in modern communication systems and provides fundamental tools and methodologies used in the analysis and design of these

systems. The authors emphasize digital communication systems, including new generations of wireless communication systems, satellite communications, and data transmission networks. A background in calculus, linear algebra, basic electronic circuits, linear system theory, and probability and random variables is assumed.

Transceiver and System

Design for Digital Communications - Scott R. Bullock 2000

This system-level approach to transceiver design covers digital communications principles for military applications and translating those concepts for commercial applications. Topics include link budget, receiver and transmitter specifications, modulation, and spread spectrum.

Global Communication -

Thomas L. McPhail
2009-02-09

The second edition of this major textbook in global communication has been fully revised to bring it up to date with advances in this dynamic field. From media coverage of the Afghanistan and Iraq wars and Arabic media systems, to digital cameras and the birth of the iPod, this book offers students a comprehensive understanding of the complex international communication scene, and of the implications of rapid

changes to the worldwide media landscape that continue on a daily basis. An accessible textbook which discusses the major trends, stakeholders, global activities and worldwide influences involved in international communications. Utilizes numerous and diverse examples of media stakeholders, including CNN, Time Warner, Disney, the BBC, and the advertising and music industries. Features engaging examples from the war on terrorism, Afghanistan and Iraq wars, post 9/11, and al Jazeera, through to the growing phenomena of Internet blogging. Updates important industry information on CNN, MTV, and the BBC- including the problems with the upcoming renewal of the BBC's global mandate and Royal Charter. Organized accessibly around two main theories that anchor the international communication debate:

electronic colonialism
and world system theory
Accompanied by a fully
updated instructor's
manual available at
<http://www.blackwellpublishing.com/mcphail>

Communication systems -
Athol Bruce Carlson 1981

Transceiver and System
Design for Digital
Communications - Scott R.
Bullock 2017

In this 5th Edition, the
author continues to evaluate
various novel techniques
and design methods for the
modulation and
transmission of digital data,
allowing the readers to gain
a firm understanding of the
processes needed to
effectively design wireless
data link communication
systems.

**Voice & Data
Communications
Handbook, Fifth Edition** -
Regis J. Bates 2007-01-03
The Definitive
Telecommunications
Reference--Fully Updated
Understand cutting-edge

telecommunication and
networking technologies
using this straightforward,
real-world implementation
guide. Fully revised to cover
all of the latest transmission
protocols, Voice & Data
Communications Handbook,
Fifth Edition covers all the
bases--from analog
transmission, VPNs, and
LANs to DSL, CATV, WiFi,
VoIP, and GSM. This
authoritative volume covers
the ins-and-outs of each
vital topic, supplies practical
examples and solutions, and
provides helpful self-tests.
You'll also find up-to-date
information on regulatory
standards, switches, routers,
frame relay, and security
procedures. Use new
wireless technologies
Understand the building
blocks of analog
transmission--bandwidth,
amplitude, and frequency
Provide transparent
communications using the
OSI model and seven-layer
architecture Comply with
local and federal regulations
and RBOCs Transmit

information using routers, SS7, PBX, and KTS switches
Send and receive data across TCP/IP, wireless, cellular, and optical systems
Create a connection using a modem
Connect to multiple VPNs and LANs using frame relay, ATM, and MPLS
Deploy high-speed broadband access with cable modems, xDSL, and CATV
Get details on VoIP, SIP, and voice over data services
Increase bandwidth using IP telephony techniques and PBX equipment

Digital Communications -

John G. Proakis 1995-01-01

This text provides an introduction to the analysis and design of digital communication systems. The third edition has been updated with a discussion of modern technological advances, providing coverage of such topics as digital modulation and demodulation techniques, source coding, channel coding and decoding, spread spectrum signals, channel

equilization, multiuser communications, and modulation and coding for fading multipath channels. In addition, the book has been reorganized so that each chapter builds on previous material, begins with an introduction to the history and classification of channel models and reviews important topics in probability and stochastic processes.

Direct, Digital & Data-Driven Marketing - Lisa Spiller 2020-01-09

In this latest edition of her classic text, Lisa Spiller takes an insightful, in-depth look at contemporary marketing concepts, tactics, and techniques and the dynamic innovations that continue to drive and shape this multi-faceted, multi-dimensional field. Direct, Digital, and Data-Driven Marketing recognizes the growth of the various digital formats as the newest interactive channels for conducting modern marketing. But it does not

overlook the traditional principles of direct marketing still relevant today. This book examines the field both as it once was and as it is evolving. With plenty of learning features online resources, the Fifth Edition provides an engaging journey, which will leave any marketing student with a thorough knowledge of how all kinds of businesses manage regular communication with their customer base and target demographic.

Introduction to Digital Communications - Ali Grami
2015-02-25

Introduction to Digital Communications explores the basic principles in the analysis and design of digital communication systems, including design objectives, constraints and trade-offs. After portraying the big picture and laying the background material, this book lucidly progresses to a comprehensive and detailed discussion of all critical elements and key

functions in digital communications. The first undergraduate-level textbook exclusively on digital communications, with a complete coverage of source and channel coding, modulation, and synchronization. Discusses major aspects of communication networks and multiuser communications Provides insightful descriptions and intuitive explanations of all complex concepts Focuses on practical applications and illustrative examples. A companion Web site includes solutions to end-of-chapter problems and computer exercises, lecture slides, and figures and tables from the text

Digital Communications - John G. Proakis 2018

Fundamentals of Wireless Communication - David Tse
2005-05-26

This textbook takes a unified view of the fundamentals of wireless communication and explains cutting-edge

concepts in a simple and intuitive way. An abundant supply of exercises make it ideal for graduate courses in electrical and computer engineering and it will also be of great interest to practising engineers.

Communication Systems - Simon S. Haykin 1983

Data Communications and Networking - Behrouz A. Forouzan 2001-07

Exploring Engineering - Philip Kosky 2009-11-11
Winner in its first edition of the Best New Undergraduate Textbook by the Professional and Scholarly Publishing Division of the American Association of Publishers (AAP), Kosky, et al is the first text offering an introduction to the major engineering fields, and the engineering design process, with an interdisciplinary case study approach. It introduces the fundamental physical, chemical and material bases for all engineering work and

presents the engineering design process using examples and hands-on projects. Organized in two parts to cover both the concepts and practice of engineering: Part I, Minds On, introduces the fundamental physical, chemical and material bases for all engineering work while Part II, Hands On, provides opportunity to do design projects An Engineering Ethics Decision Matrix is introduced in Chapter 1 and used throughout the book to pose ethical challenges and explore ethical decision-making in an engineering context Lists of "Top Engineering Achievements" and "Top Engineering Challenges" help put the material in context and show engineering as a vibrant discipline involved in solving societal problems
New to this edition:
Additional discussions on what engineers do, and the distinctions between engineers, technicians, and

managers (Chapter 1) New coverage of Renewable Energy and Environmental Engineering helps emphasize the emerging interest in Sustainable Engineering New discussions of Six Sigma in the Design section, and expanded material on writing technical reports Re-organized and updated chapters in Part I to more closely align with specific engineering disciplines new end of chapter exercises throughout the book

DIGITAL SIGNAL PROCESSING: PRINCIPLES ALGORITHMS AND APPLICATIONS - John G. Proakis 2001

Perspectives on Family Communication - Lynn Turner 2005-09-26

Emphasizing the role that communication plays in both creating and solving family issues, this new edition of Perspectives on Family Communication thoroughly reflects the explosion of research literature in the

area of family communication--on such topics as the broadened definition of family; current demographic aspects of family types; and up-to-date references on family theory, storytelling, divorce, and conflict.

Cook & Hussey's Assistive Technologies - Albert M. Cook 2008-01-01

It's here: the latest edition of the one text you need to master assistive strategies, make confident clinical decisions, and help improve the quality of life for people with disabilities. Based on the Human Activity Assistive Technology (HAAT) model, Assistive Technologies: Principles and Practice, 4th Edition provides detailed coverage of the broad range of devices, services, and practices that comprise assistive technology, and focuses on the relationship between the human user and the assisted activity within specific contexts. Updated and expanded, this new edition features

coverage of new ethical issues, more explicit applications of the HAAT model, and a variety of global issues highlighting technology applications and service delivery in developing countries. Human Activity Assistive Technology (HAAT) framework demonstrates assistive technology within common, everyday contexts for more relevant application. Focus on clinical application guides you in applying concepts to real-world situations. Review questions and chapter summaries in each chapter help you assess your understanding and identify areas where more study is needed. Content on the impact of AT on children and the role of AT in play and education for children with disabilities demonstrates how AT can be used for early intervention and to enhance development. Coverage of changing AT needs throughout the lifespan emphasizes how AT

fits into people's lives and contributes to their full participation in society. Principles and practice of assistive technology provides the foundation for effective decision-making. NEW! Global issues content broadens the focus of application beyond North America to include technology applications and service delivery in developing countries. NEW! Ethical issues and occupational justice content exposes you to vital information as you start interacting with clients. NEW! More case studies added throughout the text foster an understanding of how assistive technologies are used and how they function. NEW! Updated content reflects current technology and helps keep you current. NEW! Explicit applications of the HAAT model in each of the chapters on specific technologies and more emphasis on the interactions among the

elements make content even easier to understand.

Digital Photography: An Introduction, 3rd Edition -

Tom Ang 2009-12-21

"Once an image is in digital form, what you can do with it is practically endless."

Tom Ang Make sure you're picture perfect with this concise and easy-to-use guide to digital photography from expert photographer and bestselling author Tom Ang. Now available in ebook(PDF) format.

Understand what to look for when buying cameras, software, or accessories. Follow the essentials of good picture-taking and get expert tips on how to make the most of your digital images from covering the basics to image manipulation and special effects. Plus, "quick fix" pages on how to solve common problems mean your camera can learn to lie. Get clicking and get outstanding results every time. Updates to this edition
Ch. 1 Buyers' Guide (was

Total Photography) A guide to cameras and accessories. All new products. Spreads newly presented as "Buyers' Guides", to help the reader decide which products are most suited to their needs.
Ch. 2 Photo Techniques (was Photography for the Digital Age) Skills, trade secrets, and techniques of digital photography. Updated text, some new photographs.
Ch. 3 A Compendium of Ideas (New, not in previous 2 editions) 36 pages of projects, concepts, subject areas, approaches, and ideas. All new text and photographs, taken from Digital Photographer's Handbook 4th edition.
Ch. 4 All About Image Manipulation Filters, image effects, distortion, color control, and manipulation. Some minor reorganization of information, text updated. New text, images and layouts for Filter Effects, pp. 170-177. New spread on High Dynamic Range.
Ch. 6 The Output Adventure Proofing and printing,

uploading images to the web. Text updated. New spread on Creating a Website.

Fundamentals of Digital Communication - Upamanyu Madhow 2008-03-06

This is a concise presentation of the concepts underlying the design of digital communication systems, without the detail that can overwhelm students. Many examples, from the basic to the cutting-edge, show how the theory is used in the design of modern systems and the relevance of this theory will motivate students. The theory is supported by practical algorithms so that the student can perform computations and simulations. Leading edge topics in coding and wireless communication make this an ideal text for students taking just one course on the subject. Fundamentals of Digital Communications has coverage of turbo and LDPC codes in sufficient detail and clarity to enable hands-on

implementation and performance evaluation, as well as 'just enough' information theory to enable computation of performance benchmarks to compare them against. Other unique features include space-time communication and geometric insights into noncoherent communication and equalization.

Digital Communications - Massoud Salehi, Professor 2007-11-06

Digital Communications is a classic book in the area that is designed to be used as a senior or graduate level text. The text is flexible and can easily be used in a one semester course or there is enough depth to cover two semesters. Its comprehensive nature makes it a great book for students to keep for reference in their professional careers. This all-inclusive guide delivers an outstanding introduction to the analysis and design of digital communication systems. Includes expert

coverage of new topics: TurboCodes, Turboequalization, Antenna Arrays, Digital Cellular Systems, and Iterative Detection. Convenient, sequential organization begins with a look at the history and classification of channel models and builds from there.

Analog and Digital Communication Systems - Martin S. Roden 1979

Digital Communications - John G. Proakis 2001
Digital Communications is a classic book in the area that is designed to be used as a senior or graduate level text. The text is flexible and can easily be used in a one semester course or there is enough depth to cover two semesters. Its comprehensive nature makes it a great book for students to keep refer to in their professional careers. This best-selling book in Digital Communications by John G. Proakis has been revised to

reflect the current trends in the field. Some of the topics that have been added include TurboCodes, Antenna Arrays, Iterative Detection, and Digital Cellular Systems. Also new to this edition are electronic figures for presentation materials found on the website.

Data Communications and Networking - Behrouz A. Forouzan 2007

Annotation As one of the fastest growing technologies in our culture today, data communications and networking presents a unique challenge for instructors. As both the number and types of students are increasing, it is essential to have a textbook that provides coverage of the latest advances, while presenting the material in a way that is accessible to students with little or no background in the field. Using a bottom-up approach, Data Communications and Networking presents this

highly technical subject matter without relying on complex formulas by using a strong pedagogical approach supported by more than 700 figures. Now in its Fourth Edition, this textbook brings the beginning student right to the forefront of the latest advances in the field, while presenting the fundamentals in a clear, straightforward manner. Students will find better coverage, improved figures and better explanations on cutting-edge material. The "bottom-up" approach allows instructors to cover the material in one course, rather than having separate courses on data communications and networking

Digital Communications - John G. Proakis 2008-01
Digital Communications is a classic book in the area that is designed to be used as a senior or graduate level text. The text is flexible and can easily be used in a one semester course or there is

enough depth to cover two semesters. Its comprehensive nature makes it a great book for students to keep for reference in their professional careers. This all-inclusive guide delivers an outstanding introduction to the analysis and design of digital communication systems. Includes expert coverage of new topics: TurboCodes, Turboequalization, Antenna Arrays, Digital Cellular Systems, and Iterative Detection. Convenient, sequential organization begins with a look at the history and classification of channel models and builds from there.

Communication Systems - Simon S. Haykin 2010
This best-selling, easy to read book offers the most complete discussion on the theories and principles behind today's most advanced communications systems. Throughout, Haykin emphasizes the statistical underpinnings of

communication theory in a complete and detailed manner. Readers are guided through topics ranging from pulse modulation and passband digital transmission to random processes and error-control coding. The fifth edition has also been revised to include an extensive treatment of digital communications.

Modern Digital and Analog Communication Systems - B. P. Lathi 1995

With exceptionally clear writing, Lathi takes students step by step through a history of communications systems from elementary signal analysis to advanced concepts in communications theory. The first four chapters of the text present basic principles, subsequent chapters offer ample material for flexibility in course content and level. All Topics are covered in detail, including a thorough treatment of frequency modulation and phase modulation. Numerous worked examples in each

chapter and over 300 end-of-chapter problems and numerous illustrations and figures support the content.

Real Communication -

Dan O'Hair 2012-01-16

Real Communication uses stories from real people and the world around us to present the best and most lively introduction to communication concepts. Professors and students alike have fallen in love with Real Communication's down-to-earth writing style, its coverage of research, and its wealth of learning and teaching tools. They also appreciate how Real Communication strives to weave the discipline's different strands together with the CONNECT feature that shows students how concepts work and apply across interpersonal, small group, and public speaking contexts. The Second Edition is even better with a broader array of engaging examples, new coverage of hot topics in the field like Intercultural and mediated

communication, plus a public speaking unit honed to provide the essential information students need for this fast-paced course. Whether you want a traditional paperback, an e-Book — online or downloadable to a device — a looseleaf edition, or the book within the new HumanCommClass, Real Communication has an option for you. Read the preface.

Number Theory in Science and Communication - M.R. Schroeder 2005-11-03
Number Theory in Science and Communication introduces non-mathematicians to the fascinating and diverse applications of number theory. This best-selling book stresses intuitive understanding rather than abstract theory. This revised fourth edition is augmented by recent advances in primes in progressions, twin primes, prime triplets, prime quadruplets and quintuplets, factoring with

elliptic curves, quantum factoring, Golomb rulers and "baroque" integers.

Introduction to Digital Communications - Michael B. Pursley 2005

This book provides an introduction to the basic concepts in digital communications for readers with little or no previous exposure to either digital or analog communications. The intent is to help learners develop a firm understanding of digital communication system engineering--and to enable them to conduct system-level design and analysis for digital communication systems of the future. As a result, the book emphasizes the basic principles of digital communications theory and techniques, rather than presenting specific technologies for implementation. Chapter topics include probability and random variables--review and notation, introduction to random processes, linear filtering of

random processes, frequency-domain analysis of random processes in linear systems, baseband transmission of binary data, coherent communications, noncoherent communications, intersymbol interference, and spread-spectrum communication systems. For individuals preparing for a career in wireless communications system design.

Communications Toolkit

5e - Jane Grellier

2021-10-01

The Communications Toolkit contains practical advice, tips and strategies to enable learners to develop the communication skills needed to be successful students. The text helps students make a successful transition to tertiary studies, develop effective research skills for their discipline, approach academic writing with confidence, refine their writing skills, and enhance their face-to-face communication experience.

This fifth edition includes more information than ever on academic integrity and referencing, while taking into account the changing nature of university communication including new information on recent text-types such as blogs, twitter, digital articles, online research questionnaires, presentation formats and Turn-it-in. As students are increasingly studying online, additional examples of online students' communication work and additional coverage of the communication challenges students face when going to university via an online channel are included. The direct, inclusive, motivational and student-friendly text addresses both individual students and those working in seminar or workshop groups, and provides activities for both types of student throughout the book. The new MindTap offers students resources for learning and revision, making this the strongest

communications textbook in the market today. Learn more about the online tools au.cengage.com/mindtap

Communication Systems Engineering - John G. Proakis 2002

Thorough coverage of basic digital communication system principles ensures that readers are exposed to all basic relevant topics in digital communication system design. The use of CD player and JPEG image coding standard as examples of systems that employ modern communication principles allows readers to relate the theory to practical systems. Over 180 worked-out examples throughout the book aids readers in understanding basic concepts. Over 480 problems involving applications to practical systems such as satellite communications systems, ionospheric channels, and mobile radio channels gives readers ample opportunity to practice the concepts

they have just learned. With an emphasis on digital communications, *Communication Systems Engineering, Second Edition* introduces the basic principles underlying the analysis and design of communication systems. In addition, this book gives a solid introduction to analog communications and a review of important mathematical foundation topics. New material has been added on wireless communication systems—GSM and CDMA/IS-94; turbo codes and iterative decoding; multicarrier (OFDM) systems; multiple antenna systems. Includes thorough coverage of basic digital communication system principles—including source coding, channel coding, baseband and carrier modulation, channel distortion, channel equalization, synchronization, and wireless communications. Includes basic coverage of

analog modulation such as amplitude modulation, phase modulation, and frequency modulation as well as demodulation methods. For use as a reference for electrical engineers for all basic relevant topics in digital communication system design.

The New Communications Technologies - Michael M. Mirabito 2004

A complete explanation of today's communication technologies, and their impact!

Digital Marketing Excellence - Dave Chaffey 2017-03-31

Now in its fifth edition, the hugely popular *Digital Marketing Excellence: Planning, Optimizing and Integrating Online Marketing* is fully updated, keeping you in line with the changes in this dynamic and exciting field and helping you create effective and up-to-date customer-centric digital marketing plans. A practical guide to creating and executing digital marketing

plans, it combines established approaches to marketing planning with the creative use of new digital models and digital tools. It is designed to support both marketers and digital marketers, and students of business or marketing who want a thorough yet practical grounding in digital marketing. Written by two highly experienced digital marketing consultants, the book shows you how to:

- Draw up an outline digital marketing plan
- Evaluate and apply digital marketing principles and models
- Integrate online and offline communications
- Implement customer-driven digital marketing
- Reduce costly trial and error
- Measure and enhance your digital marketing
- Learn best practices for reaching and engaging your audiences using the key digital marketing platforms like Apple, Facebook, Google and Twitter.

This new edition seamlessly integrates the latest changes in social

media technology, including expanded coverage of mobile technology, demonstrating how these new ways to reach customers can be integrated into your marketing plans. It also includes new sections on data analytics, clearly demonstrating how marketers can leverage data to their advantage. Offering a highly structured and accessible guide to a critical and far-reaching subject, *Digital Marketing Excellence*, Fifth Edition, provides a vital reference point for all students and managers involved in marketing strategy and implementation.

Industrial Data Communications - Lawrence M. Thompson 1997

For readers with a general technical education and semi-literacy with computers, introduces the principles to the level that they can read the literature and carry on a technical conversation. On the basis that the first and most

difficult hindrance to learning the subject is the jargon, uses a conv *Small Group and Team Communication* - Thomas E. Harris 2018-05-10

Much of contemporary communication occurs between and among small groups, whether in person in a work setting or on the Internet via email, Facebook, or instant messages. How we engage in our small-group communication in each medium matters. To be effective we have to consider our group roles, norms, cohesion, process, and phases of development, as well as our personal verbal and nonverbal communication and listening styles. To succeed as a member of a team, we need to consider the limits of our personal experience and perspective, recognize the creative strength of diverse perspectives in decision making and problem solving, develop our conflict-management skills, and

strengthen our leadership skills. To be successful necessitates an understanding of group process, participation style, ethical group behavior, and the influences of the medium. *Small Group and Team Communication* explores all these different interconnections and the communication strategies we use in our work and social groups. The authors use the systems perspective as their core approach throughout the text, treating small groups as complex open systems reliant upon communication to achieve success. Many chapters highlight the importance of considering ethics and diversity in relation to a variety of topics. Harris and Sherblom address the growing influence of computer-mediated communication to this discipline. Real-world, applied examples show students that what they're learning aren't simply abstract concepts, but

knowledge that will serve them outside the classroom. *Principles of Communications* - Rodger E. Ziemer 1976

Modern Digital and Analog Communication Systems - Bhagwandas Pannalal Lathi 2019

As engineering students become more and more aware of the important role that communication systems play in modern society, they are increasingly motivated to learn through experimenting with solid, illustrative examples. To captivate students' attention and stimulate their imaginations, *Modern Digital and Analog Communication*, Fifth Edition, places strong emphasis on connecting fundamental concepts of communication theory to students' daily experiences of communication technologies. The text provides highly relevant information on the operation and features of wireless cellular systems, Wi-Fi

access, broadband Internet services, and more.

Loose-leaf Version for Real Communication -

Dan O'Hair 2020-11-02

Real Communication continues to prove its reputation as the most current human communication text available. This new edition provides today's students with the critical skills they now need most: to be able to objectively encounter increasingly digital communication contexts, examine the theory and concepts underpinning them, and competently respond in a professional, healthy, and intentional way. Utilizing a social-scientific approach to communication, the text uses engaging stories which work as small case studies that students learn to see and analyze as communication situations, discovering theory played out in practice. Authored by a leading team of communication scholars and

instructors, this authoritative text helps students become social scientists in communication to confront and adapt to the challenges of today's digital age.

Digital Communications, Fifth Edition - John G. Proakis 2019

Digital Communications - Bernard Sklar 2016-12-23

The clear, easy-to-understand introduction to digital communications Completely updated coverage of today's most critical technologies Step-by-step implementation coverage Trellis-coded modulation, fading channels, Reed-Solomon codes, encryption, and more Exclusive coverage of maximizing performance with advanced "turbo codes" "This is a remarkably comprehensive treatment of the field, covering in considerable detail modulation, coding (both source and channel), encryption, multiple access

and spread spectrum. It can serve both as an excellent introduction for the graduate student with some background in probability theory or as a valuable reference for the practicing communication system engineer. For both communities, the treatment is clear and well presented."

- Andrew Viterbi, The Viterbi Group Master every key digital communications technology, concept, and technique. Digital Communications, Second Edition is a thoroughly revised and updated edition of the field's classic, best-selling introduction. With remarkable clarity, Dr. Bernard Sklar introduces every digital communication technology at the heart of today's wireless and Internet revolutions, providing a unified structure and context for understanding them -- all without sacrificing mathematical precision. Sklar begins by introducing the fundamentals of signals,

spectra, formatting, and baseband transmission. Next, he presents practical coverage of virtually every contemporary modulation, coding, and signal processing technique, with numeric examples and step-by-step implementation guidance. Coverage includes: Signals and processing steps: from information source through transmitter, channel, receiver, and information sink Key tradeoffs: signal-to-noise ratios, probability of error, and bandwidth expenditure Trellis-coded modulation and Reed-Solomon codes: what's behind the math Synchronization and spread spectrum solutions Fading channels: causes, effects, and techniques for withstanding fading The first complete how-to guide to turbo codes: squeezing maximum performance out of digital connections Implementing encryption with PGP, the de facto industry standard Whether

you're building wireless systems, xDSL, fiber or coax-based services, satellite networks, or Internet infrastructure, Sklar presents the theory and the practical implementation details you need. With nearly 500 illustrations and 300 problems and exercises, there's never been a faster way to master advanced

digital communications. **CD-ROM INCLUDED** The CD-ROM contains a complete educational version of Elanix' SystemView DSP design software, as well as detailed notes for getting started, a comprehensive DSP tutorial, and over 50 additional communications exercises.