

Electronics Communication Engineering Journal

This book gives an in-depth account of GaAs, InP and SiGe, technologies and describes all the key techniques for the design of amplifiers, ranging from filters and data converters to image oscillators, mixers, switches, variable attenuators, phase shifters, integrated antennas and complete monolithic transceivers.

This book presents selected papers from the 4th International Conference on Micro-Electronics and Telecommunication Engineering, held at SRM Institute of Science and Technology, Ghaziabad, India, during 26-7 September 2020. It covers a wide variety of topics in micro-electronics and telecommunication engineering, including micro-electronic engineering, computational remote sensing, computer science and intelligent systems, signal and image processing, and information and communication technology.

Every day, millions of people are unaware of the amazing processes that take place when using their phones, connecting to broadband internet, watching television, or even the most basic action of flipping on a light switch. Advances are being continually made in not only the transmission of this data but also in the new methods of receiving it. These advancements come from many different sources and from engineers who have engaged in research, design, development, and implementation of electronic equipment used in communications systems. This volume addresses a

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selection of important current advancements in the electronics and communications engineering fields, focusing on signal processing, chip design, and networking technology. The sections in the book cover: Microwave and antennas Communications systems Very large-scale integration Embedded systems Intelligent control and signal processing systems

Microwave photonics and information optics provide high bandwidth and precision along with ultrafast speed at a low cost. In order to reduce noise at the communication trans-receivers, scattering in the devices needs to be decreased, which can be achieved by replacing optoelectronic devices with photonic devices because in the latter only photons propagate electromagnetic waves. Contemporary Developments in High-Frequency Photonic Devices is a crucial research book that examines high-frequency photonics and their applications in communication engineering. Featuring coverage on a wide range of topics such as metamaterials, optoelectronic devices, and plasmonics, this book is excellent for students, researchers, engineers, and professionals.

Europe's leading experts from industry and academia present the results of the research into advanced mobile technologies and services performed within the scope of the ACTS R& D program in two new book volumes.

Invaluable for industry professionals and researchers, the state-of-the-art in European R& D into wireless technologies is detailed in these two works.

This book reveals the state-of-the-art in wireless ad-hoc networking. It addresses many complex and open

problems for researchers in the field of ad hoc networks. It further discusses some of the key research topics that are expected to promote and accelerate the commercial application of these networks (e.g., MAC, routing, QoS, optimization issues, service discovery, traffic models, mobility, handovers, security). It also presents "killer applications".

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In a remarkably short time, electronics has penetrated almost every aspect of modern life and the pace of development in the field shows no sign of slackening. One of the first books to cover electronic inventions in depth, *Electronic Inventions and Discoveries: Electronics from Its Earliest Beginnings to the Present Day*, Fourth Edition traces the development of electronics from its earliest beginnings to the present day. Spanning a period of two and a half centuries, the book presents a mini-encyclopedia full of valuable information on practically all inventions in electronics from 1745 to 1996. This fourth edition has been brought up-to-date and made more attractive by a complete redesign while still maintaining the successful features of previous editions. The first nine

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chapters supply concise yet comprehensive histories of the main areas of the subject. Subsequent chapters provide a list of inventions by subject and succinct descriptions of each invention in date order with over 1,000 references. The book concludes with a list of acronyms and abbreviations, a list of books on inventions and inventors, and a comprehensive index. During his seventy years in the field, the author has collected a variety of published data to form an up-to-date systematic review of the major developments in electronics and the pattern of advances in electronic techniques. The book forms an essential source of reference to practicing engineers wishing to broaden their knowledge. Teachers and students who require a sound background and understanding of electronics will also find the book invaluable. Written in an easily understood largely nontechnical language, this fascinating and authoritative history of electronic developments will be of great interest to electronic hobbyists and general science readers.

This book presents selected papers from the 3rd International Conference on Micro-Electronics and Telecommunication Engineering, held at SRM Institute of Science and Technology, Ghaziabad, India, on 30-31 August 2019. It covers a wide variety of topics in micro-electronics and telecommunication engineering, including micro-electronic engineering, computational remote sensing, computer science and intelligent systems, signal and image processing, and information and communication technology.

An indispensable reference publication for telecommunication and information-industry professionals. Each year, the IEC brings together into one unique resource the most current thinking and practical experience of industry leaders around the world on a variety of topics facing their areas of specialization. This 700+ page reference tool is a must for executives, managers, engineers, analysts, and educators in

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all sectors of today's changing information industry. Whether gaming, constant communications and connectivity, or streaming video and audio is the future killer app that keeps consumers reaching for mobile devices, you can turn to this book for the hands-on technology details you need to know to prepare yourself and your organizations for tomorrow's world of wireless multimedia. The book includes in-depth discussions on the hottest topics in this area, including AAA, multiple access protocols, IPv6 and adaptive technologies. Such resource management strategies as power control, user admission techniques, and congestion control are fully explained, helping you design wireless multimedia systems that provide the required degree of quality of service by effectively utilizing limited radio resources.

The aim of this book is to give a treatment of the actively developed domain of Ubiquitous computing. Originally proposed by Mark D. Weiser, the concept of Ubiquitous computing enables a real-time global sensing, context-aware informational retrieval, multi-modal interaction with the user and enhanced visualization capabilities. In effect, Ubiquitous computing environments give extremely new and futuristic abilities to look at and interact with our habitat at any time and from anywhere. In that domain, researchers are confronted with many foundational, technological and engineering issues which were not known before. Detailed cross-disciplinary coverage of these issues is really needed today for further progress and widening of application range. This book collects twelve original works of researchers from eleven countries, which are clustered into four sections: Foundations, Security and Privacy, Integration and Middleware, Practical Applications.

The 18th International Conference on Electrical Engineering Electronics, Computer, Telecommunications and Information

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Technology (ECTI CON 2021) is the annual international conference organized by Electrical Engineering Electronics, Computer, Telecommunications and Information Technology (ECTI) Association, Thailand The conference aims to provide an international platform to present technological advances, launch new ideas and showcase research work in the field of electrical engineering, electronics, computer, telecommunications and information technology

Collaboration in business allows for equitable opportunities and inclusive growth as the economy rises while also permitting partnering organizations to adopt and utilize the latest successful practices and management. However, a market in stasis may require a displacement in order to allow businesses to grow and create new alliances and partnerships toward a shared economy. There is a need for studies that seek to understand the necessity of market disruption and the best supervisory methods for remaining relevant and profitable in a time of change. The Handbook of Research on Managerial Practices and Disruptive Innovation in Asia is an essential reference source that explores successful executive behavior and business operations striving toward a more inclusive economy. Featuring research on topics such as employee welfare, brand orientation, and entrepreneurship, this publication is ideally designed for human resources developers, policymakers, IT specialists, economists, executives, managers, corporate directors, information technologists, and academicians seeking current research focusing on innovative business factors and sustainable economies in Asia.

The book contains high quality papers presented in the Fifth International Conference on Innovations in Electronics and Communication Engineering (ICIECE 2016) held at Guru Nanak Institutions, Hyderabad, India during 8 and 9 July 2016. The objective is to provide the latest developments in

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the field of electronics and communication engineering specially the areas like Image Processing, Wireless Communications, Radar Signal Processing, Embedded Systems and VLSI Design. The book aims to provide an opportunity for researchers, scientists, technocrats, academicians and engineers to exchange their innovative ideas and research findings in the field of Electronics and Communication Engineering.

Electronics & Communication Engineering Journal
Electronics and Communications Engineering
Applications and Innovations
CRC Press

Annotation Written by a leading authority, this timely new work offers today's wireless professionals a complete understanding of OFDM technology and applications in wireless communications systems, placing emphasis on wireless LANs (local area networks) and PANs (personal area networks).

The optical world is continuously and rapidly evolving, and new challenges arise every day. As a result of these rapid changes, the need for up-to-date texts that address this growing field from an interdisciplinary perspective persists. This book presents an overview of new optical communication technologies and a bird's-eye view of some of the more promising technologies among them. The book covers the theoretical but also the practical aspects of technology implementation in a way that is suitable for undergraduate- and graduate-level students, as well as researchers and professional engineers.

While covering the basics of wideband CDMA, this major revision of the bestseller brings design engineers and technical managers up to date with all the latest developments and technologies in third generation mobile communications. This cutting-edge book gives professionals a complete understanding of the complex standardization

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environment of 3G networks and the design and development of 3G systems.

The book is a collection of best selected research papers presented at 6th International Conference on Innovations in Electronics and Communication Engineering at Guru Nanak Institutions Hyderabad, India. The book presents works from researchers, technocrats and experts about latest technologies in electronic and communication engineering. The book covers various streams of communication engineering like signal processing, VLSI design, embedded systems, wireless communications, and electronics and communications in general. The authors have discussed the latest cutting edge technology and the volume will serve as a reference for young researchers.

This book helps readers do just that by: providing a comprehensive introduction to multicarrier techniques for 4G mobile communications with a special focus on the analytical aspects; explaining radio channel characteristics and phenomena and discussing the advantages and disadvantages of the OFDM scheme; featuring new multicarrier-related techniques, MC-CDMA, research on several 4G systems, and a look at several problems to be overcome with these systems; examining the concept and detail of the OFDM scheme and how to carry out theoretical analysis on the performance of transmission systems in radio channels; showing how OFDM has been successfully adopted as a modulation scheme in communications systems and broadcasting systems such as ADSL, wireless LANs, and DVB-T."--Jacket.

Global mobile satellite communications (GMSC) are specific satellite communication systems for maritime, land and aeronautical applications. It enables connections between moving objects such as ships,

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vehicles and aircrafts, and telecommunications subscribers through the medium of communications satellites, ground earth stations, PTT or other landline telecommunications providers. Mobile satellite communications and technology have been in use for over two decades. Its initial application is aimed at the maritime market for commercial and distress applications. In recent years, new developments and initiatives have resulted in land and aeronautical applications and the introduction of new satellite constellations in non-geostationary orbits such as Little and Big LEO configurations and hybrid satellite constellations as Ellipso Borealis and Concordia system. This book is important for modern shipping, truck, train and aeronautical societies because GMSC in the present millennium provides more effective business and trade, with emphasis on safety and commercial communications. Global Mobile Satellite Communications is written to make bridges between potential readers and current GMSC trends, mobile system concepts and network architecture using a simple mode of style with understandable technical information, characteristics, graphicons, illustrations and mathematics equations. Global Mobile Satellite Communications represents telecommunications technique and technology, which can be useful for all technical staff on vessels at sea and rivers, on all types of land vehicles, on planes, on off shore constructions and for everyone possessing satellite communications handset phones.

In the field of astrophysics, modern developments of

practice are emerging in order to further understand the spectral information derived from cosmic sources. Radio telescopes are a current mode of practice used to observe these occurrences. Despite the various accommodations that this technology offers, physicists around the globe need a better understanding of the underlying physics and operational components of radio telescopes as well as an explanation of the cosmic objects that are being detected. Analyzing the Physics of Radio Telescopes and Radio Astronomy is an essential reference source that discusses the principles of the astronomical instruments involved in the construction of radio telescopes and the analysis of cosmic sources and celestial objects detected by this machinery. Featuring research on topics such as electromagnetic theory, antenna design, and geometrical optics, this book is ideally designed for astrophysicists, engineers, researchers, astronomers, students, and educators seeking coverage on the operational methods of radio telescopes and understanding the physical processes of radio astronomy.

Wireless communications have become invaluable in the modern world. The market is going through a revolutionary transformation as new technologies and standards endeavor to keep up with demand for integrated and low-cost mobile and wireless devices. Due to their ubiquity, there is also a need for a simplification of the design of wireless systems and networks. The Handbook of Research on Advanced Trends in Microwave and Communication Engineering showcases the current trends and approaches in the

design and analysis of reconfigurable microwave devices, antennas for wireless applications, and wireless communication technologies. Outlining both theoretical and experimental approaches, this publication brings to light the unique design issues of this emerging research, making it an ideal reference source for engineers, researchers, graduate students, and IT professionals. Advances in Computing, Communication, Automation and Biomedical Technology aims to bring together leading academic, scientists, researchers, industry representatives, postdoctoral fellows and research scholars around the world to share their knowledge and research expertise, to advances in the areas of Computing, Communication, Electrical, Civil, Mechanical and Biomedical Systems as well as to create a prospective collaboration and networking on various areas. It also provides a premier interdisciplinary platform for researchers, practitioners, and educators to present and discuss the most recent innovations, trends, and concerns as well as practical challenges encountered, and solutions adopted in the fields of innovation.

Businesses in the Asia-Pacific communities provide enormous opportunities for local entrepreneurs to develop and collectively collaborate with other economies. However, several challenges and success factors exist for effective business operations in the region. Innovative Management and Business Practices in Asia is a collection of innovative research that enhances understanding and collaboration in business, management, and technology in Asia for the present and

in the future. While highlighting topics including corporate culture, international trade, and business administration, this book is ideally designed for managers, executives, CEOs, board members, corporate professionals, managing directors, deans, decision makers, professors, researchers, policymakers, industry practitioners, and students.

This cutting-edge, first-of-its-kind resource gives you a comprehensive understanding of the simulation and evaluation methods used for today's mobile communication systems. Written by two highly regarded experts in the field, the book focuses on the performance of both the physical and protocol layer transmission scheme. It defines and presents several invaluable simulation tools written in MATLAB® code, along with clear examples that explain their use.

As the healthcare industry continues to expand, it must utilize technology to ensure efficiencies are maintained. Healthcare needs to move in a direction where computational methods and algorithms can relieve the routine work of medical doctors, leaving them more time to carry out more important and skilled tasks such as surgery. *Computational Methods and Algorithms for Medicine and Optimized Clinical Practice* discusses some of the most interesting aspects of theoretical and applied research covering complementary facets of computational methods and algorithms to achieve greater efficiency and support medical personnel. Featuring research on topics such as healthcare reform, artificial intelligence, and disease detection, this book will particularly appeal to medical professionals and

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practitioners, hospitals, administrators, students, researchers, and academicians.

The Department of Electronics and Communication Engineering of KIET Group of Institutions, Delhi-NCR organized the 4th International Conference ICCE-2020 during November 28-29, 2020.

Information compiled in this book is based on the 114 research papers of excellent quality covering different domains of Electronics and Communication Engineering, Computer Science Engineering, Information Technology, Electrical Engineering, Electronics and Instrumentation Engineering. The subject areas treated in the book are: Satellite, Radar and Microwave Techniques, Secure, Smart, and Reliable Networks, Next Generation Networks, Devices & Circuits, Signal & Image Processing, New Emerging Technologies, having the central focus on Recent Trends in Communication & Electronics (ICCE-2020). In addition, a few themes based on Special Sessions have also been conducted in ICCE-2020. The objective of the book resulting from the 4th International Conference on Recent Trends in Communication & Electronics (ICCE-2020) is to provide a resource for the study and research work for an interested audience comprising of researchers, students, audience, and practitioners in the areas of Communications & Computing Systems. Communication Patterns of Engineers brings together, summarizes, and analyzes the research on

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how engineers communicate, presenting benchmark data and identifying gaps in the existing research. Written by two renowned experts in this area, the text: Compares engineering communication patterns with those of science and medicine Offers information on improving engineering communication skills, including the use of communication tools to address engineering departments' concerns about the inadequacies of communication by engineers Provides strong conclusions to address what lessons engineering educators, librarians, and communication professionals can learn from the research presented

This is a practical introduction to the key computing concepts of networks and communications, suitable for a first year undergraduate or industrial course. It provides the foundational knowledge on which to build a fully developed understanding of modern communications methodologies, techniques and standards. It will also be a useful professional reference companion.; The book begins with a general introduction to data communications and the options commonly open to the system designer. It then provides overviews of the key areas in which design decisions must be made: communication media; interface standards; network architectures; modems and multiplexers; network topologies, switching and access control; local area networks; wide-area networks; performance; software issues;

security; and implementation.; As a second edition of an established text the book has been thoroughly revised and improved but retains the strengths of the first edition in its clear and well- illustrated exposition. It includes current developments in standards and architecture including ATM, B-ISDN, SNMP, TCP/IP, and other state-of-the- art features of the computer communications world.; In its first edition the book was an authoritative textbook and personal reference for industry. In this new edition it should be even more essential for all with a need for an accessible modern technical introduction to computer communications and networks. Suitable for a practically orientated computer science course at degree level or for an introductory industrial course.

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