## **Galgotias Publications Electrical Engineering**

Power and Energy Engineering are important and pressing topics globally, covering issues such as shifting paradigms of energy generation and consumption, intelligent grids, green energy and environmental protection. The 11th Asia-Pacific Power and Energy Engineering Conference (APPEEC 2019) was held in Xiamen, China from April 19 to 21, 2019. APPEEC has been an annual conference since 2009 and has been successfully held in Wuhan (2009 & 2011), Chengdu (2010 & 2017), Shanghai (2012 & 2014), Beijing (2013 & 2015), Suzhou (2016) and Guilin (2018), China. The objective of APPEEC 2019 was to provide scientific and professional interactions for the advancement of the fields of power and energy engineering. APPEEC 2019 facilitated the exchange of insights and innovations between industry and academia. A group of excellent speakers have delivered keynote speeches on emerging technologies in the field of power and energy engineering. Attendees were given the opportunity to give oral and poster presentations and to interface with invited experts. Test Prep for Control Systems—GATE, PSUS AND ES Examination Computational methods in Power Systems require significant inputs from diverse disciplines, such as data base structures, numerical analysis etc. Strategic decisions in sparsity exploitation and algorithm design influence large-scale simulation and high-speed computations. Selection of programming paradigm shapes the design, its modularity and reusability. This has a far reaching effect on software maintenance. Computational Methods for Large Sparse Power Systems Analysis: An Object Oriented Approach provides a unified object oriented (OO) treatment for power system analysis. Sparsity exploitation techniques in OO paradigm are emphasized to facilitate large scale and fast computing. Specific applications like large-scale load flow, short circuit analysis, state estimation and optimal power flow are discussed within this framework. A chapter on modeling and computational issues in power system dynamics is also included. Motivational examples and illustrations are included throughout the book. A library of C++ classes provided along with this book has classes for transmission lines, transformers, substation etc. A CD-ROM with C++ programs is also included. It contains load flow, short circuit analysis and network topology processor applications. Power system data is provided and systems up to 150 buses can be studied. Other Special Features: This book is the first of its kind, covering power system applications designed with an OO perspective. Chapters on object orientation for modeling of power system computations, data structure, large sparse linear system solver, sparse QR decomposition in an OO framework are special features of this book.

Distributed Energy Resources in Microgrids: Integration, Challenges and Optimization unifies classically unconnected aspects of microgrids by considering them alongside economic analysis and stability testing. In addition, the book presents well-founded mathematical analyses on how to technically and economically optimize microgrids via distributed energy resource integration. Researchers and engineers in the power and energy sector will find this information useful for combined scientific and economical approaches to microgrid integration. Specific sections cover microgrid performance, including key technical elements, such as control design, stability analysis, power quality, reliability and resiliency in microgrid operation. Addresses the challenges related to the integration of renewable energy resources Includes examples of control algorithms adopted during integration Presents detailed methods of optimization to enhance successful integration

This book investigates how we as citizens of Society 5.0 borrow the disruptive technologies like Blockchain, IoT, cloud and software-defined networking from Industry 4.0, with its automation and digitization of manufacturing verticals, to change the way we think and act in cyberspace incorporated within everyday life. The technologies are explored in Non-IT sectors, their implementation challenges put on the table, and new directions of thought flagged off.

Disruptive Technologies for Society 5.0: Exploration of New Ideas, Techniques, and Tools is a pathbreaking book on current research, with case studies to comprehend their importance, in technologies that disrupt the de facto. This book is intended for researchers and academicians and will enable them to explore new ideas, techniques, and tools.

Question Bank In Electrical And Electronics EngineeringGalgotia PublicationsAdvances in Power and Control EngineeringProceedings of GUCON 2019Springer Nature

This book on Strength of Materials, covers the introductory course on the subject for engineering students of all disciplines i.e. Mechanical. Electrical. Electronics, Computer, Production. Civil, Instrumentation and Control in Engineering Colleges as well as in Polytechnics.

The book deals with fundamental concept, theory and designs, as well as applications of microwaves in details. In addition it also describes EMI and EMC, Microwave hazards, and applications of microwaves in medicals. Radars and Radar devices, and MASERS have also been described properly in this book. Microwave antennas have been explained with emphasis on theory of operation and design procedures. The book also focuses on microwave measurements along with necessary requirements and different methods of measurement. "Discusses IoT in healthcare and how it enables interoperability, machine-tomachine communication, information exchange, and data movement. Covers how healthcare service delivery automates patient care with the help of mobility solutions, new technologies, and next-gen healthcare facilities with challenges faced and suggested solutions prescribed. This book presents the latest applications of IoT in healthcare along with challenges and solutions. It looks at a comparison of advanced technologies such as Deep Learning, Machine Learning, and AI and explores the ways they can be applied to sensed data to improve prediction and decision-making in smart health services. It focuses on society 5.0 technologies and illustrates how they can improve society and the transformation of IoT in healthcare facilities to support patient independence. Case studies are included for applications such as smart eyewear, smart jackets, and smart beds. The book will also go into detail on wearable technologies and how they can communicate patient information to doctors in medical emergencies. The target audiences for this edited volume is researchers, practitioners, students, as well as key stakeholders involved in and working on healthcare engineering solutions"--

This book gathers selected high-quality research papers presented at International Conference on Advanced Computing and Intelligent Technologies (ICACIT 2021) held at NCR New Delhi, India, during March 2021, 2021, jointly organized by Galgotias University, India, and Department of Information Engineering and Mathematics Universita Di Siena, Italy. It discusses emerging topics pertaining to advanced computing, intelligent technologies, and networks including AI and machine learning, data mining, big data analytics, high-performance computing network performance analysis, Internet of things

networks, wireless sensor networks, and others. The book offers a valuable asset for researchers from both academia and industries involved in advanced studies. This book presents selected papers from the 2021 International Conference on Electrical and Electronics Engineering (ICEEE 2020), held on January 2, 2021. The book focuses on the current developments in various fields of electrical and electronics engineering, such as power generation, transmission and distribution; renewable energy sources and technologies; power electronics and applications; robotics; artificial intelligence and IoT; control, automation and instrumentation; electronics devices, circuits and systems; wireless and optical communication; RF and microwaves; VLSI; and signal processing. The book is a valuable resource for academics and industry professionals alike.

The book features selected high-quality papers presented at the International Conference on Computing, Power and Communication Technologies 2019 (GUCON 2019), organized by Galgotias University, India, in September 2019. Divided into three sections, the book discusses various topics in the fields of power electronics and control engineering, power and energy systems, and machines and renewable energy. This interesting compilation is a valuable resource for researchers, engineers and students.

The book is a compilation of selected papers from 2020 International Conference on Electrical and Electronics Engineering (ICEEE 2020) held in National Power Training Institute HQ (Govt. of India) on February 21 – 22, 2020. The work focuses on the current development in the fields of electrical and electronics engineering like power generation, transmission and distribution, renewable energy sources and technology, power electronics and applications, robotics, artificial intelligence and IoT, control, and automation and instrumentation, electronics devices, circuits and systems, wireless and optical communication, RF and microwaves, VLSI, and signal processing. The book is beneficial for readers from both academia and industry.

This book is envisaged as a Text Book and extensively covers the syllabus of Digital Electronics taught to students of B.E. /B. Tech. In different specializations of Electronics, Electrical or Computer Engineering or to the students of Computer Science, MCA or Information Technology in different universities and institutions. This subject is now also being introduced in the curriculum of universities for the students of disciplines other than those listed above. This book thoroughly covers all the needed topics and is also very useful for the students of AMIE, IETE and other similar degree level courses where Digital Electronics is a prescribed subject.

Catalog of books on display at the 12th New Delhi World Book Fair, held at New Delhi in February 1996.

This book covers the various aspects of solar photovoltaic systems including measurement of solar irradiance, solar photovoltaic modules, arrays with MATLAB implementation, recent MPPT techniques, latest literature of converter design (with MATLAB Simulink models), energy storage for PV applications, balance of systems, grid integration of PV systems, PV system protection, economics of grid connected PV system and system yield performance using PV system. Challenges, issues and solutions related to grid integration of solar photovoltaic systems are also be dealt with.

Dr. Harish C, Rai is presently. Controller Examination. IP University. Delhi, formerly Director All India Council for Technical Education, New Delhi, and Professor in the Department of Electrical and Electronics Engineering, C.R. State College of Engineering. Murthal fSonepat)

Haryana. He received his Graduate and Post Graduate Degree from Delhi College of Engineering, Delhi and Ph.D. Degree in Electrical Engineering from I IT, Delhi in 1991. A study of power semiconductor controlled drives that contain dc, induction and synchronous motors. Discusses the dynamics of motor and load systems; open and closed-loop drives; and thyristor, power transistor, and GTO converters. Also reviews arc drives, brushless and commutatorless dc drives, and rectifier controlled dc drives. Annotation copyrighted by Book News, Inc., Portland, OR

The book is useful as an Introductory Course in Electrical Engineering at the first year level for degree students of various disciplines of engineering. The book will also help to those preparing for various competitive examinations such as AMIE, GATE and graduate IETE. Large number of solved examples have been given. A number of unsolved problems with answers have been included at the end of each chapter.

In the present edition, authors have made sincere efforts to make the book up-to-date. A noteable feature is the inclusion of two chapters on Power System. It is hoped that this edition will serve the readers in a more useful way.

This textbook, in its second edition aims to provide undergraduate students of Electrical Engineering with a unified treatment of all aspects of modern power systems, including generation, transmission and distribution of electric power, load flow studies, economic considerations, fault analysis and stability, high voltage phenomena, system protection, power control, and so on. The text systematically deals with the fundamental techniques in power systems, coupled with adequate analytical techniques and reference to practices in the field. Special emphasis is placed on the latest developments in power system engineering. The book will be equally useful to the postgraduate students specialising in power systems and practising engineers as a reference. NEW TO THIS EDITION • Chapters on Elements of Electric Power Generation and Power System Economics are thoroughly updated. • A new Chapter on Control of Active and Reactive Power is added.

Python is an amazing programming language. It can be applied to almost any programming task. It allows for rapid development and debugging. Getting started with Python is like learning any new skill: it's important to find a resource you connect with to guide your learning. Luckily, there's no shortage of excellent books that can help you learn both the basic concepts of programming and the specifics of programming in Python. With the abundance of resources, it can be difficult to identify which book would be best for your situation. Python for Beginners is a concise single point of reference for all material on python. -Provides concise, need-to-know information on Python types and statements, special method names, built-in functions and exceptions, commonly used standard library modules, and other prominent Python tools -Offers practical advice for each major area of development with both Python 3.x and Python 2.x -Based on the latest research in cognitive science and learning theory -Helps the reader learn how to write effective, idiomatic Python code by leveraging its best--and possibly most neglected--features This book focuses on enthusiastic research aspirants who work on scripting languages for automating the modules and tools, development of web applications, handling big data, complex calculations, workflow creation, rapid prototyping, and other software development purposes. It also targets graduates, postgraduates in computer science, information technology, academicians, practitioners, and research scholars.

Present book covers new paradigms in Blockchain, Big Data and Machine Learning

concepts including applications and case studies. It explains dead fusion in realizing the privacy and security of blockchain based data analytic environment. Recent research of security based on big data, blockchain and machine learning has been explained through actual work by practitioners and researchers, including their technical evaluation and comparison with existing technologies. The theoretical background and experimental case studies related to real-time environment are covered as well. Aimed at Senior undergraduate students, researchers and professionals in computer science and engineering and electrical engineering, this book: Converges Blockchain, Big Data and Machine learning in one volume. Connects Blockchain technologies with the data centric applications such Big data and E-Health. Easy to understand examples on how to create your own blockchain supported by case studies of blockchain in different industries. Covers big data analytics examples using R. Includes Illustrative examples in python for blockchain creation.

The textbook on Control System tells about the basic concepts of control system in a detailed manner. This book contains the brief explanation about block diagram reduction, signal flow graph and time domain analysis. The techniques which are used in control system such as root locus, bode plot and polar plots are explained in detail. designing procedures for the compensators (Lag, lead and lag lead) are given in easy manner and steady state space analysis also explained in a simple manner. The effort has been taken to explain all the concepts in a simple language to make the students to understand the concepts very easily.

The book constitutes selected high quality papers presented in International Conference on Computing, Power and Communication Technologies 2018 (GUCON 2018) organised by Galgotias University, India, in September 2018. It discusses issues in electrical, computer and electronics engineering and technologies. The selected papers are organised into three sections - cloud computing and computer networks; data mining and big data analysis; and bioinformatics and machine learning. In-depth discussions on various issues under these topics provides an interesting compilation for researchers, engineers, and students.

Copyright: a7172c223690e2e7e3a942d248c375a6