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BXOQVC - JOHNNY ALESSANDRO

Revolutionary ideas on how to use markets to achieve fairness and prosperity for all. Many blame today's economic inequality, stagnation, and political instability on the free market. The solution is to rein in the market, right? Radical Markets turns this thinking on its head. With a new foreword by Ethereum creator Vitalik Buterin and virtual reality pioneer Jaron Lanier as well as a new afterword by Eric Posner and Glen Weyl, this provocative book reveals bold new ways to organize markets for the good of everyone. It shows how the emancipatory force of genuinely open, free, and competi-

tive markets can reawaken the dormant nineteenth-century spirit of liberal reform and lead to greater equality, prosperity, and cooperation. Only by radically expanding the scope of markets can we reduce inequality, restore robust economic growth, and resolve political conflicts. But to do that, we must replace our most sacred institutions with truly free and open competition—Radical Markets shows how.

Despite creating vast inequalities and propping up reactionary world regimes, capitalism has many passionate defenders—but not because of what it withholds from some and gives to others. Capitalism dominates, Todd McGowan argues, be-

cause it mimics the structure of our desire while hiding the trauma that the system inflicts upon it. People from all backgrounds enjoy what capitalism provides, but at the same time are told more and better is yet to come. Capitalism traps us through an incomplete satisfaction that compels us after the new, the better, and the more. Capitalism's parasitic relationship to our desires gives it the illusion of corresponding to our natural impulses, which is how capitalism's defenders characterize it. By understanding this psychic strategy, McGowan hopes to divest us of our addiction to capitalist enrichment and help us rediscover enjoyment as we actually experi-

enced it. By locating it in the present, McGowan frees us from our attachment to a better future and the belief that capitalism is an essential outgrowth of human nature. From this perspective, our economic, social, and political worlds open up to real political change. Eloquent and enlivened by examples from film, television, consumer culture, and everyday life, *Capitalism and Desire* brings a new, psychoanalytically grounded approach to political and social theory.

This book is written so that it serves as a text book for B.E./B.Tech degree students in general and for the institutions where AICTE model curriculum has been adopted. **TOPICS COVERED IN THIS BOOK:-** Magnetic field and Magnetic circuit Electromagnetic force and torque D.C. Machines D.C. Machines-Motoring and Generation **SALIENT FEATURES:-** Self-contained, self-explanatory and simple to follow text. Numerous worked out examples. Well Explained theory parts with illustrations. Exercises, objective type question with answers at the end of each chapter.

The book is a collection of high-quality peer-reviewed research papers presented at International

Conference on Frontiers of Intelligent Computing: Theory and applications (FICTA 2016) held at School of Computer Engineering, KIIT University, Bhubaneswar, India during 16 - 17 September 2016. The book presents theories, methodologies, new ideas, experiences and applications in all areas of intelligent computing and its applications to various engineering disciplines like computer science, electronics, electrical and mechanical engineering.

An important new resource for the international utility market Over the past two decades, static reactive power compensators have evolved into a mature technology and become an integral part of modern electrical power systems. They are one of the key devices in flexible AC transmission systems (FACTS). Coordination of static compensators with other controllable FACTS devices promises not only tremendously enhanced power system controllability, but also the extension of power transfer capability of existing transmission corridors to near their thermal capacities, thus delaying or even curtailing the need to invest in new transmission facilities.

Offering both an in-depth presentation of theoretical concepts and practical applications pertaining to these power compensators, Thyristor-Based FACTS Controllers for Electrical Transmission Systems fills the need for an appropriate text on this emerging technology. Replete with examples and case studies on control design and performance, the book provides an important resource for both students and engineers working in the field.

What happens when media and politics become forms of entertainment? As our world begins to look more and more like Orwell's 1984, Neil's Postman's essential guide to the modern media is more relevant than ever. "It's unlikely that Trump has ever read *Amusing Ourselves to Death*, but his ascent would not have surprised Postman." -CNN Originally published in 1985, Neil Postman's groundbreaking polemic about the corrosive effects of television on our politics and public discourse has been hailed as a twenty-first-century book published in the twentieth century. Now, with television joined by more sophisticated electronic media—from the In-

ternet to cell phones to DVDs—it has taken on even greater significance. *Amusing Ourselves to Death* is a prophetic look at what happens when politics, journalism, education, and even religion become subject to the demands of entertainment. It is also a blueprint for regaining control of our media, so that they can serve our highest goals. "A brilliant, powerful, and important book. This is an indictment that Postman has laid down and, so far as I can see, an irrefutable one." —Jonathan Yardley, *The Washington Post Book World*

Definitive novel of the "Lost Generation" focuses on the coming of age of Amory Blaine, a handsome, wealthy Princeton student. Fitzgerald's first novel and an immediate, spectacular success. Note. This handbook serves as a guide to deploying battery energy storage technologies, specifically for distributed energy resources and flexibility resources. Battery energy storage technology is the most promising, rapidly developed technology as it provides higher efficiency and ease of control. With energy transition through decarbonization and decentralization, energy storage plays a significant

role to enhance grid efficiency by alleviating volatility from demand and supply. Energy storage also contributes to the grid integration of renewable energy and promotion of microgrid.

This is an introduction to power system analysis and design. The text contains fundamental concepts and modern topics with applications to real-world problems, and integrates MATLAB and SIMULINK throughout.

A bestselling calculations handbook that offers electric power engineers and technicians essential, step-by-step procedures for solving a wide array of electric power problems. This edition introduces a complete electronic book on CD-ROM with over 100 live calculations--90% of the book's calculations. Updated to reflect the new National Electric Code advances in transformer and motors; and the new system design and operating procedures in the electric utility industry prompted by deregulation.

For this revision of their bestselling junior- and senior-level text, Guru and Hizioglu have incorporated eleven years of cutting-edge developments in the field since *Electric*

Machinery and Transformers was first published. Completely re-written, the new Second Edition also incorporates suggestions from students and instructors who have used the First Edition, making it the best text available for junior- and senior-level courses in electric machines. The new edition features a wealth of new and improved problems and examples, designed to complement the authors' overall goal of encouraging intuitive reasoning rather than rote memorization of material. Chapter 3, which presents the conversion of energy, now includes: analysis of magnetically coupled coils, induced emf in a coil rotating in a uniform magnetic field, induced emf in a coil rotating in a time-varying magnetic field, and the concept of the revolving field. All problems and examples have been rigorously tested using Mathcad.

In the history of electronic communication, the last quarter of the nineteenth century holds a special place, for it was during this period that the telephone, phonograph, electric light, wireless, and cinema were all invented. In *When Old Technologies Were New*, Carolyn Marvin explores how two of these

new inventions--the telephone and the electric light--were publicly envisioned at the end of the nineteenth century, as seen in specialized engineering journals and popular media. Marvin pays particular attention to the telephone, describing how it disrupted established social relations, unsettling customary ways of dividing the private person and family from the more public setting of the community. On the lighter side, she describes how people spoke louder when calling long distance, and how they worried about catching contagious diseases over the phone. A particularly powerful chapter deals with telephonic precursors of radio broadcasting--the "Telephone Herald" in New York and the "Telefon Hirmondo" of Hungary--and the conflict between the technological development of broadcasting and the attempt to impose a homogenous, ethnocentric variant of Anglo-Saxon culture on the public. While focusing on the way professionals in the electronics field tried to control the new media, Marvin also illuminates the broader social impact, presenting a wide-ranging, informative, and entertaining account of the early

years of electronic media. *Electric Machinery Fundamentals* continues to be a best-selling machinery text due to its accessible, student-friendly coverage of the important topics in the field. Chapman's clear writing persists in being one of the top features of the book. Although not a book on MATLAB, the use of MATLAB has been enhanced in the fourth edition. Additionally, many new problems have been added and remaining ones modified. *Electric Machinery Fundamentals* is also accompanied by a website that provides solutions for instructors, as well as source code, MATLAB tools, and links to important sites for students. The GHG Protocol Corporate Accounting and Reporting Standard helps companies and other organizations to identify, calculate, and report GHG emissions. It is designed to set the standard for accurate, complete, consistent, relevant and transparent accounting and reporting of GHG emissions. Guru and Hizioglu have produced an accessible and user-friendly text on electromagnetics that will appeal to both students and professors teaching this course. This lively

book includes many worked examples and problems in every chapter, as well as chapter summaries and background revision material where appropriate. The book introduces undergraduate students to the basic concepts of electrostatic and magnetostatic fields, before moving on to cover Maxwell's equations, propagation, transmission and radiation. Chapters on the Finite Element and Finite Difference method, and a detailed appendix on the Smith chart are additional enhancements. MathCad code for many examples in the book and a comprehensive solutions set are available at www.cambridge.org/9780521830164. *Electrical Machines* primarily covers the basic functionality and the role of electrical machines in their typical applications. The effort of applying coordinate transforms is justified by obtaining a more intuitive, concise and easy-to-use model. In this textbook, mathematics is reduced to a necessary minimum, and priority is given to bringing up the system view and explaining the use and external characteristics of machines on their electrical and mechanical ports.

Covering the most relevant concepts relating to machine size, torque and power, the author explains the losses and secondary effects, outlining cases and conditions in which some secondary phenomena are neglected. While the goal of developing and using machine mathematical models, equivalent circuits and mechanical characteristics persists through the book, the focus is kept on physical insight of electromechanical conversion process. Details such as the slot shape and the disposition of permanent magnets and their effects on the machine parameters and performance are also covered.

A unique approach to sensorless control and regulator design of electric drives Based on the author's vast industry experience and collaborative works with other industries, *Control of Electric Machine Drive Systems* is packed with tested, implemented, and verified ideas that engineers can apply to everyday problems in the field. Originally published in Korean as a textbook, this highly practical updated version features the latest information on the control of electric machines and ap-

paratus, as well as a new chapter on sensorless control of AC machines, a topic not covered in any other publication. The book begins by explaining the features of the electric drive system and trends of development in related technologies, as well as the basic structure and operation principles of the electric machine. It also addresses steady state characteristics and control of the machines and the transformation of physical variables of AC machines using reference frame theory in order to provide a proper foundation for the material. The heart of the book reviews several control algorithms of electric machines and power converters, explaining active damping and how to regulate current, speed, and position in a feedback manner. Seung-Ki Sul introduces tricks to enhance the control performance of the electric machines, and the algorithm to detect the phase angle of an AC source and to control DC link voltages of power converters. Topics also covered are: Vector control Control algorithms for position/speed sensorless drive of AC machines Methods for identifying the parameters of electric machines and power converters The matrix alge-

bra to model a three-phase AC machine in d-q-n axes Every chapter features exercise problems drawn from actual industry experience. The book also includes more than 300 figures and offers access to an FTP site, which provides MATLAB programs for selected problems. The book's practicality and realworld relatability make it an invaluable resource for professionals and engineers involved in the research and development of electric machine drive business, industrial drive designers, and senior undergraduate and graduate students. To obtain instructor materials please send an email to pressbooks@ieee.org To visit this book's FTP site to download MATLAB codes, please click on this link: ftp://ftp.wiley.com/public/sci_tech_med/electric_machine/ MATLAB codes are also downloadable from Wiley Booksupport Site at <http://booksupport.wiley.com>

The new edition of *POWER SYSTEM ANALYSIS AND DESIGN* provides students with an introduction to the basic concepts of power systems along with tools to aid them in applying these skills to real world situations. Physical concepts

are highlighted while also giving necessary attention to mathematical techniques. Both theory and modeling are developed from simple beginnings so that they can be readily extended to new and complex situations. The authors incorporate new tools and material to aid students with design issues and reflect recent trends in the field. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

A practical treatment of power system design within the oil, gas, petrochemical and offshore industries. These have significantly different characteristics to large-scale power generation and long distance public utility industries. Developed from a series of lectures on electrical power systems given to oil company staff and university students, Sheldrake's work provides a careful balance between sufficient mathematical theory and comprehensive practical application knowledge. Features of the text include: Comprehensive handbook detailing the application of electrical engineering to the oil, gas and petrochemical industries Practi-

cal guidance to the electrical systems equipment used on off-shore production platforms, drilling rigs, pipelines, refineries and chemical plants Summaries of the necessary theories behind the design together with practical guidance on selecting the correct electrical equipment and systems required Presents numerous 'rule of thumb' examples enabling quick and accurate estimates to be made Provides worked examples to demonstrate the topic with practical parameters and data Each chapter contains initial revision and reference sections prior to concentrating on the practical aspects of power engineering including the use of computer modelling Offers numerous references to other texts, published papers and international standards for guidance and as sources of further reading material Presents over 35 years of experience in one self-contained reference Comprehensive appendices include lists of abbreviations in common use, relevant international standards and conversion factors for units of measure An essential reference for electrical engineering designers, operations and maintenance engineers

and technicians.

Discover BIM: A better way to build better buildings Building Information Modeling (BIM) offers a novel approach to design, construction, and facility management in which a digital representation of the building product and process is used to facilitate the exchange and interoperability of information in digital format. BIM is beginning to change the way buildings look, the way they function, and the ways in which they are designed and built. The BIM Handbook, Third Edition provides an in-depth understanding of BIM technologies, the business and organizational issues associated with its implementation, and the profound advantages that effective use of BIM can provide to all members of a project team. Updates to this edition include: Information on the ways in which professionals should use BIM to gain maximum value New topics such as collaborative working, national and major construction clients, BIM standards and guides A discussion on how various professional roles have expanded through the widespread use and the new avenues of BIM practices and services A wealth of new case

studies that clearly illustrate exactly how BIM is applied in a wide variety of conditions. Painting a colorful and thorough picture of the state of the art in building information modeling, the BIM Handbook, Third Edition guides readers to successful implementations, helping them to avoid needless frustration and costs and take full advantage of this paradigm-shifting approach to construct better buildings that consume fewer materials and require less time, labor, and capital resources.

“One of the most profound and illuminating studies of this century to have been published in recent decades.”—John Gray, *New York Times Book Review* Hailed as “a magisterial critique of top-down social planning” by the *New York Times*, this essential work analyzes disasters from Russia to Tanzania to uncover why states so often fail—sometimes catastrophically—in grand efforts to engineer their society or their environment, and uncovers the conditions common to all such planning disasters. “Beautifully written, this book calls into sharp relief the nature of the world we now inhabit.”—*New Yorker* “A tour

de force.”—Charles Tilly, Columbia University

A compilation of 3M voices, memories, facts and experiences from the company's first 100 years.

This seventh edition of Fitzgerald and Kingsley's *Electric Machinery* by Stephen Umans was developed recognizing the strength of this classic text since its first edition has been the emphasis on building an understanding of the fundamental physical principles underlying the performance of electric machines. Much has changed since the publication of the first edition, yet the basic physical principles remain the same, and this seventh edition is intended to retain the focus on these principles in the context of today's technology.

Traditionally, electrical machines are classified into d. c. commutator (brushed) machines, induction (asynchronous) machines and synchronous machines. These three types of electrical machines are still regarded in many academic curricula as fundamental types, despite that d. c. brushed machines (except small machines) have been gradually abandoned and PM brushless machines (PMBM) and switched reluctance

machines (SRM) have been in mass production and use for at least two decades. Recently, new topologies of high torque density motors, high speed motors, integrated motor drives and special motors have been developed. Progress in electric machines technology is stimulated by new materials, new areas of applications, impact of power electronics, need for energy saving and new technological challenges. The development of electric machines in the next few years will mostly be stimulated by computer hardware, residential and public applications and transportation systems (land, sea and air). At many Universities teaching and research strategy oriented towards electrical machinery is not up to date and has not been changed in some countries almost since the end of the WWII. In spite of many excellent academic research achievements, the academia-industry collaboration and technology transfer are underestimated or, quite often, neglected. Underestimation of the role of industry, unfamiliarity with new trends and restraint from technology transfer results, with time, in lack of external financial support and dras-

tic - cline in the number of students interested in Power Electrical Engineering.

IOM's 1999 landmark study *To Err is Human* estimated that between 44,000 and 98,000 lives are lost every year due to medical errors. This call to action has led to a number of efforts to reduce errors and provide safe and effective health care. Information technology (IT) has been identified as a way to enhance the safety and effectiveness of care. In an effort to catalyze its implementation, the U.S. government has invested billions of dollars toward the development and meaningful use of effective health IT. Designed and properly applied, health IT can be a positive transformative force for delivering safe health care, particularly with computerized prescribing and medication safety. However, if it is designed and applied inappropriately, health IT can add an additional layer of complexity to the already complex delivery of health care. Poorly designed IT can introduce risks that may lead to unsafe conditions, serious injury, or even death. Poor human-computer interactions could result in wrong dosing decisions and wrong diagnos-

es. Safe implementation of health IT is a complex, dynamic process that requires a shared responsibility between vendors and health care organizations. Health IT and Patient Safety makes recommendations for developing a framework for patient safety and health IT. This book focuses on finding ways to mitigate the risks of health IT-assisted care and identifies areas of concern so that the nation is in a better position to realize the potential benefits of health IT. Health IT and Patient Safety is both comprehensive and specific in terms of recommended options and opportunities for public and private interventions that may improve the safety of care that incorporates the use of health IT. This book will be of interest to the health IT industry, the federal government, health care providers and other users of health IT, and patient advocacy groups.

Analysis of Electrical Machines discloses the information essential for a holistic understanding of electrical machines. The title emphasizes the effective analysis of machine performance. The text first covers the basic transformer and magnetically coupled circuit theory con-

cepts, and then proceeds to tackling commutator machines. Next, the selection deals with synchronous and induction machines. The text also talks about the transient analysis of noncommutator machines. The last chapter details the physical basis for machine inductance parameters. The book will be of great use to both student and practicing electronics engineers and technicians.

The process of user-centered innovation: how it can benefit both users and manufacturers and how its emergence will bring changes in business models and in public policy. Innovation is rapidly becoming democratized. Users, aided by improvements in computer and communications technology, increasingly can develop their own new products and services. These innovating users—both individuals and firms—often freely share their innovations with others, creating user-innovation communities and a rich intellectual commons. In *Democratizing Innovation*, Eric von Hippel looks closely at this emerging system of user-centered innovation. He explains why and when users find it profitable to develop new products and services for themselves,

and why it often pays users to reveal their innovations freely for the use of all. The trend toward democratized innovation can be seen in software and information products—most notably in the free and open-source software movement—but also in physical products. Von Hippel's many examples of user innovation in action range from surgical equipment to surfboards to software security features. He shows that product and service development is concentrated among "lead users," who are ahead on marketplace trends and whose innovations are often commercially attractive. Von Hippel argues that manufacturers should redesign their innovation processes and that they should systematically seek out innovations developed by users. He points to businesses—the custom semiconductor industry is one example—that have learned to assist user-innovators by providing them with toolkits for developing new products. User innovation has a positive impact on social welfare, and von Hippel proposes that government policies, including R&D subsidies and tax credits, should be realigned to eliminate biases against it. The goal of a

democratized user-centered innovation system, says von Hippel, is well worth striving for. An electronic version of this book is available under a Creative Commons license.

"Institute of Electrical and Electronics Engineers."

This book is intended for a course that combines machinery and power systems into one semester. It is designed to be flexible and to allow instructors to choose chapters a la carte, so the instructor controls the emphasis. The text gives students the information they need to become real-world engineers, focusing on principles and teaching how to use information as opposed to doing a lot of calculations that would rarely be done by a practising engineer. The author compresses the material by focusing on its essence, underlying principles. MATLAB is used throughout the book in examples and problems.

This book introduces electromechanical energy conversion through active learning. Covering linear and non-linear magnetic circuits, transformers, electromechanical energy and forces, and excited electromechanical systems, along with detailed examination of various

machines involved, the book contains numerous 'hands-on' challenges that encourage a creative and determined approach to problem-solving, making it an ideal text for undergraduate courses.

Engineering Electromagnetics provides a solid foundation in electromagnetics fundamentals by emphasizing physical understanding and practical applications. Electromagnetics, with its requirements for abstract thinking, can prove challenging for students. The authors' physical and intuitive approach has produced a book that will inspire enthusiasm and interest for the material. Benefiting from a review of electromagnetic curricula at several schools and repeated use in classroom settings, this text presents material in a rigorous yet readable manner. FEATURES/BENEFITS Starts with coverage of transmission lines before addressing fundamental laws, providing a smooth transition from circuits to electromagnetics. Emphasizes physical understanding and the experimental bases of fundamental laws. Offers detailed examples and numerous practical end-of-chapter problems, with each problem's topical content clearly identified.

Provides historical notes, abbreviated biographies, and hundreds of footnotes to motivate interest and enhance understanding. Back Cover Benefiting from a review of electromagnetics curricula at several schools and repeated use in classroom settings, this text presents material in a comprehensive and practical yet readable manner. Features: Starts with coverage of transmission lines before addressing fundamental laws, providing a smooth transition from circuits to electromagnetics. Emphasizes physical understanding and the experimental bases of fundamental laws. Offers detailed examples and numerous practical end-of-chapter problems, with each problem's topical content clearly identified. Provides historical notes, abbreviated biographies, and hundreds of footnotes to motivate interest and enhance understanding.

In one complete volume, this essential reference presents an in-depth overview of the theoretic-

cal principles and techniques of electrical machine design. This timely new edition offers up-to-date theory and guidelines for the design of electrical machines, taking into account recent advances in permanent magnet machines as well as synchronous reluctance machines. New coverage includes: Brand new material on the ecological impact of the motors, covering the eco-design principles of rotating electrical machines An expanded section on the design of permanent magnet synchronous machines, now reporting on the design of tooth-coil, high-torque permanent magnet machines and their properties Large updates and new material on synchronous reluctance machines, air-gap inductance, losses in and resistivity of permanent magnets (PM), operating point of loaded PM circuit, PM machine design, and minimizing the losses in electrical machines> End-of-chapter exercises and

new direct design examples with methods and solutions to real design problems> A supplementary website hosts two machine design examples created with MATHCAD: rotor surface magnet permanent magnet machine and squirrel cage induction machine calculations. Also a MATLAB code for optimizing the design of an induction motor is provided Outlining a step-by-step sequence of machine design, this book enables electrical machine designers to design rotating electrical machines. With a thorough treatment of all existing and emerging technologies in the field, it is a useful manual for professionals working in the diagnosis of electrical machines and drives. A rigorous introduction to the theoretical principles and techniques makes the book invaluable to senior electrical engineering students, postgraduates, researchers and university lecturers involved in electrical drives technology and electromechanical energy conversion.