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Management Information Systems: A Concise Study 2Nd Ed. - Kelkar

[Handbook of Research on Technical, Privacy, and Security Challenges in a Modern World](#) - Tyagi, Amit Kumar 2022-06-30

More individuals than ever are utilizing internet technologies to work from home, teach and learn, shop, interact with peers, review medical records, and more. While it is certainly convenient to conduct such tasks via the internet, this

increased internet presence has also led to a rise in the search and availability of personal information, which in turn is resulting in more cyber-attacks, privacy breaches, and information leaks. Cyber criminals are using such opportunities to attack governments, organizations, and individuals, making it necessary to anticipate, assess, and mitigate privacy and security threats during this infodemic. The Handbook of Research on Technical, Privacy, and Security

Challenges in a Modern World discusses the design and development of different machine learning systems, including next generation applications, in order to mitigate cyber-attacks and address security challenges in everyday technologies. It further explores select methods and algorithms of learning for implementing better security methods in fields such as business and healthcare. It recognizes the future of privacy and the importance of preserving data through recommended practice, feedback loops, and smart agents. Covering topics such as face mask detection, gesture recognition, and botnet attacks and detection, this major reference work is a dynamic resource for medical professionals, healthcare administrators, government officials, business executives and managers, IT managers, students and faculty of higher education, librarians, researchers, and academicians. Phytochemicals and Medicinal Plants in Food Design - Megh

R. Goyal 2022-05-19
Phytochemicals and Medicinal Plants in Food Design: Strategies and Technologies for Improved Healthcare explores the therapeutic potential of various natural and novel phytochemicals in the design of new foods. Divided into two parts, the first section discusses plant-based secondary metabolites for healthcare, focusing on the health aspects of herbs and medicinal plants and nutraceuticals for livestock production and for the treatment of diseases such as HIV and diabetes. The authors also address the benefits of preserving indigenous knowledge of medicinal plants and current consumer views of health issues from foods. The second part delves into the design and utilization of healthy foods. This section discusses the application of novel designs and herbal formulations in conjunction with other biomolecules for the development and utilization for food products with health benefits. Key features:

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Encourages the preservation of indigenous knowledge on herbs and medicinal plants Explains the health-promoting effects of some herbs and medicinal plants Discusses the therapeutics and their mechanisms of actions of the biological compounds for food safety This informative volume will be valuable for faculty, students, scientists, researchers, and industry professionals in the development of superfoods from phytochemicals and medicinal plants.

Trusted Systems - Moti Yung
2016-01-29

Normal 0 false false false EN-US X-NONE X-NONE This book constitutes the thoroughly refereed post-conference proceedings of the 6th International Conference on Trusted Systems, INTRUST 2014, held in Beijing, China, in December 2014. The conference brings together academic and industrial researchers, designers, and implementers with end-users of trusted systems, in order to foster the exchange of ideas in

this challenging and fruitful area. The revised full papers focus on the theory, technologies and applications of trusted systems and cover all aspects of trusted computing systems, including trusted modules, platforms, networks, services and applications, from their fundamental features and functionalities to design principles, architecture and implementation technologies.

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Modern Control Theory - Uday A. Bakshi 2020-11-01

The book is written for an undergraduate course on the Modern Control Systems. It provides comprehensive explanation of state variable analysis of linear control systems and analysis of nonlinear control systems. Each chapter starts with the background of the topic. Then it gives the conceptual knowledge about the topic dividing it in various sections and subsections. Each chapter provides the detailed explanation of the topic, practical examples and variety of solved problems. The book explains the philosophy of the subject which makes the understanding of the concepts very clear and makes the subject more interesting. The book starts with explaining the concept of state variable and state model of linear control

systems. Then it explains how to obtain the state models of various types of systems using phase variables, canonical variables, Jordan's canonical form and cascade programming. Then the book includes good coverage of the matrix algebra including eigen values, eigen vectors, modal matrix and diagonalization. It also includes the derivation of transfer function of the system from its state model. The book further explains the solution of state equations including the concept of state transition matrix. It also includes the various methods of obtaining the state transition matrix such as Laplace transform method, Power series method, Cayley Hamilton method and Similarity transformation method. It further includes the detailed discussion of controllability and observability of systems. It also provides the discussion of pole placement technique of system design. The book teaches various types of nonlinearities and the nonlinear systems. The book covers the fundamental

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knowledge of analysis of nonlinear systems using phase plane method, isocline method and delta method. Finally, it explains stability analysis of nonlinear systems and Liapunov's stability analysis.

Active Building Energy Systems - Vahid Vahidinasab
2022-05-06

This book provides a comprehensive study on state-of-the-art developments in the control, operation, and market participation of active buildings (ABs). Active buildings can support the broader energy system by intelligent integration of renewable-based energy technologies for heating, cooling, electricity, and transport. This important reference analyzes the key features of modern control and operation techniques applied to these systems. Contributions from an international team of experts present practical methods with evidence and case studies from applications to real-world or simulated active buildings. Sample computer codes and analytical examples aid in the

understanding of the presented methods. The book will support researchers working on the control and operation of buildings as an energy system, smart cities and smart grids, and microgrids, as well as researchers and developers from the building and energy engineering, economic, and operation research fields.

Provides an in-depth review of building-level energy systems technologies; Covers codes, standards, and requirements for active building control systems; Includes sample computer code and analytical examples.

Security Management, Integrity, and Internal Control in Information Systems - Steve Furnell
2006-06-03

This is the first joint working conference between the IFIP Working Groups 11.1 and 11.5. We hope this joint conference will promote collaboration among researchers who focus on the security management issues and those who are interested in integrity and control of

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information systems. Indeed, as management at any level may be increasingly held answerable for the reliable and secure operation of the information systems and services in their respective organizations in the same manner as they are for financial aspects of the enterprise, there is an increasing need for ensuring proper standards of integrity and control in information systems in order to ensure that data, software and, ultimately, the business processes are complete, adequate and valid for intended functionality and expectations of the owner (i. e. the user organization). As organizers, we would like to thank the members of the international program committee for their review work during the paper selection process. We would also like to thank the authors of the invited papers, who added valuable contribution to this first joint working conference. Paul Dowland X. Sean Wang
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**New Perspectives on
Information Systems
Modeling and Design -**

Rosado da Cruz, António
Miguel 2018-11-09

Information modeling plays an important role in every level of the enterprise information system's architecture. Modeling allows organizations to adapt and become more efficient, helping top managers and engineers outline tactics to reach strategic objectives, understand organizational needs, and design information systems that are aligned with

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business goals. New Perspectives on Information Systems Modeling and Design is an essential reference source that discusses organizational adaptation through the integration of new information technologies into existing processes and underlying supporting applications. Featuring research on topics such as application integration, change management, and mobile process activities, this book is ideally designed for managers, researchers, system developers, entrepreneurs, graduate-level students, business professionals, information system engineers, and academicians seeking coverage on emerging technological developments and practical solutions for system modeling and design.

Efficient Decision Support

Systems - Chiang Jao

2011-09-06

This series is directed to diverse managerial professionals who are leading the transformation of individual domains by using expert information and domain

knowledge to drive decision support systems (DSSs). The series offers a broad range of subjects addressed in specific areas such as health care, business management, banking, agriculture, environmental improvement, natural resource and spatial management, aviation administration, and hybrid applications of information technology aimed to interdisciplinary issues. This book series is composed of three volumes: Volume 1 consists of general concepts and methodology of DSSs; Volume 2 consists of applications of DSSs in the biomedical domain; Volume 3 consists of hybrid applications of DSSs in multidisciplinary domains. The book is shaped decision support strategies in the new infrastructure that assists the readers in full use of the creative technology to manipulate input data and to transform information into useful decisions for decision makers.

Sustainable Energy Systems:

Innovative Perspectives - Anton

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SinitSyn 2021-02-04

This book gathers the latest advances, innovations, and applications in the field of sustainable energy systems, as presented by researchers and engineers at the International Conference Sustainable Energy Systems: Innovative Perspectives (SES), held in Saint-Petersburg, Russia, on October 29-30, 2020. It covers highly diverse topics, including applications of renewable energy sources, recycling of solid municipal and industrial waste, circular economy based on agricultural waste, energy-efficient and sustainable buildings, innovation management and technologies of sustainable cities, sustainable construction, creative construction technology and materials, construction simulation and virtual construction, BIM and rapid prototyping for construction, consumption practices in the digital era, sustainable operations management, and supply chain management in the digital era. The contributions, which were

selected by means of a rigorous international peer-review process, highlight numerous exciting ideas that will spur novel research directions and foster multidisciplinary collaborations.

Principles Of Control Systems - U.A.Bakshi S.C.Goyal 2008
Open loop and closed loop systems, Servomechanism, Basic structure of a feedback control system. Dynamic Models and Responses Dynamic model of an RLC network, State variable model, Impulse response model, Transfer function model, Standard test/disturbance signals and their models, Transfer function model and dynamic response of a second order electrical system. Control System Components Basic units of feedback control system, Reduction of system block diagrams, Signal flow graph, Mason's gain rule, Block diagram reduction using Mason's gain rule, Operational amplifier used as an error detector, Servo potentiometer, DC and AC servomotors, Tachogenerator, Stepper

motor, Synchros, Block diagram model of a typical control system using simplified sub-system, Transfer function blocks. Feedback Control System Characteristics Stability, Sensitivity, Disturbance rejection, Steady state accuracy, Transient and steady state responses of a second order system, Effect of additional zeros and poles, Desired closed loop pole locations and dominant poles, Steady state error constants, System type numbers and error compensation. System Stability Analysis and Compensator Design System stability bounds, Routh stability criterion, Relative stability and range of stability, Root locus concept, System characteristic equation, Plotting root loci, Design of cascade lag-lead compensation, Minor loop (rate) feedback compensation. Nyquist Criterion and Stability Margins Nyquist stability criteria, Nyquist plot, Gain and phase margins, Bode plot of magnitude and phase and determination of stability margins. Feedback System

Performance Performance specifications in frequency domain, Correlation between frequency domain and time domain specifications, Constant - M circles, Nichols chart, Stability margins from sensitivity function. Design of cascade lag-lead compensation using Bode plot. Minor loop (rate) feedback compensation. Cyber-Physical, IoT, and Autonomous Systems in Industry 4.0 - Vikram Bali 2021-12-24

This book addresses topics related to the Internet of Things (IoT), machine learning, cyber-physical systems, cloud computing, and autonomous vehicles in Industry 4.0. It investigates challenges across multiple sectors and industries and considers Industry 4.0 for operations research and supply chain management. Cyber-Physical, IoT, and Autonomous Systems in Industry 4.0 encourages readers to develop novel theories and enrich their knowledge to foster sustainability. It examines the recent research trends and the future of cyber-physical

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systems, IoT, and autonomous systems as they relate to Industry 4.0. This book is intended for undergraduates, postgraduates, academics, researchers, and industry individuals to explore new ideas, techniques, and tools related to Industry 4.0.

Acute Pulmonary Embolism

- A. Geibel 2012-12-06

The value of echocardiography in the diagnostic work-up of patients with suspected acute pulmonary embolism.- New developments in the thrombolytic therapy of venous thrombosis.- Mechanism of blood coagulation. Newer aspects of anticoagulant and antithrombotic therapy.MR-angiography in the diagnosis of pulmonary embolism.Scintigraphy-ventilation/perfusion scanning and imaging of the embolus.- Clinical course and prognosis of acute pulmonary embolism.- The molecular mechanisms of inherited thrombophilia.

Advances in Cryptology - ASIACRYPT 2017 - Tsuyoshi Takagi 2017-11-22

The three-volume set LNCS

10624, 10625, 10626 constitutes the refereed proceedings of the 23rd International Conference on the Theory and Applications of Cryptology and Information Security, ASIACRYPT 2017, held in Hong Kong, China, in December 2017.The 65 revised full papers were carefully selected from 243 submissions. They are organized in topical sections on Post-Quantum Cryptography; Symmetric Key Cryptanalysis; Lattices; Homomorphic Encryptions; Access Control; Oblivious Protocols; Side Channel Analysis; Pairing-based Protocols; Quantum Algorithms; Elliptic Curves; Block Chains; Multi-Party Protocols; Operating Modes Security Proofs; Cryptographic Protocols; Foundations; Zero-Knowledge Proofs; and Symmetric Key Designs.

Smart Buildings

Digitalization - O.V. Gnana Swathika 2022-02-24

This book explains the concept of data centers, including data collection, public parking systems, smart metering, and

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sanitizer dispensers. Electric urban transport systems and effective electric distribution in smart cities are discussed as well. The extensive role of power electronics in smart building applications, such as electric vehicles, rooftop terracing, and renewable energy integration, is included. Case studies on automation in smart homes and commercial and official buildings are elaborated. This book describes the complete implication of smart buildings via industrial, commercial, and community platforms. FEATURES Systematically defines energy-efficient buildings employing power consumption optimization techniques with the inclusion of renewable energy sources Covers data centers and cybersecurity with excellent data storage features for smart buildings Includes systematic and detailed strategies for building air-conditioning and lighting Details smart building security propulsion This book is aimed at graduate students, researchers, and professionals

in building systems engineering, architectural engineering, and electrical engineering.

Big Data Analytics - Sanjay Madria 2019-12-12

This book constitutes the refereed proceedings of the 7th International Conference on Big Data analytics, BDA 2019, held in Ahmedabad, India, in December 2019. The 25 papers presented in this volume were carefully reviewed and selected from 53 submissions. The papers are organized in topical sections named: big data analytics: vision and perspectives; search and information extraction; predictive analytics in medical and agricultural domains; graph analytics; pattern mining; and machine learning.

Paving the Way for 5G Through the Convergence of Wireless Systems - Trestian, Ramona 2018-12-28

In the ever-evolving telecommunication industry, smart mobile computing devices have become increasingly affordable and powerful, leading to significant

growth in the number of advanced mobile users and their bandwidth demands. Due to this increasing need, the next generation of wireless networks needs to enable solutions to bring together broadband, broadcast, and cellular technologies for global consumers. Paving the Way for 5G Through the Convergence of Wireless Systems provides innovative insights into wireless networks and cellular coexisting solutions that aim at paving the way towards 5G. Through examining data offloading, cellular technologies, and multi-edge computing, it addresses coexistence problems at different levels (i.e., physical characteristics, open access, technology-neutrality, economic characteristics, healthcare, education, energy, etc.), influencing networks to provide solutions for next generation wireless networks. Bridging research and practical solutions, this comprehensive reference source is ideally designed for graduate-level students, IT professionals and

technicians, engineers, academicians, and researchers.

New Threats and Countermeasures in Digital Crime and Cyber Terrorism -

Dawson, Maurice 2015-04-30
Technological advances, although beneficial and progressive, can lead to vulnerabilities in system networks and security. While researchers attempt to find solutions, negative uses of technology continue to create new security threats to users. New Threats and Countermeasures in Digital Crime and Cyber Terrorism brings together research-based chapters and case studies on security techniques and current methods being used to identify and overcome technological vulnerabilities with an emphasis on security issues in mobile computing and online activities. This book is an essential reference source for researchers, university academics, computing professionals, and upper-level students interested in the techniques, laws, and training initiatives currently being

implemented and adapted for secure computing.

Internet of Things and Cyber Physical Systems - Keshav Kaushik 2022-12-30

The quantity, diversity, and sophistication of Internet of Things (IoT) items are rapidly increasing, posing significant issues but also innovative solutions for forensic science. Such systems are becoming increasingly common in public locations, businesses, universities, residences, and other shared offices, producing enormous amounts of data at rapid speeds in a variety of forms. IoT devices can be used as suspects, digital witnesses, or instruments of crime and cyberattacks, posing new investigation problems, forensic issues, security threats, legal concerns, privacy concerns, and ethical dilemmas. A cyberattack on IoT devices might target the device itself or associated systems, particularly vital infrastructure. This book discusses the advancements in IoT and Cyber Physical Systems (CPS) forensics. The

first objective is to learn and understand the fundamentals of IoT forensics. This objective will answer the question of why and how IoT has evolved as one of the most promising and widely accepted technologies across the globe and has many widely accepted applications. The second objective is to learn how to use CPS to address many computational problems. CPS forensics is a promising domain, and there are various advancements in this field. This book is structured so that the topics of discussion are relevant to each reader's particular areas of interest. The book's goal is to help each reader to see the relevance of IoT and CPS forensics to his or her career or interests. This book not only presents numerous case studies from a global perspective, but it also compiles a large amount of literature and research from a database. As a result, this book effectively demonstrates the concerns, difficulties, and trends surrounding the topic while also encouraging readers to think globally. The main goal

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of this project is to encourage both researchers and practitioners to share and exchange their experiences and recent studies between academia and industry.

Sanskrit Parsing - Amba Kulkarni 2021-03-01

About the Book India has a rich grammatical tradition, still extant in the form of PĀṅini's grammar as well as the theories of verbal cognition. These two together provide a formal theory of language communication. The formal nature of the theory makes it directly relevant to the new technology called Natural Language Processing. This book, first presents the key concepts from the Indian Grammatical Tradition (IGT) that are necessary for understanding the information flow in a language string and its dynamics. A fresh look at these concepts from the perspective of Natural Language Processing is provided. This is then followed by a concrete application of building a parser for Sanskrit using the framework of Indian

Grammatical Tradition. This book not only documents the salient pieces of work carried out over the last quarter century under Computational Paninian Grammar, but provides the first comprehensive exposition of the ideas involved. It fills a gap for students of Computational Linguistics/Natural Language Processing who are working on Indian languages using PĀṅinian Grammatical Framework for developing their computational models and do not have direct access to the texts in Sanskrit. Similarly for the Sanskrit scholars and the students it provides an example of concrete application of the Indian theories to solve a contemporary problem. About the Author Amba Kulkarni is a computational linguist. Since 1991 she has been engaged in showing the relevance of Indian Grammatical Tradition to the field of computational linguistics. She has contributed towards the building of Anusaarakas (language accessors) among English and Indian languages. She is the

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founder head of the Department of Sanskrit Studies, University of Hyderabad established in 2006. Since then her focus of research is on use of Indian grammatical theories for computational processing of Sanskrit texts. Under her leadership, a consortium of institutes developed several computational tools for Sanskrit and also a prototype of Sanskrit-Hindi Machine Translation system. In 2015, she was awarded a “Vishishta Sanskrit Sevavrati Sammana” by the Rashtriya Sanskrit Sansthan, New Delhi for her contribution to the studies and research on Sanskrit-based knowledge system. She was a fellow at the Indian Institute of Advanced Study, Shimla during 2015-17.

Control System Engineering -

Uday A. Bakshi 2020-11-01

The book is written for an undergraduate course on the Feedback Control Systems. It provides comprehensive explanation of theory and practice of control system engineering. It elaborates

various aspects of time domain and frequency domain analysis and design of control systems. Each chapter starts with the background of the topic. Then it gives the conceptual knowledge about the topic dividing it in various sections and subsections. Each chapter provides the detailed explanation of the topic, practical examples and variety of solved problems. The explanations are given using very simple and lucid language. All the chapters are arranged in a specific sequence which helps to build the understanding of the subject in a logical fashion. The book starts with explaining the various types of control systems. Then it explains how to obtain the mathematical models of various types of systems such as electrical, mechanical, thermal and liquid level systems. Then the book includes good coverage of the block diagram and signal flow graph methods of representing the various systems and the reduction methods to obtain simple system from the

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analysis point of view. The book further illustrates the steady state and transient analysis of control systems. The book covers the fundamental knowledge of controllers used in practice to optimize the performance of the systems. The book emphasizes the detailed analysis of second order systems as these systems are common in practice and higher order systems can be approximated as second order systems. The book teaches the concept of stability and time domain stability analysis using Routh-Hurwitz method and root locus method. It further explains the fundamentals of frequency domain analysis of the systems including correlation between time domain and frequency domain. The book gives very simple techniques for stability analysis of the systems in the frequency domain, using Bode plot, Polar plot and Nyquist plot methods. It also explores the concepts of compensation and design of the control systems in time domain and frequency domain. The classical approach loses the

importance of initial conditions in the systems. Thus, the book provides the detailed explanation of modern approach of analysis which is the state variable analysis of the systems including methods of finding the state transition matrix, solution of state equation and the concepts of controllability and observability. The variety of solved examples is the feature of this book which helps to inculcate the knowledge of the design and analysis of the control systems in the students. The book explains the philosophy of the subject which makes the understanding of the concepts very clear and makes the subject more interesting.

Micro Irrigation

Management - Megh R. Goyal
2016-10-14

Micro Irrigation Management: Technological Advances and Their Applications, the fifth book in the Innovations and Challenges in Micro Irrigation book series, is a valuable reference volume on micro irrigation and water management for professional

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training institutes, technical agricultural centers, irrigation centers, agricultural extension service, and other agencies who work with micro irrigation programs. With an international focus, this new book focuses on applications of solar energy in micro irrigation and other important technological advances. It includes case studies and illustrative examples on drip irrigation design.

Automated Driving - Daniel Watzenig 2016-09-23

The main topics of this book include advanced control, cognitive data processing, high performance computing, functional safety, and comprehensive validation.

These topics are seen as technological bricks to drive forward automated driving.

The current state of the art of automated vehicle research, development and innovation is given. The book also addresses industry-driven roadmaps for major new technology advances as well as collaborative European initiatives supporting the

evolution of automated driving. Various examples highlight the state of development of automated driving as well as the way forward. The book will be of interest to academics and researchers within engineering, graduate students, automotive engineers at OEMs and suppliers, ICT and software engineers, managers, and other decision-makers.

Proceedings of International Scientific Conference on Telecommunications, Computing and Control -

Nikita Voinov 2021-04-28

This book provides a platform for academics and practitioners for sharing innovative results, approaches, developments, and research projects in computer science and information technology, focusing on the latest challenges in advanced computing and solutions introducing mathematical and engineering approaches. The book presents discussions in the area of advances and challenges of modern computer science, including

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telecommunications and signal processing, machine learning and artificial intelligence, intelligent control systems, modeling and simulation, data science and big data, data visualization and graphics systems, distributed, cloud and high-performance computing, and software engineering. The papers included are presented at TELECCON 2019 organized by Peter the Great St.

Petersburg University during November 18-19, 2019.

Transforming the Internet of Things for Next-Generation Smart Systems -

Alankar, Bhavya 2021-06-04

The internet of things (IoT) has massive potential to transform current business models and enhance human lifestyles. With the current pace of research, IoT will soon find many new horizons to touch. IoT is now providing a base of technological advancement in various realms such as pervasive healthcare, smart homes, smart cities, connected logistics, automated supply chain, manufacturing units, and many more. IoT is also

paving the path for the emergence of the digital revolution in industrial technology, termed Industry 4.0. Transforming the Internet of Things for Next-Generation Smart Systems focuses on the internet of things (IoT) and how it is involved in modern day technologies in a variety of domains. The chapters cover IoT in sectors such as agriculture, education, business and management, and computer science applications. The multi-disciplinary view of IoT provided within this book makes it an ideal reference work for IT specialists, technologists, engineers, developers, practitioners, researchers, academicians, and students interested in how IoT will be implemented in the next generation of smart systems and play an integral role in advancing technology in the future.

Soft Computing Applications for Renewable Energy and Energy Efficiency - Cascales, Maria del Socorro García
2014-10-31

As the climate and

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environment continue to fluctuate, researchers are urgently looking for new ways to preserve our limited resources and prevent further environmental degradation. The answer can be found through computer science, a field that is evolving at precisely the time it is needed most. Soft Computing Applications for Renewable Energy and Energy Efficiency brings together the latest technological research in computational intelligence and fuzzy logic as a way to care for our environment. This reference work highlights current advances and future trends in environmental sustainability using the principles of soft computing, making it an essential resource for students, researchers, engineers, and practitioners in the fields of project engineering and energy science.

Irrigation - Sandra Ricart
2019-12-18

The management of irrigation systems is context-dependent, socially constructed, and

technically uncertain. An example of complex social-ecological systems, irrigation deals with both the ecosystem uncertainty and the implementation of new technological systems and water management options. Issues to be addressed by irrigation systems at the global scale include: water productivity and food security, field operation and maintenance, spate irrigation in climate change scenarios, and vulnerability of environmental resources. This book provides examples of some of the current challenges faced by irrigation systems from technical and social perspectives. The book offers an easy-to-follow format focused on different case studies combining evidence-based solutions for increasing resilience and reducing vulnerability of irrigation systems in semi-arid and arid regions across the world.

Foundations of Signal Processing - Martin Vetterli
2014-09-04

This comprehensive and

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engaging textbook introduces the basic principles and techniques of signal processing, from the fundamental ideas of signals and systems theory to real-world applications. Students are introduced to the powerful foundations of modern signal processing, including the basic geometry of Hilbert space, the mathematics of Fourier transforms, and essentials of sampling, interpolation, approximation and compression. The authors discuss real-world issues and hurdles to using these tools, and ways of adapting them to overcome problems of finiteness and localization, the limitations of uncertainty, and computational costs. It includes over 160 homework problems and over 220 worked examples, specifically designed to test and expand students' understanding of the fundamentals of signal processing, and is accompanied by extensive online materials designed to aid learning, including Mathematica® resources and

interactive demonstrations.

Information Diffusion Management and Knowledge Sharing: Breakthroughs in Research and Practice - Management

Association, Information Resources 2019-10-11

Within the past 10 years, tremendous innovations have been brought forth in information diffusion and management. Such technologies as social media have transformed the way that information is disseminated and used, making it critical to understand its distribution through these mediums. With the consistent creation and wide availability of information, it has become imperative to remain updated on the latest trends and applications in this field. Information Diffusion Management and Knowledge Sharing: Breakthroughs in Research and Practice examines the trends, models, challenges, issues, and strategies of information diffusion and management from a global context.

Highlighting a range of topics

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such as influence maximization, information spread control, and social influence, this publication is an ideal reference source for managers, librarians, information systems specialists, professionals, researchers, and administrators seeking current research on the theories and applications of global information management.

Green Information and Communication Systems for a Sustainable Future - Rajshree Srivastava 2020-11-18

Green Information and Communication Systems for a Sustainable Future covers the fundamental concepts, applications, algorithms, protocols, new trends, challenges, and research results in the area of Green Information and Communication Systems. This book provides the reader with up-to-date information on core and specialized issues, making it highly suitable for both the novice and the experienced researcher in the field. The book covers theoretical and

practical perspectives on network design. It includes how green ICT initiatives and applications can play a major role in reducing CO₂ emissions, and focuses on industry and how it can promote awareness and implementation of Green ICT. The book discusses scholarship and research in green and sustainable IT for business and organizations and uses the power of IT to usher sustainability into other parts of an organization. Business and management educators, management researchers, doctoral scholars, university teaching personnel and policy makers as well as members of higher academic research organizations will all discover this book to be an indispensable guide to Green Information and Communication Systems. It will also serve as a key resource for Industrial and Management training organizations all over the world.

[Public Sector Transformation Processes and Internet Public Procurement: Decision Support](#)

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Systems - Pomazalová, Natasa
2012-12-31

While many social, economic, and political changes have occurred recently in internet public procurement and its decision support systems, there is still a lot of opportunity for improvement. Public Sector Transformation Processes and Internet Public Procurement: Decision Support Systems brings together research on different perspectives from academics and practitioners on the methods, theories, and practices involved in the growth and expansion of decision support systems as it relates to the public sector transformation process and internet public procurement.

Handbook of Research on Cybersecurity Issues and Challenges for Business and FinTech Applications -

Saeed, Saqib 2022-10-21
Digital transformation in organizations optimizes the business processes but also brings additional challenges in the form of security threats and vulnerabilities. Cyberattacks incur financial losses for

organizations and can affect their reputations. Due to this, cybersecurity has become critical for business enterprises. Extensive technological adoption in businesses and the evolution of FinTech applications require reasonable cybersecurity measures to protect organizations from internal and external security threats. Recent advances in the cybersecurity domain such as zero trust architecture, application of machine learning, and quantum and post-quantum cryptography have colossal potential to secure technological infrastructures. The Handbook of Research on Cybersecurity Issues and Challenges for Business and FinTech Applications discusses theoretical foundations and empirical studies of cybersecurity implications in global digital transformation and considers cybersecurity challenges in diverse business areas. Covering essential topics such as artificial intelligence, social commerce, and data

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leakage, this reference work is ideal for cybersecurity professionals, business owners, managers, policymakers, researchers, scholars, academicians, practitioners, instructors, and students.

Renewable and Alternative Energy: Concepts, Methodologies, Tools, and Applications - Management Association, Information Resources 2016-10-19

As the human population expands and natural resources become depleted, it becomes necessary to explore other sources for energy consumption and usage. Renewable and Alternative Energy: Concepts, Methodologies, Tools, and Applications provides a comprehensive overview of emerging perspectives and innovations for alternative energy sources. Highlighting relevant concepts on energy efficiency, current technologies, and ongoing industry trends, this is an ideal reference source for academics, practitioners, professionals, and upper-level

students interested in the latest research on renewable energy.

Social Networks: Models of Information Influence, Control and Confrontation - Alexander G. Chkhartishvili 2018-12-30

This book surveys the well-known results and also presents a series of original results on the mathematical modeling of social networks, focusing on models of informational influence, control and confrontation. Online social networks are intended for communication, opinion exchange and information acquisition for their members, but recently, online social networks have been intensively used as the objects and means of informational control and an arena of informational confrontation. They have become a powerful informational influence tool, particularly for the manipulation of individuals, social groups and society as a whole, as well as a battlefield of information warfare (cyberwars). This book aimed at under- and postgraduate

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university students as well as experts in information technology and modeling of social systems and processes. *Digital Media and Wireless Communications in Developing Nations* - Megh R. Goyal
2019-09-16

Digital Media and Wireless Communication in Developing Nations: Agriculture, Education, and the Economic Sector explores how digital media and wireless communication, especially mobile phones and social media platforms, offer concrete opportunities for developing countries to transform different sectors of their economies. The volume focuses on the agricultural, economic, and education sectors. The chapter authors, mostly from Africa and India, provide a wealth of information on recent innovations, the opportunities they provide, challenges faced, and the direction of future research in digital media and wireless communication to leverage transformation in developing countries. The volume provides important

research on digital media and wireless communication within the context of developing countries that will be very useful for professionals from academia, government agencies, NGOs, technologists, entrepreneurs and investors, and others.

Active Flow and Combustion Control 2021 - Rudibert King

Blockchain Technology for Data Privacy Management - Sudhir Kumar Sharma
2021-03-22

The book aims to showcase the basics of both IoT and Blockchain for beginners as well as their integration and challenge discussions for existing practitioner. It aims to develop understanding of the role of blockchain in fostering security. The objective of this book is to initiate conversations among technologists, engineers, scientists, and clinicians to synergize their efforts in producing low-cost, high-performance, highly efficient, deployable IoT systems. It presents a stepwise discussion,

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exhaustive literature survey, rigorous experimental analysis and discussions to demonstrate the usage of blockchain technology for securing communications. The book evaluates, investigate, analyze and outline a set of security challenges that needs to be addressed in the near future. The book is designed to be the first reference choice at research and development centers, academic institutions, university libraries and any institutions interested in exploring blockchain. UG/PG students, PhD Scholars of this fields, industry technologists, young entrepreneurs and researchers working in the field of blockchain technology are the primary audience of this book.

Smart Buildings Digitalization, Two Volume

Set - O.V. Gnana Swathika

2022-05-28

A smart building is the state-of-art in building with features that facilitates informed decision making based on the available data through smart metering and IoT sensors. This

set provides useful information for developing smart buildings including significant improvement of energy efficiency, implementation of operational improvements and targeting sustainable environment to create an effective customer experience. It includes case studies from industrial results which provide cost effective solutions and integrates the digital SCADA solution. Describes complete implication of smart buildings via industrial, commercial and community platforms Systematically defines energy-efficient buildings, employing power consumption optimization techniques with inclusion of renewable energy sources Covers data centre and cyber security with excellent data storage features for smart buildings Includes systematic and detailed strategies for building air conditioning and lighting Details smart building security propulsion. This set is aimed at graduate students, researchers and professionals in building systems, architectural, and electrical

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engineering.

Wireless Communications -

Prathima Agrawal 2010-05-05

This volume contains papers based on invited talks given at the 2005 IMA Summer Workshop on Wireless Communications, held at the Institute for Mathematics and Its Applications, University of Minnesota, June 22 - July 1, 2005. It presents some of the highlights of the workshop, and collects papers covering a broad spectrum of important and pressing issues in wireless communications.

Advanced Controls for Intelligent Buildings -

Siddharth Goyal 2021-07-04

This book focuses primarily on both technical and business aspects needed to select, design, develop and deploy control application (or product) successfully for multiple components in building systems. Designing and deploying a control application require multiple steps such as sensing, system dynamics

modelling, algorithms, and

testing. This may involve choosing an appropriate methodology and technique at multiple stages during the development process.

Understanding the pros and cons of such techniques, most importantly being aware of practically possible approaches in the entire ecosystem, is critical in choosing the best framework and system application for different parts of building systems. Providing a wide overview of the state-of-art in controls and building systems, providing guidance on developing an end-to-end system in relation to business fundamentals (distribution channels, stakeholders, marketing, supply-chain and financial management), the book is ideal for fourth-year control/mechanical/electrical engineering undergraduates, graduate students, and practitioners including business leaders concerned with smart building technology.