Communication Engineering Principles Ifiok Otung

Communication Engineering Principles Communication Engineering Principles Digital Communications **Optical and Wireless Convergence for 5G Networks Communication Systems** *Principles of Communication Engineering* **Broadband Communications, Networks, and Systems** Modern Digital and Analog Communication Systems **Recent Technical Developments in Energy-Efficient 5G Mobile Cells** Antenna Fundamentals for Legacy Mobile Applications and Beyond *Water Quality in Ponds for Aquaculture* **Organic Light-Emitting Devices** e-Infrastructure and e-Services for Developing Countries *Journalism and Politics in Nigeria* **Enabling 6G Mobile Networks** Blueprint for Greening Affordable Housing Bentley's Complete Phrase Code (nearly 1000 Million Combinations) **Advances in Communications Satellite Systems. Proceedings of the 37th International Communications Satellite Systems Conference (ICSSC-2019) Handbook of Polymers in Stone Conservation Advances in Communications Satellite Systems** *Principles of Communications* **Mobile Context Awareness** *Righteous Porkchop* **Principles of E-Learning Systems Engineering Energy-Aware System Design Research 2.0 and the Future of Information Literacy Wireless and Satellite Systems** Satellite Communication Engineering **The Oil Palm** Internet of Things and Big Data Analytics for Smart Generation **Managing Wastes from Aluminum Smelter Plants Hands-On Machine Learning for Algorithmic Trading Advances in Communications Satellite Systems Elements of Chemical Reaction Engineering Formal Languages and Their Relation to Automata [by] John E. Hopcroft [and] Jeffrey D. Ullman** The Intuitive Guide to Fourier Analysis & Spectral Estimation with MATLAB **Smart Infrastructure and Applications** *Guide for Prospective Financial Information, with Conforming Changes as of ...* The Goodmans *Prayer Cookbook for Busy People (Book 1)*

Eventually, you will no question discover a additional experience and capability by spending more cash. still when? pull off you undertake that you require to acquire those all needs in imitation of having significantly cash? Why dont you attempt to acquire something basic in the beginning? Thats something that will lead you to comprehend even more approximately the globe, experience, some places, as soon as history, amusement, and a lot more?

It is your totally own era to do something reviewing habit. accompanied by guides you could enjoy now is **Communication Engineering Principles Ifiok Otung** below.

Advances in Communications Satellite Systems Jan 31 2020 This book gathers the contributions from The 37th International Communications Satellite Systems Conference (ICSSC-2019) held in October 2019 with highlights including high speed optical communications and feeder links, advanced digital payloads, broadband satellite communication architectures and applications.
Advances in Communications Satellite Systems. Proceedings of the 37th International Communications Satellite Systems Conference (ICSSC-2019) May 17 2021
Bentley's Complete Phrase Code (nearly 1000 Million Combinations) Jun 17 2021 This book has been considered by academicians and scholars of great significance and value to literature. This forms a part of the knowledge base for future generations. So that the book is never forgotten we have represented this book in a print format as the same form as it was originally first published. Hence any marks or annotations seen are left intentionally to preserve its true nature.
Modern Digital and Analog Communication Systems Mar 27 2022 With exceptionally clear writing, Lathi takes students step by step through a history of communications systems from elementary signal analysis to advanced concepts in communications theory. The first four chapters of the text present basic principles, subsequent chapters offer ample material for flexibility in course content and level. All Topics are covered in detail, including a thorough treatment of frequency modulation and phase modulation. Numerous worked examples in each chapter and over 300 end-of-chapter problems and numerous illustrations and figures support the content.
Smart Infrastructure and Applications Sep 28 2019 This book provides a multidisciplinary view of smart infrastructure through a range of diverse introductory and advanced topics. The book features an array of subjects that include: smart cities and infrastructure, e-healthcare, emergency and disaster management, Internet of Vehicles, supply chain management, eGovernance, and high performance computing. The book is divided into five parts: Smart Transportation, Smart Healthcare, Miscellaneous Applications, Big Data and High Performance Computing,

and Internet of Things (IoT). Contributions are from academics, researchers, and industry professionals around the world. Features a broad mix of topics related to smart infrastructure and smart applications, particularly high performance computing, big data, and artificial intelligence; Includes a strong emphasis on methodological aspects of infrastructure, technology and application development; Presents a substantial overview of research and development on key economic sectors including healthcare and transportation.

Research 2.0 and the Future of Information Literacy Sep 08 2020 Research 2.0 and the Future of Information Literacy examines possible congruencies between information literacy and Research 2.0, because the work of today's researcher mobilizes a number of literacies. From among the various types of relevant literacies, at least three types of literacies can be mentioned in this relation: information literacy, scientific literacy and academic literacy. This book addresses these literacies in the light of the changing research landscape. Broad contexts of the researcher's abilities, as adaptive and innovative thinking, problem solving skills, self-management and design mindset are also examined. Computational thinking and the computational paradigm in a number of fields of research are taken into consideration, as well. Researchers differ to non-researchers when populating social media, which means that these two different groups require different literacies. The relationship between information literacy and information is approached in a new way. Among the multitude of issues, we introduce a new interface between information literacy and Research 2.0. It encompasses the issues of research data management and data literacy, which represent also a challenge both for the academic library and for the communities of researchers. Similarly, the questions of new metrics of scientific output are addressed in the book. Summarizes the most important and up-to date approaches towards Research 2.0, including researchers' skills and abilities, the data-intensive paradigm of scientific research, open science, not forgetting about factors that inhibit a wider uptake of Research 2.0 Discusses the nature of information literacy in the light of its definitions, declarations and related frameworks and by outlining the new literacies context, reading and writing, the cultural context, and the turns of library and information science Numerous literacies, other than information literacy, its relationship to information overload and personal information management are also subject of the book Theoretical and practical perspectives are given to enable the understanding of the transformations of information literacy and its relationship to Research 2.0

Handbook of Polymers in Stone Conservation Apr 15 2021 This handbook is dedicated to the conservation of stone materials by the application of polymers. A short introduction on polymer chemistry is given to highlight their characteristics and properties. After the physical and chemical attributes of stone are summarised, the problems related to its degradation are discussed. Finally, the properties of the various polymers of potential value for stone restoration are reviewed and classified by schemes and tables, and pointers for the future are suggested.This handbook will be of great interest to those who share the author's enthusiasm for stone artworks and her dedication to their restoration and conservation.

Communication Engineering Principles Oct 02 2022 For those seeking a thorough grounding in modern communication engineering principles delivered with unrivaled clarity using an engineering-first approach Communication Engineering Principles: 2nd Edition provides readers with comprehensive background information and instruction in the rapidly expanding and growing field of communication engineering. This book is well-suited as a textbook in any of the following courses of study: Telecommunication Mobile Communication Satellite Communication Optical Communication Electronics Computer Systems Primarily designed as a textbook for undergraduate programs, Communication Engineering Principles: 2nd Edition can also be highly valuable in a variety of MSc programs. Communication Engineering Principles grounds its readers in the core concepts and theory required for an in-depth understanding of the subject. It also covers many of the modern, practical techniques used in the field. Along with an overview of communication systems, the book covers topics like time and frequency domains analysis of signals and systems, transmission media, noise in communication systems, analogue and digital modulation, pulse shaping and detection, and many others.

Elements of Chemical Reaction Engineering Jan 01 2020 The book presents in a clear and concise manner the fundamentals of chemical reaction engineering. The structure of the book allows the student to solve reaction engineering problems through reasoning rather than through memorization and recall of numerous equations, restrictions, and conditions under which each equation applies. The fourth edition contains more industrial chemistry with real reactors and real engineering and extends the wide range of applications to which chemical reaction engineering principles can be applied (i.e., cobra bites, medications, ecological engineering)

Advances in Communications Satellite Systems Mar 15 2021 This book gathers the contributions from The 36th International Communications Satellite Systems Conference (ICSSC-2018) held in October 2018.

The Goodmans Jul 27 2019 The lovely doctor Abby Hart lives in her dream cottage in the quintessential English border town of Ludbury, home to the Goodmans. Maggie Goodman, all fire and passion, is like another mother to her, amiable Richard a rock and 60s-child Celia is the grandmother she never had. But Abby has a secret. Best friend Jude Goodman is the love of her life, and very, very straight. Even if Jude had ever given a woman a second glance,

there'd also be the small problem of Maggie - she would definitely not approve. But secrets have a habit of sneaking out, and Abby's not the only one with something to hide. Life is just about to get very interesting for the Goodmans. Things are not what they used to be, but could they be even better? "If you ever wanted to know how straight women become lesbians, how lesbians fall in love, make love and almost ruin love, The Goodmans is the book for you!" - TT Thomas

Communication Engineering Principles Nov 03 2022 For those seeking a thorough grounding in modern communication engineering principles delivered with unrivaled clarity using an engineering-first approach Communication Engineering Principles: 2nd Edition provides readers with comprehensive background information and instruction in the rapidly expanding and growing field of communication engineering. This book is well-suited as a textbook in any of the following courses of study: Telecommunication Mobile Communication Satellite Communication Optical Communication Electronics Computer Systems Primarily designed as a textbook for undergraduate programs, Communication Engineering Principles: 2nd Edition can also be highly valuable in a variety of MSc programs. Communication Engineering Principles grounds its readers in the core concepts and theory required for an in-depth understanding of the subject. It also covers many of the modern, practical techniques used in the field. Along with an overview of communication systems, the book covers topics like time and frequency domains analysis of signals and systems, transmission media, noise in communication systems, analogue and digital modulation, pulse shaping and detection, and many others.

Prayer Cookbook for Busy People (Book 1) Jun 25 2019 What is an Esther Fast? Why is the midnight prayer so powerful? In this book you will discover these biblical secrets and more. After reading this prayer manual, you will know why a few believers are able to consistently obtain answers to their prayers, no matter how impossible the situation may look. And what you can do to join them today.

Water Quality in Ponds for Aquaculture Dec 24 2021 Part 1 - Principles of water quality: Physical factors; Water chemistry; Aquatic plants; Environmental requirements; Pond soils; Part 2 - Water quality management: Liming; Pond fertilization; Pond dynamics; Aeration, circulation, and water exchange; Phytoplankton control; Pond treatments.

Digital Communications Sep 01 2022 A worldwide digital and wireless communication revolution has taken place in the last 20 years which has created a high demand in industry for graduates with in-depth expertise in digital transmission techniques and a sound and complete understanding of their core principles. Digital communications: Principles and systems recognises that although digital communications is developing at a fast pace, the core principles remain the same. It therefore concentrates on giving the reader a thorough understanding of core principles and extensive coaching in the solution of practical problems drawn from various application areas. The intention is that after studying the material presented, the student will have a solid foundation free of knowledge gaps, and will be fully equipped to undertake digital communication systems analysis, design and computer simulations, and to deal with specialised applications and follow advances in the technology. Topics covered include: overview of digital communication linear and nonlinear channels and systems sampling of baseband and bandpass signals quantisation and PCM source coding and lossless data compression line codes and modulation transmission through bandlimited AWGN channels transmitted digital signals error control coding link analysis and design. Many works on emerging digital transmission techniques are largely confined to academic research papers. This book will give postgraduate students and practicing engineers a sound mastery of the subject.

Managing Wastes from Aluminum Smelter Plants Apr 03 2020 The book discusses the major environmental polluting waste materials from industries and particularly stresses upon decontaminating spent pot liner. The book incorporates the author's direct experiences in handling this toxic waste and discusses his world patents and semi-commercial plant operation in decontaminating spent pot liner and recovering its carbon value.

Formal Languages and Their Relation to Automata [by] John E. Hopcroft [and] Jeffrey D. Ullman Nov 30 2019

e-Infrastructure and e-Services for Developing Countries Oct 22 2021 This book constitutes the thoroughly refereed proceedings of the 9th International Conference on e-Infrastructure and e-Services for Developing Countries, AFRICOMM 2017, held in Lagos, Nigeria, in December 2017. The 19 full papers, 12 short papers and 5 workshop papers were carefully selected from 81 submissions. The papers were presented in eight sessions: e-government, network and load management, digital inclusion, knowledge extraction, representation and sharing, networks and communications, ICT applications for development, decision support, e-business and e-services, internet measurement.

Wireless and Satellite Systems Aug 08 2020 This book constitutes the proceedings of the 7th International Conference on Wireless and Satellite Services, WiSATS 2015, held in Bradford, UK, in July 2015. The conference was formerly known as the International Conference on Personal Satellite Services (PSATS) mainly covering topics in the satellite domain. As the scope of the conference widened to include wireless systems, the conference was renamed to WiSATS. The 29 revised papers were presented at the conference in three technical sessions and one

special session on "Network Coding for Satellites". WiSATS 2015 also hosted two workshops along with the main conference: The first workshop, Communication Applications in Smart Grid (CASG 2015), focused on the merging area of using communication technology within the electricity power grid for smart monitoring and control. The second workshop, Advanced Next-Generation Broadband Satellite Systems (BSS 2015), focused on the use of satellite systems for providing next-generation broadband services.

The Intuitive Guide to Fourier Analysis & Spectral Estimation with MATLAB Oct 29 2019

Optical and Wireless Convergence for 5G Networks Jul 31 2022 The mobile market has experienced unprecedented growth over the last few decades. Consumer trends have shifted towards mobile internet services supported by 3G and 4G networks worldwide. Inherent to existing networks are problems such as lack of spectrum, high energy consumption, and inter-cell interference. These limitations have led to the emergence of 5G technology. It is clear that any 5G system will integrate optical communications, which is already a mainstay of wide area networks. Using an optical core to route 5G data raises significant questions of how wireless and optical can coexist in synergy to provide smooth, end-to-end communication pathways. Optical and Wireless Convergence for 5G Networks explores new emerging technologies, concepts, and approaches for seamlessly integrating optical-wireless for 5G and beyond. Considering both fronthaul and backhaul perspectives, this timely book provides insights on managing an ecosystem of mixed and multiple access network communications focused on optical-wireless convergence. Topics include Fiber–Wireless (FiWi), Hybrid Fiber-Wireless (HFW), Visible Light Communication (VLC), 5G optical sensing technologies, approaches to real-time IoT applications, Tactile Internet, Fog Computing (FC), Network Functions Virtualization (NFV), Software-De?ned Networking (SDN), and many others. This book aims to provide an inclusive survey of 5G optical-wireless requirements, architecture developments, and technological solutions.

Hands-On Machine Learning for Algorithmic Trading Mar 03 2020 Explore effective trading strategies in real-world markets using NumPy, spaCy, pandas, scikit-learn, and Keras Key FeaturesImplement machine learning algorithms to build, train, and validate algorithmic modelsCreate your own algorithmic design process to apply probabilistic machine learning approaches to trading decisionsDevelop neural networks for algorithmic trading to perform time series forecasting and smart analyticsBook Description The explosive growth of digital data has boosted the demand for expertise in trading strategies that use machine learning (ML). This book enables you to use a broad range of supervised and unsupervised algorithms to extract signals from a wide variety of data sources and create powerful investment strategies. This book shows how to access market, fundamental, and alternative data via API or web scraping and offers a framework to evaluate alternative data. You'll practice the ML workflow from model design, loss metric definition, and parameter tuning to performance evaluation in a time series context. You will understand ML algorithms such as Bayesian and ensemble methods and manifold learning, and will know how to train and tune these models using pandas, statsmodels, sklearn, PyMC3, xgboost, lightgbm, and catboost. This book also teaches you how to extract features from text data using spaCy, classify news and assign sentiment scores, and to use gensim to model topics and learn word embeddings from financial reports. You will also build and evaluate neural networks, including RNNs and CNNs, using Keras and PyTorch to exploit unstructured data for sophisticated strategies. Finally, you will apply transfer learning to satellite images to predict economic activity and use reinforcement learning to build agents that learn to trade in the OpenAI Gym. What you will learnImplement machine learning techniques to solve investment and trading problemsLeverage market, fundamental, and alternative data to research alpha factorsDesign and fine-tune supervised, unsupervised, and reinforcement learning modelsOptimize portfolio risk and performance using pandas, NumPy, and scikit-learnIntegrate machine learning models into a live trading strategy on QuantopianEvaluate strategies using reliable backtesting methodologies for time seriesDesign and evaluate deep neural networks using Keras, PyTorch, and TensorFlowWork with reinforcement learning for trading strategies in the OpenAI GymWho this book is for Hands-On Machine Learning for Algorithmic Trading is for data analysts, data scientists, and Python developers, as well as investment analysts and portfolio managers working within the finance and investment industry. If you want to perform efficient algorithmic trading by developing smart investigating strategies using machine learning algorithms, this is the book for you. Some understanding of Python and machine learning techniques is mandatory.

Journalism and Politics in Nigeria Sep 20 2021 This book explores the legacy of colonial heritage on Nigerian political activities and journalistic practices. It asserts that journalism and multi-party politics were introduced into the country during British colonial rule, and, while they have become domesticated and indigenised, they still exhibit traces of their roots because they emerged in a different socio-cultural and political environment. Taking as its point of departure the view that, without the colonial intervention, the Nigerian state may not have come into being or survived in its present form, this book offers fresh insight into the impact of British colonial rule on contemporary journalistic practices and political activities more than 100 years after the â ~creationâ (TM) of Nigeria. It draws attention to the enduring effect of colonial inheritance on Nigeria and how the â ~creationâ (TM) process of the country produced unintended consequences that remain problematic. Using press coverage of the politics of

transition-to-civil-rule programmes during periods of military dictatorship as a case study, the book identifies trends and patterns of influence from the past that have been interlaced into the present.

Blueprint for Greening Affordable Housing Jul 19 2021 Blueprint for Green Affordable Housing is a guide for housing developers, advocates, public agency staff, and the financial community that offers specific guidance on incorporating green building strategies into the design, construction, and operation of affordable housing developments. A completely revised and expanded second edition of the groundbreaking 1999 publication, this new book focuses on topics of specific relevance to affordable housing including: how green building adds value to affordable housing the integrated design process best practices in green design for affordable housing green operations and maintenance innovative funding and finance emerging programs, partnerships, and policies Edited by national green affordable housing expert Walker Wells and featuring a foreword by Matt Petersen, president and chief executive officer of Global Green USA, the book presents 12 case studies of model developments and projects, including rental, home ownership, special needs, senior, self-help, and co-housing from around the United States. Each case study describes the unique green features of the development, discusses how they were successfully incorporated, considers the project's financing and savings associated with the green measures, and outlines lessons learned. Blueprint for Green Affordable Housing is the first book of its kind to present information regarding green building that is specifically tailored to the affordable housing development community.

Internet of Things and Big Data Analytics for Smart Generation May 05 2020 This book discusses emerging technologies in the field of the Internet of Things and big data, an area that will be scaled in next two decades. Written by a team of leading experts, it is the only book focusing on the broad areas of both the Internet of things and big data. The thirteen chapters present real-time experimental methods and theoretical explanations, as well as the implementation of these technologies through various applications. Offering a blend of theory and hands-on practices, the book enables graduate, postgraduate and research students who are involved in real-time project scaling techniques to understand projects and their execution. It is also useful for senior computer students, researchers and industry workers who are involved in experimenting with the Internet of Things and big data technologies, helping them to solve the real-time problem. Moreover, the chapters covering cutting-edge technologies help multidisciplinary researchers who are bridging the gap of two different outset real-time problems.

Communication Systems Jun 29 2022

Satellite Communication Engineering Jul 07 2020 Highlighting satellite and earth station design, links and communication systems, error detection and correction, and regulations and procedures for system modeling, integrations, testing, and evaluation, Satellite Communication Engineering provides a simple and concise overview of the fundamental principles common to information communications. It

The Oil Palm Jun 05 2020 The oil palm is the world's most valuable oil crop. Its production has increased over the decades, reaching 56 million tons in 2013, and it gives the highest yields per hectare of all oil crops. Remarkably, oil palm has remained profitable through periods of low prices. Demand for palm oil is also expanding, with the edible demand now complemented by added demand from biodiesel producers. The Oil Palm is the definitive reference work on this important crop. This fifth edition features new topics - including the conversion of palm oil to biodiesel, and discussions about the impacts of palm oil production on the environment and effects of climate change – alongside comprehensively revised chapters, with updated references throughout. The Oil Palm, Fifth Edition will be useful to researchers, plantation and mill managers who wish to understand the science underlying recommended practices. It is an indispensable reference for agriculture students and all those working in the oil palm industry worldwide.

Righteous Porkchop Dec 12 2020 Asked to head up Robert F. Kennedy Jr.'s environmental organization's "hog campaign," Nicolette Hahn Niman embarked upon a fascinating odyssey through the inner workings of the "factory farm" industry. What she discovered transformed her into an intrepid environmental lawyer determined to lock horns with the big business farming establishment. She even, unexpectedly, found love along the way. A searing account of an industry gone awry and one woman's passionate fight to remedy it, Righteous Porkchop chronicles Niman's investigation and her determination to organize a national reform movement to fight the shocking practices of industrial animal operations. She offers necessary alternatives, showing how livestock farming can be done in a better way—and she details both why and how to choose meat, poultry, dairy, eggs, and fish from traditionally farmed sources.

Principles of Communications Feb 11 2021

Recent Technical Developments in Energy-Efficient 5G Mobile Cells Feb 23 2022 This book addresses the true innovation in engineering design that may be promoted by blending together models and methodologies from different disciplines, and, in this book, the target was exactly to follow this approach to deliver a new disruptive architecture to deliver these next-generation mobile small cell technologies. According to this design philosophy, the work within this book resides in the intersection of engineering paradigms that includes "cooperation", "network coding", and "smart energy-aware frontends". These technologies will not only be considered as individual building

blocks, but re-engineered according to an inter-design approach resulting in the enabler for energy efficient femtocell-like services on the move. The book aims to narrow the gap between the current networking technologies and the foreseen requirements that are targeted at the future development of the 5G mobile and wireless communications networks in terms of the higher networking capacity, the ability to support more users, the lower cost per bit, the enhanced energy efficiency, and adaptability to new services and devices (for example, smart cities, and the Internet of things (IoT)).

Enabling 6G Mobile Networks Aug 20 2021 This book tackles the 6G odyssey, providing a concerted technology roadmap towards the 6G vision focused on the interoperability between the wireless and optical domain, including the benefits that are introduced through virtualization and software defined radio. The authors aim to be at the forefront of beyond 5G technologies by reflecting the integrated works of several major European collaborative projects (H2020-ETN-SECRET, 5GSTEPFWD, and SPOTLIGHT). The book is structured so as to provide insights towards the 6G horizon, reporting on the most recent developments on the international 6G research effort. The authors address a variety of telecom stakeholders, which includes practicing engineers on the field developing commercial solutions for 5G and beyond products; postgraduate researchers that require a basis on which to build their research by highlighting the current challenges on radio, optical and cloud-based networking for ultra-dense networks, including novel approaches; and project managers that could use the principles and applications for shaping new research proposals on this highly dynamic field. Provides a concerted technology roadmap towards the 6G vision focused on the interoperability between the wireless and optical domain; Discusses the benefits of 6G, introduced through virtualization and software defined radio; Includes concepts as well as applications to provide a base for the reader to acquire new knowledge on optical, wireless, and cloud computing.

Antenna Fundamentals for Legacy Mobile Applications and Beyond Jan 25 2022 This book highlights technology trends and challenges that trace the evolution of antenna design, starting from 3rd generation phones and moving towards the latest release of LTE-A. The authors explore how the simple monopole and whip antenna from the GSM years have evolved towards what we have today, an antenna design that is compact, multi-band in nature and caters to multiple elements on the same patch to provide high throughput connectivity. The scope of the book targets a broad range of subjects, including the microstrip antenna, PIFA antenna, and the monopole antenna to be used for different applications over three different mobile generations. Beyond that, the authors take a step into the future and look at antenna requirements for 5G communications, which already has the 5G drive in place with prominent scenarios and use-cases emerging. They examine these, and put in place the challenges that lie ahead for antenna design, particularly in mm-Wave design. The book provides a reference for practicing engineers and under/post graduate students working in this field.

Organic Light-Emitting Devices Nov 22 2021 Although it has long been possible to make organic materials emit light, it has only recently become possible to do so at the level and with the efficiency and control necessary to make the materials a useful basis for illumination in any but the most specialized uses. This book surveys the current status of the field.

Energy-Aware System Design Oct 10 2020 Power consumption becomes the most important design goal in a wide range of electronic systems. There are two driving forces towards this trend: continuing device scaling and ever increasing demand of higher computing power. First, device scaling continues to satisfy Moore's law via a conventional way of scaling (More Moore) and a new way of exploiting the vertical integration (More than Moore). Second, mobile and IT convergence requires more computing power on the silicon chip than ever. Cell phones are now evolving towards mobile PC. PCs and data centers are becoming commodities in house and a must in industry. Both supply enabled by device scaling and demand triggered by the convergence trend realize more computation on chip (via multi-core, integration of diverse functionalities on mobile SoCs, etc.) and finally more power consumption incurring power-related issues and constraints. Energy-Aware System Design: Algorithms and Architectures provides state-of-the-art ideas for low power design methods from circuit, architecture to software level and offers design case studies in three fast growing areas of mobile storage, biomedical and security. Important topics and features: - Describes very recent advanced issues and methods for energy-aware design at each design level from circuit and architecture to algorithm level, and also covering important blocks including low power main memory subsystem and on-chip network at architecture level - Explains efficient power conversion and delivery which is becoming important as heterogeneous power sources are adopted for digital and non-digital parts - Investigates 3D die stacking emphasizing temperature awareness for better perspective on energy efficiency - Presents three practical energy-aware design case studies; novel storage device (e.g., solid state disk), biomedical electronics (e.g., cochlear and retina implants), and wireless surveillance camera systems. Researchers and engineers in the field of hardware and software design will find this book an excellent starting point to catch up with the state-of-the-art ideas of low power design.

Mobile Context Awareness Jan 13 2021 Mobile context-awareness is a popular research trend in the field of ubiquitous computing. Advances in mobile device sensory hardware and the rise of 'virtual' sensors such as web

application programming interfaces (APIs) mean that the mobile user is exposed to a vast range of data that can be used for new advanced applications. Mobile Context Awareness presents work from industrial and academic researchers, focusing on novel methods of context acquisition in the mobile environment – particularly through the use of physical and virtual sensors – along with research into new applications utilising this context. In addition, the book provides insights into the technical and usability challenges involved in mobile context-awareness, as well as observations on current and future trends in the field.

Principles of E-Learning Systems Engineering Nov 10 2020 The book integrates the principles of software engineering with the principles of educational theory, and applies them to the problems of e-learning development, thus establishing the discipline of E-learning systems engineering. For the first time, these principles are collected and organised into the coherent framework that this book provides. Both newcomers to and established practitioners in the field are provided with integrated and grounded advice on theory and practice. The book presents strong practical and theoretical frameworks for the design and development of technology-based materials and environments which have teaching, training or educational value. It brings together a complete range of the specific theories and detailed techniques involved in the design, development and delivery of materials such as business presentations, web-based presentations, training courses and academic lessons. Although the methods and theories discussed are generally appropriate to all forms and levels of learning and teaching, the book illustrates their use in and focuses its approach upon e-learning with adults. Integrates the principles of software engineering with the principles of educational theory Provides a coherent process for developing e-learning activities Provides a coherent framework for the content and structure of e-learning activities

Principles of Communication Engineering May 29 2022 This book provides a cohesive introduction to much of the vast body of knowledge central to the problems of communication engineering.

Guide for Prospective Financial Information, with Conforming Changes as of ... Aug 27 2019

Broadband Communications, Networks, and Systems Apr 27 2022 This book constitutes the refereed post-conference proceedings of the 9th International Conference on Broadband Communications, Networks, and Systems, Broadnets 2018, which took place in Faro, Portugal, in September 2018. The 30 revised full and 16 workshop papers were carefully reviewed and selected from 68 submissions. The papers are thematically grouped as follows: Advanced Techniques for IoT and WSNs; SDN and Network Virtualization; eHealth and Telemedicine Mobile Applications; Security and Privacy Preservation; Communication Reliability and Protocols; Spatial Modulation Techniques; Hardware Implementation and Antenna Design.