



Engineering & Computer Science

May to August 2021

Subject: Architecture & Planning

Wiley

No Image
Available**Building Codes Illustrated : A Guide to Understanding the 2021 International Building Code (7th Edition)**

Francis D. K. Ching, Steven R. Winkel

9781119772408, 1119772400

Pub Date: 8/24/21

\$67.50 USD

480 pages

Paperback

Architecture / Design, Drafting, Drawing & Presentation

Summary: This unique reference to the 2021 International Building Code marries the graphic skills of bestselling author Frank Ching with the code expertise of Steven Winkel, FAIA. It pulls out portions of the building code that are most relevant for the architect and provides an easy-to-understand interpretation in both words and illustrations. This Seventh Edition will include three new chapters: Plumbing Fixture Counts, Elevators, and Special Construction, and an extensively expanded chapter on Existing Buildings.

Wiley

Emerging Talents : Training Architects

Neil Spiller

9781119717522, 1119717523

Pub Date: 8/9/21

\$41.37 USD

136 pages

Paperback

Architecture

Summary: There is a newfound interest in architectural education. This *AD* is a survey of some of the best contemporary architecture student work in the world. The most forward-looking architecture schools worldwide are reinventing pedagogy in the hope of developing radical syllabi that are a rich mix of the virtual and the actual. Design education is changing and adapting to compensate for the new material changes to the discipline, and is being used to disentangle old, outmoded spatial practices and replace them with new paradigms of space and representation. This issue showcases the students and teachers who are pushing the envelope of architecture in extraordinary ways, offering their insights.

Wiley-Blackwell

People Flow in Buildings

Marja-Liisa Siikonen

9781119545569, 1119545560

Pub Date: 9/7/21

\$137.88 USD

464 pages

Hardcover

Architecture / Design, Drafting, Drawing & Presentation

Summary: Discover how to measure, control, model, and plan people flow within modern buildings with this one-stop resource from a leading professional

People Flow in Buildings delivers a comprehensive and insightful description of people flow, analysis with software-based tools. The book offers readers an up-to-date overview of mathematical optimization methods used in control systems and transportation planning methods used to manage vertical and horizontal transportation.

The text offers a starting point for selecting the optimal transportation equipment for new buildings and those being

Wiley

Worldmodelling : Architectural Models in the 21st Century

Mark Morris, Mike Aling

9781119747222, 1119747228

Pub Date: 6/28/21

\$45.00 USD

144 pages

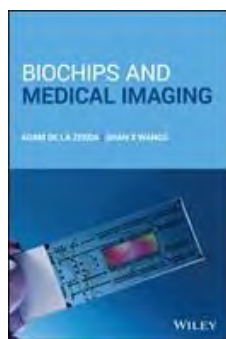
Paperback

Architecture / Design, Drafting, Drawing & Presentation

Summary: In light of current developments in modelling, and with the aim of reinvigorating debates around the potentiality of the architectural model – its philosophies, technologies and futures – this issue of *AD* examines how the model has developed to become an immersive worldbuilding machine. Worldbuilding is the creation of imaginary worlds through forms of cultural production. Although this discourse began with an analysis of imaginary places constructed in works of literature, it has evolved to encompass worlds from fields such as cinema, games, design, landscape, urbanism and architecture. Worldbuilding differs from the notion of worldmaking, which deals with how speculative thinking ...

Subject: Biomedical Engineering

Wiley

**Biochips and Medical Imaging**

Adam de la Zerda, Shan X Wang
 9781118910504, 1118910508
 Pub Date: 9/15/21
 \$180.00 USD
 384 pages
 Hardcover
 Technology & Engineering / Biomedical

Summary: Advanced, recent developments in biochips and medical imaging

Biochips and Medical Imaging is designed as a professional resource, covering recent biochip and medical imaging developments. Within the text, the authors encourage uniting aspects of engineering, biology, and medicine to facilitate advancements in the field of molecular diagnostics and imaging.

Biochips are microchips for efficiently screening biological analytes. This book aims at presenting information on the state-of-the-art and emerging biosensors, biochips, and

Wiley-IEEE Press

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Computational Modeling and Simulation Examples in Bioengineering

Nenad Filipovic
 9781119563945, 1119563941
 Pub Date: 8/17/21
 \$135.00 USD
 450 pages
 Hardcover
 Science / Biotechnology

Summary: This book focuses on biomedical engineering and its applications. More specifically, it provides the theoretical background for simulating pathological conditions in the area of bones, muscles, tissue, cardiovascular, cancer, lung, vertigo disease. The methodological approaches used for simulations include the finite element, dissipative particle dynamics and lattice boltzman. Aside from the theoretical background and knowledge, the author provides additional material consisting of a software package for simulations for the theoretical problems. In this way, the book enhances the reader's learning capabilities in the field of biomedical engineering.

Wiley-Scrivener

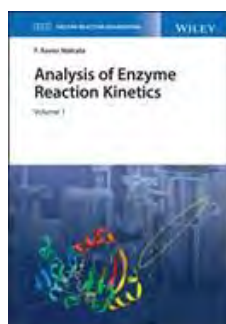
**Self-Healing Smart Materials**

Inamuddin, Mohd Imran Ahamed, Rajender Boddula, Ta...
 9781119710158, 1119710154
 Pub Date: 6/16/21
 \$225.00 USD
 560 pages
 Hardcover
 Science / Biotechnology

Summary: This comprehensive book describes the design, synthesis, mechanisms, characterization, fundamental properties, functions and development of self-healing smart materials and their composites with their allied applications. It covers cementitious concrete composites, bleeding composites, elastomers, tires, membranes, and composites in energy storage, coatings, shape-memory, aerospace and robotic applications. The 21 chapters are written by researchers from a variety of disciplines and backgrounds.

Subject: Chemical Engineering

Wiley

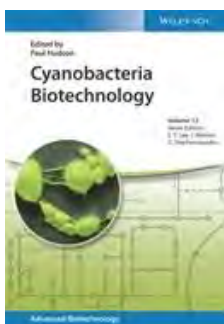
**Analysis of Enzyme Reaction Kinetics, 2 Volume Set : 2 Volume Set**

F. Xavier Malcata
 9781119490241, 1119490243
 Pub Date: 9/20/21
 \$425.00 USD
 1472 pages
 Hardcover
 Technology & Engineering / Chemical & Biochemical

Summary: Comprehensively introduces readers to modelling of rate of enzymatic reactions, including effects of physicochemical parameters

Analysis of Enzyme Reaction Kinetics is the second set in a unique eleven-volume collection on Enzyme Reactor Engineering. It describes rate expressions pertaining to enzymatic reactions, including modulation by physicochemical factors, as well as tools for prediction and control of how fast substrates are transformed to products. Volume 1 details rate expressions mathematically derived from mechanistic postulates, and is complemented by appropriate statistical approaches to fit them to experimental

Wiley-VCH



Cyanobacteria biotechnology

Paul Hudson, Sang Yup Lee, Jens Nielsen, Gregory S...

9783527347148, 3527347143

Pub Date: 7/19/21

\$175.00 USD

560 pages

Hardcover

Science / Life Sciences / Microbiology

Summary: Unites a biological and a biotechnological perspective on cyanobacteria, and includes the industrial aspects and applications of cyanobacteria

Cyanobacteria Biotechnology offers a guide to the interesting and useful features of cyanobacteria metabolism that keeps true to a biotechnology vision. In one volume the book brings together both biology and biotechnology to illuminate the core aspects and principles of cyanobacteria metabolism.

Designed to offer a practical approach to the metabolic engineering of cyanobacteria, the book contains relevant examples of how this metabolic "module" is currently being

Wiley



Engineering Applications : Analytical and Numerical Calculation with MATLAB

Mihai Dupac, Dan B. Marghitu

9781119093626, 1119093627

Pub Date: 3/8/21

\$130.00 USD

368 pages

Hardcover

Technology & Engineering / Mechanical

Summary: A comprehensive text on the fundamental principles of mechanical engineering

Engineering Applications presents a comprehensive text to the fundamental principles and applications of the statics and mechanics of materials in the design of complex mechanical systems. The book uses the modern tool of MATLAB to help solve problems with numerical and analytical calculations. The authors noted experts on the topic offer an understanding of the static behaviour of engineering structures and components considering the mechanics of materials knowledge as an essential part (most important) for their design.

Wiley-AICHe

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Modeling, Simulation, and Optimization of Supercritical and Subcritical Fluid Extraction Processes

Zainuddin A. Manan, Gholamreza Zahedi

9781118460177, 1118460170

Pub Date: 7/21/21

\$125.00 USD

304 pages

Hardcover

Technology & Engineering / Chemical & Biochemical

Summary: This book provides a complete guide on tools and techniques for modeling of supercritical and subcritical fluid extraction (SSFE) processes and phenomena. It provides details for SSFE from managing the experiments to modeling and optimization. It includes the fundamentals of SSFE as well as the necessary experimental techniques to validate the models. The optimization section includes the use of process simulators, conventional optimization techniques and state-of-the-art genetic algorithm methods. Numerous practical examples and case studies on the application of the modeling and optimization techniques on the SSFE processes are also provided. Detailed thermodynamic modeling with a

Wiley-AICHe

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Process Plant Operations Human Factors Handbook : A Guide for Improving Process Safety and Overall System Performance

CCPS (Center for Chemical Process Safety)

9781119640493, 1119640490

Pub Date: 9/22/21

\$135.00 USD

252 pages

Hardcover

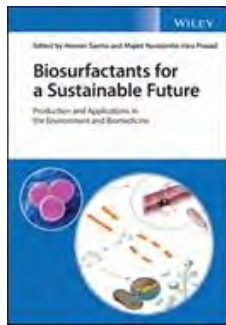
Science / Chemistry / Industrial & Technical

Summary: The aim of this book is to help supervisors, managers and engineers incorporate Human Factors principles and practices in the design of processes and work tasks performed by plant maintenance and operations workers, enabling everyone to perform their work safely and effectively.

The scope of this book covers all Human Factors subjects as applicable to the process industries, including using the framework of Crew Resource Management (CRM) which is used in the aviation industry. Although the primary focus is on Human Factors applications for plant operations and maintenance, it also covers the applications in the plant

Subject: Civil Engineering & Construction

Wiley


Biosurfactants for a Sustainable Future : Production and Applications in the Environment and Biomedicine

Hemen Sarma, M. N. V. Prasad

9781119671008, 1119671000

Pub Date: 6/28/21

\$220.00 USD

560 pages

Hardcover

Technology & Engineering / Environmental

Summary: Explore the state-of-the-art in biosurfactant technology and its applications in environmental remediation, biomedicine, and biotechnology

Biosurfactants for a Sustainable Future explores recent developments in biosurfactants and their use in a variety of cutting-edge applications. The book opens a window on the rapid development of microbiology by explaining how microbes and their products are used in advanced medical technology and in the sustainable remediation of emerging environmental contaminants.

Ernst & Sohn


Engineered Transparency 2021 : Glass in Architecture and Structural Engineering

Bernhard Weller, Jens Schneider

9783433033203, 343303320X

Pub Date: 7/19/21

\$65.00 USD

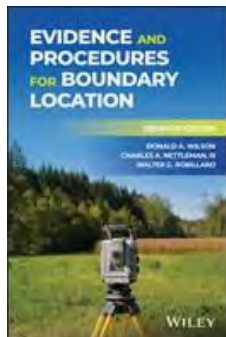
580 pages

Paperback

Technology & Engineering / Civil

Summary: This book contains more than 70 articles and presents international trends in structural glazing and facade construction. Renowned authors from all over the world report on current research results and innovative construction projects.

Wiley


Evidence and Procedures for Boundary Location (7th Edition)

Donald A. Wilson, Charles A. Nettleman, Walter G. ...

9781119719397, 1119719399

Pub Date: 8/17/21

\$156.00 USD

752 pages

Hardcover

Technology & Engineering / Civil

Summary: The updated classic guide to land boundary law and evidence discovery

The revised seventh edition of *Evidence and Procedures for Boundary Location* offers a seminal guide to the principles and concepts of land boundary law and evidence for accurately determining boundaries. Written by a team of noted authorities on the subject, the book presents the proven methods for the rediscovery or recreation of real property boundaries. Grounded in historical documentation, field investigation, and recreation of the original surveying methodology, the book contains the appropriate and legally defensible tools needed for the re-establishment of land

Wiley-Blackwell

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Why do buildings collapse in earthquakes? Building for safety in seismic areas

Robin Spence, Emily So

9781119619420, 1119619424

Pub Date: 8/2/21

\$110.00 USD

256 pages

Hardcover

Technology & Engineering / Civil

Summary: Using the experienced gained from many years as members of the UK's Earthquake Engineering Field Investigation Team (EEFIT) the authors will explain how buildings have fared in recent earthquakes around the world. Using empirical evidence and analyses they will show:

- why buildings have collapsed
- the way buildings collapse in earthquakes
- which building types are the main cause of casualties in earthquakes

They will illustrate the key lessons learnt about failures as well as successes in earthquake engineering and disaster

Subject: Computer Science

Sybex


(ISC)2 CISSP Certified Information Systems Security Professional Official Study Guide & Practice Tests Bundle, 3e (3rd Edition)

Mike Chapple, James Michael Stewart, Darri Gibson...

9781119790020, 1119790026

Pub Date: 6/22/21

\$95.00 USD

Paperback

Computers / Security / Network Security

Summary: This value-packed set for the serious CISSP certification candidate combines the bestselling *(ISC)2 CISSP Certified Information Systems Security Professional Official Study Guide, 9th Edition* with an updated collection of Practice Exams and improved online practice test tool to give you the best preparation ever for the high-stakes CISSP Exam.

(ISC)2 CISSP Study Guide, 9th Edition has been thoroughly updated for the latest 2021 CISSP Body of Knowledge. This bestselling Sybex study guide covers 100% of all exam objectives. You'll prepare for the exam smarter and faster with Sybex thanks to expert content, real-world examples.

Wiley-IEEE Press


Artificial Intelligence Hardware Design : Challenges and Solutions

Albert (Chun-Chen) Liu, Oscar Ming Kin Law

9781119810452, 1119810450

Pub Date: 7/21/21

\$115.00 USD

300 pages

Hardcover

Computers / Data Science / Neural Networks

Summary: This book covers the design applications of specific circuits and systems for accelerating neural network processing. Chapter 1 introduces neural networks and discusses its developmental history. Chapter 2 reviews Convolutional Neural Network model (CNN) and describes each layer function and example. Chapter 3 lists parallel architectures such as Intel CPU, Nvidia GPU, Google TPU and Microsoft NPU. Chapter 4 introduces a streaming graph for massive parallel computation through Blaize GSP and Graphcore IPU. Chapter 5 shows how to optimize convolution with UCLA's Deep Convolutional Neural Network (DCNN) accelerator filter decomposition and MIT's Eyeriss accelerator Row Stationary data

Wrox

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Beginning C# and .NET (2021)

Benjamin Perkins, Jon D. Reid

9781119795780, 1119795788

Pub Date: 9/22/21

\$55.00 USD

864 pages

Paperback

Computers / Languages / C#

Summary: *Beginning C# and .NET: 2021 Edition* covers C# 9.X and .NET 5.X, and is aimed at novice programmers who wish to learn programming with C# and the .NET Core framework. The book starts with absolute programming basics such as variables, flow control, and object oriented programming. It then moves into Web and Windows programming and data access (databases and XML). The book continues to focus on the tool beginners use most to program C# and .NET.

This edition of the book improves the pedagogy for beginners with more attention to step-by-step instruction in "Try it Out" sections in the introductory chapters. That approach is the

Wiley


Big Data Analytics for Internet of Things

Tausifa Jan Saleem, Mohammad Ahsan Chishti

9781119740759, 1119740754

Pub Date: 5/4/21

\$135.00 USD

400 pages

Hardcover

Mathematics / Probability & Statistics

Summary: This book provides a thorough overview of all the aspects of data analytics in IoT systems including need for data analytics, computing platforms, big data analytical tools, data compression and storage, privacy and security etc. It includes discussions of ways to extract valuable insights from Big Data with the help of techniques like Regression, K-Nearest Neighbor, Decision tree, Support Vector Machine, Naïve Bayes, Clustering, Deep Neural Networks etc. The book explains the techniques that are suitable for digging out the best decisions from large amounts of IoT data to gain control of IoT devices. Moreover, the book offers novel designs for IoT systems covering applications like

No Image
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Blue Fox : Arm Assembly Internals and Binary Analysis of Mobile and IoT Devices

Maria Markstedter
9781119745303, 1119745306
Pub Date: 10/5/21
\$45.00 USD
Paperback
Computers / Security / Cryptography & Encryption

Summary: Provides readers with a solid foundation in Arm assembly internals and using reverse-engineering as the basis for analyzing and securing billions of Arm devices

Finding and mitigating security vulnerabilities in Arm devices is the next critical internet security frontier—Arm processors are already in use by more than 90% of all mobile devices, billions of Internet of Things (IoT) devices, and a growing number of current and soon-to-arrive laptops from companies including Microsoft, Lenovo, and Apple. Written by a leading expert on Arm security, *Blue Fox: Arm Assembly Internals and Binary Analysis of Mobile and IoT Devices*

Cloud Native Security

Chris Binnie, Rory McCune
9781119782230, 1119782236
Pub Date: 7/21/21
\$40.00 USD
220 pages
Paperback
Computers / Security / Network Security

Summary: Explore the latest and most comprehensive guide to securing your Cloud Native technology stack

Cloud Native Security delivers a detailed study into minimizing the attack surfaces found on today's Cloud Native infrastructure. Throughout the work hands-on examples walk through mitigating threats and the areas of concern that need to be addressed. The book contains the information that professionals need in order to build a diverse mix of the niche knowledge required to harden Cloud Native estates.

The book begins with more accessible content about understanding Linux containers and container runtime

Cybersecurity and Third-Party Risk

Gregory C. Rasner
9781119809555, 111980955X
Pub Date: 7/21/21
\$40.00 USD
400 pages
Paperback
Computers / Security

Summary: After large breaches at well-known organizations including Home Depot, Capital One, Equifax, Best Buy and many others, CISOs, Cybersecurity professionals and business leaders have spent countless hours and money upgrading their cybersecurity internally. Data Loss Prevention, Cloud Access Security Broker, Intrusion Detection/Prevention, Zero Trust, Privileged Access Manager, and countless other projects and systems have been purchased and integrated to head off breaches.

And yet the size and frequency of breaches continue to grow.

The real kicker: many of these major breaches occurred at a

Data Analytics for Organisational Development : Unleashing the Potential of Your Data

Uwe H. Kaufmann, Amy B. C. Tan
9781119758334, 1119758335
Pub Date: 7/13/21
\$39.95 USD
240 pages
Hardcover
Computers / Data Science

Summary: A practical guide for anyone who aspires to become data analytics-savvy

Data analytics has become central to the operation of most businesses, making it an increasingly necessary skill for every manager and for all functions across an organisation. *Data Analytics for Organisational Development: Unleashing the Potential of Your Data* introduces a methodical process for gathering, screening, transforming, and analysing the correct datasets to ensure that they are reliable tools for business decision-making. Written by a Six Sigma Master Black Belt and a Lean Six Sigma Black Belt, this accessible guide explains and illustrates the application of data analytics

For Dummies

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Available**Data Science For Dummies (3rd Edition)**

Lillian Pierson
9781119811558, 1119811554
Pub Date: 8/31/21
\$34.99 USD
384 pages
Paperback
Computers / Data Science

Summary: *Data Science For Dummies*, 3rd Edition is the perfect starting point for IT professionals and students who want a quick primer on the subject. It explores topics in big data, data science, and data engineering, and how these three areas are combined to produce value. Readers will learn from real-world examples and applications.

Updates include:

- An introduction to natural language processing
- New ways of looking at data science strategy
- New and emerging careers in data

Wiley

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Available**Decoding Cybersecurity : A Rosetta Stone for C(I)SOs, Analysts and Developers**

Qing Li, Gregory S Clark, Hugh Thompson, Jon DiMag...
9781119512899, 1119512891
Pub Date: 9/22/21
\$60.00 USD
400 pages
Paperback
Computers / Security

Summary: The effective and proven techniques presented in this book combine a multi-layer defense-in-depth approach to cybersecurity. It illustrates how various technologies and algorithms are applied in practice to build real-world security solutions and it explains how these solutions fit into the different bands of the security spectrum, together, form a comprehensive layered defense. This layered defense includes:

- Next generation endpoint techniques
- Virtualization and isolation
- Browser protection
- Network protection

Wiley-IEEE Press

Dependable Computing : Design and Assessment

Ravishankar K. Iyer, Zbigniew T. Kalbarczyk, Nithi...
9781118709443, 1118709446
Pub Date: 8/24/21
\$150.00 USD
400 pages
Hardcover
Computers / Computer Engineering



Summary: The only recent book on dependability/fault-tolerance that covers both software and hardware aspects of dependability, *Dependable Computing Design and Assessment* addresses the new reality of dependability. After a discussion of reliability, availability, and hardware and software fault models, the authors explore hardware redundancy, coding techniques, processor-level error detection and recovery, checkpoint and recovery, software fault tolerance techniques, and network-specific issues. Ideal for both students and practitioners, the capabilities and applicability of all techniques are illustrated with examples of actual applications and systems.

Wiley-Scrivener

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Available**Digital Forensics and Internet of Things : Impact and Challenges**

Anita Gehlot, Rajesh Singh, Jaskaran Singh, Neeta ...
9781119768784, 1119768780
Pub Date: 7/7/21
\$195.00 USD
300 pages
Hardcover
Computers / Artificial Intelligence

Summary: The book discusses applications and challenges professionals encounter in the burgeoning field of IoT forensics. IoT forensics attempts to align its workflow to that of any forensics practice—investigators identify, interpret, preserve, analyze and present any relevant data. Like any investigation, a timeline is constructed, and, with the aid of smart devices providing data, investigators might be able to capture much more specific data points than in a traditional crime. However, collecting this data can often be a challenge, as it frequently doesn't live on the device itself, but rather in the provider's cloud platform. If you are able to get the data off the device, you'll have ...



Foundations of Data Intensive Applications : Large Scale Data Analytics under the Hood

Supun Kamburugamuva, Saliya Ekanayake

9781119713029, 1119713021

Pub Date: 7/21/21

\$55.00 USD

Paperback

Computers / Data Science / Data Modeling & Design

Summary: There is an ever increasing need to store this data, process them and incorporate the knowledge into everyday business operations of the companies. Before big data systems. there were high performance systems designed to do large calculations. Around the time big data became popular, high performance computing systems were mature enough to support the scientific community. But they weren't ready for the enterprise needs of data analytics. Because of the lack of system support for big data systems at that time, there was a large number of systems created to store and process data. These systems were created according to different design principles and some of them thrived through the

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Fuzzy Intelligent Systems : Methodologies, Techniques, and Applications

E. Chandrasekaran, R. Anandan, G. Suseendran, S. B...

9781119760450, 1119760453

Pub Date: 10/4/22

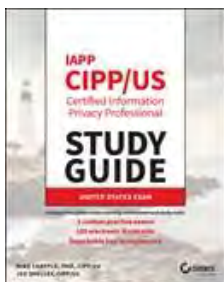
\$225.00 USD

510 pages

Hardcover

Computers / Artificial Intelligence

Summary: *Fuzzy Intelligent Systems: Methodologies, Techniques and Applications* comprises state-of-the-art chapters detailing how expert systems are built and the fuzzy logic resembling human reasoning powering them. Hybrid and neuro-fuzzy intelligent systems are discussed along with Evolutionary and, in particular, Genetic Algorithms. This approach has been extended by using Multiobjective Evolutionary Algorithms, which can consider multiple conflicting objectives instead of a single one. The book also discusses the hybridization between Multiobjective Evolutionary Algorithms and Fuzzy Systems which is known as Multiobjective Evolutionary Fuzzy Systems.



IAPP CIPP / US Certified Information Privacy Professional Study Guide

Mike Chapple, Joe Shelley

9781119755463, 1119755468

Pub Date: 6/9/21

\$50.00 USD

560 pages

Paperback

Computers / Internet / Online Safety & Privacy

Summary: Prepare for success on the IAPP CIPP/US exam to further your career in privacy with this effective study guide

Information privacy has become a critical and central concern for small and large businesses across the United States. At the same time, the demand for talented professionals able to navigate the increasingly complex web of legislation and regulation regarding privacy continues to increase.

Written from the ground up to prepare you for the United States version of the Certified Information Privacy Professional (CIPP) exam, Sybex's *IAPP CIPP / US Certified*

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Industrial Internet of Things (IIoT) : Intelligent Analytics for Predictive Maintenance

R. Anandan, G. Suseendran, Souvik Pal, Noor Zaman

9781119768777, 1119768772

Pub Date: 7/7/21

\$225.00 USD

350 pages

Hardcover

Computers / Artificial Intelligence

Summary: The Industrial Internet of Things (IIoT) breakthrough technology is a key element to developing smart factories, integrating modern cloud computing, IIoT, and AI to create intelligent, self-optimizing industrial equipment and facilities. With the industrial robot market along is estimated to be \$75B by 2023, industry will be benefitting through

- Enhanced efficiency
- Higher accuracy and reduced errors
- Cost-effectiveness



Kali Linux Penetration Testing Bible

Gus Khawaja
9781119719083, 1119719089
Pub Date: 6/2/21
\$40.00 USD
512 pages
Paperback
Computers / Security / Network Security

Summary: A comprehensive how-to pentest book, using the popular Kali Linux tools

Kali is a popular Linux distribution used by security professionals and is becoming an important tool for daily use and for certifications. Penetration testers need to master Kali's hundreds of tools for pentesting, digital forensics, and reverse engineering. *Kali Linux Penetration Testing Bible* is a hands-on guide for getting the most from Kali Linux for pentesting. This book is for working cybersecurity professionals in offensive, hands-on roles, including red teamers, white hat hackers, and ethical hackers. Defensive specialists will also find this book valuable, as they need to

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Machine Learning Paradigm for IoT Applications

Shalli Rani, R. Maheswar, G. R. Kanagachidambaresa...
9781119760474, 111976047X
Pub Date: 10/4/22
\$225.00 USD
400 pages
Hardcover
Computers / Artificial Intelligence

Summary: The aim of the book is to explore the benefits of deploying Machine Learning (ML) in Internet of Things (IoT) environment. As a growing number of internet-connected sensors are built into cars, planes, trains and buildings, businesses are amassing vast amounts of data. Tapping into that data to extract useful information is a challenge that's starting to be met using the pattern-matching abilities of machine learning (ML) -- a subset of the field of artificial intelligence (AI). In order to provide smarter environment, their needs to be implemented IoT with machine learning. Machine learning will allow these smart devices to be smarter in a literal sense. It can analyze the data gene...

No Image
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Machine Learning with Dynamics 365 and Power Platform : The Ultimate Guide to Learning and Applying Machine Learning and Predictive Analytics

Vinnie Bansal, Aurelien Clere
9781119771296, 1119771293
Pub Date: 7/7/21
\$49.95 USD
224 pages
Hardcover
Computers / Business & Productivity Software / Business Intelligence

Summary: In this practical book, readers will learn how Microsoft Power Platform works with different technologies like Azure and Dynamics 365 and gives a detailed description of how AI Builder can be integrated with CDS and Dynamics 365 to provide business solutions. In addition, it demonstrates how powerful machine learning models using Azure, such as Azure Stream Analytics, Azure Databricks, and Azure Synapse Analytics, can be built.

Crammed with clear explanations, visualizations, and working examples, the book covers all the essential machine learning techniques in depth. The book will help you in determining the right algorithms for supervised,



Mastering Microsoft Teams : Creating a Hub for Successful Teamwork in Office 365

Christina Wheeler
9781119697886, 1119697883
Pub Date: 3/2/22
\$45.00 USD
Paperback
Computers / Operating Systems / Windows Server

Summary: Get the most out of Microsoft Teams with this comprehensive and insightful resource

Mastering Microsoft Teams: Creating a Hub for Successful Teamwork in Office 365 shows readers how to communicate intelligently and effectively within Microsoft's powerful Office 365. This book covers all the topics required for a full and comprehensive understanding of collaborating within the Microsoft suite of software, including:

- Architecture
- Implementing Teams
- Teams and Channels

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Meta-Heuristic Algorithms in Supply Chain, Logistics and Transportation : Recent Advances, New Perspectives and Applications

Aidin Delgoshaei, Michael G. Kay

9781119652243, 1119652243

Pub Date: 7/26/22

\$130.00 USD

500 pages

Hardcover

Computers / Programming / Algorithms

Summary: This book shows how Meta-heuristic algorithms can be developed by using MATLAB for Supply Chain and Logistics problems. The book begins with an explanation of various problems in the field of supply chain, logistics and transportation. Then, optimization methods that are frequently used for the mentioned problems are explained and some problems are solved using these methods by Lingo and GAMS. The book continues by outlining reasons for using heuristics and metaheuristics for complicated problems in supply chain and logistics. This book helps readers understand each commonly used metaheuristic method, understand its elements quickly, as well as applications of it and how to code usi

PHP & MySQL : Server-side Web Development

Jon Duckett

9781119149224, 1119149223

Pub Date: 8/3/21

\$45.00 USD

672 pages

Paperback

Computers / Internet / Web Design

Summary: Learn PHP, the programming language used to build sites like Facebook, Wikipedia and WordPress, then discover how these sites store information in a database (MySQL) and use the database to create the web pages.

This full-color book is packed with inspiring code examples, infographics and photography that not only teach you the PHP language and how to work with databases, but also show you how to build new applications from scratch. It demonstrates practical techniques that you will recognize from popular sites where visitors can:

- Register as a member and log in

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Real World AI in Cybersecurity

Giulio D'Agostino

9781119790174, 1119790174

Pub Date: 10/5/21

\$45.00 USD

350 pages

Paperback

Computers / Security / Network Security

Summary: *Real World AI in Cybersecurity* provides hands on examples of using AI and machine learning to improve cybersecurity in systems of all sizes. It includes step-by-step guidance for using AI applications in system administration and cybersecurity. The more complex and frequent that cybersecurity attacks and data breaches become, the more cybersecurity experts will need to master tools including AI to help them spot the dangerous attacks and mitigate them. The reader will learn to:

- Overcome antivirus limits in threat detection, classify suspicious user activity, and use fraud detection algorithms

Security Awareness For Dummies

Ira Winkler

9781119720928, 1119720923

Pub Date: 8/10/21

\$29.99 USD

320 pages

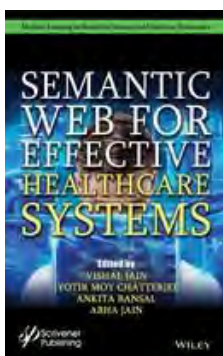
Paperback

Computers / Security

Summary: Make security a priority on your team

Every organization needs a strong security program. One recent study estimated that a hacker attack occurs somewhere every *37 seconds*. Since security programs are only as effective as a team's willingness to follow their rules and protocols, it's increasingly necessary to have not just a widely accessible gold standard of security, but also a practical plan for rolling it out and getting others on board with following it. *Security Awareness For Dummies* gives you the blueprint for implementing this sort of holistic and hyper-secure program in your organization.

Wiley-Scrivener



Semantic Web for Effective Health Care Systems : Impact and Challenges

Vishal Jain, Jyotir Moy Chatterjee, Ankita Bansal
9781119762294, 1119762294

Pub Date: 8/3/21

\$225.00 USD

350 pages

Hardcover

Computers / Artificial Intelligence

Summary: Recently, the Semantic Web has gained huge popularity to address these challenges. Semantic web technologies have the opportunity to transform the way healthcare providers utilize technology to gain insights and knowledge from their data and make decisions. Both big data and semantic web technologies can complement each other to address the challenges and add intelligence to healthcare management systems.

The aim of this book is to analyze the current status on how Semantic Web is used to solve the health data integration and interoperability problem, how it provides advanced data linking capabilities that can improve search and retrieval of

Wiley-Scrivener

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Smart Intelligent Systems for Industrial Applications

C. Venkatesh, N. Rengarajan, P. Ponmurugan, S. Bal...

9781119762003, 1119762006

Pub Date: 7/7/21

\$225.00 USD

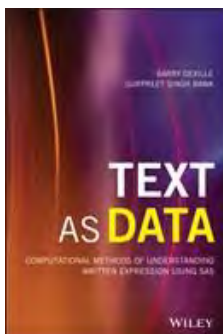
400 pages

Hardcover

Computers / Artificial Intelligence

Summary: This book articulates the evolution and emergence of artificial intelligence in electrical systems. It summarizes the advantages, functions and prospective role of AI and computational intelligence in expert systems, machine learning, pattern recognition, artificial neural network and deep learning etc. The applications of AI in many domains are examined from various perspectives covering the basic principles and current methods that will prove useful instructions to all readers.

Wiley



Text as Data : Computational Methods of Understanding Written Expression Using SAS

Barry DeVille, Gurpreet Singh Bawa

9781119487128, 1119487129

Pub Date: 11/9/21

\$60.00 USD

256 pages

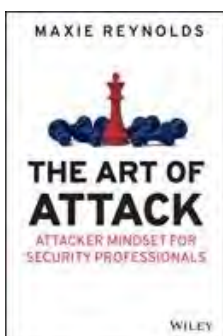
Hardcover

Computers / Data Science

Summary: Text As Data: Combining qualitative and quantitative algorithms within the SAS system for accurate, effective and understandable text analytics

The need for powerful, accurate and increasingly automatic text analysis software in modern information technology has dramatically increased. Fields as diverse as financial management, fraud and cybercrime prevention, Pharmaceutical R&D, social media marketing, customer care, and health services are implementing more comprehensive text-inclusive, analytics strategies. *Text as Data: Computational Methods of Understanding Written Expression Using SAS* presents an overview of text analytics and the

Wiley



The Art of Attack : Attacker Mindset for Security Professionals

Maxie Reynolds

9781119805465, 1119805465

Pub Date: 6/2/21

\$30.00 USD

352 pages

Paperback

Computers / Security

Summary: Take on the perspective of an attacker with this insightful new resource for ethical hackers, pentesters, and social engineers

In *The Art of Attack: Attacker Mindset for Security Professionals*, experienced physical pentester and social engineer Maxie Reynolds untangles the threads of a useful, sometimes dangerous, mentality. The book shows ethical hackers, social engineers, and pentesters what an attacker mindset is and how to and how to use it to their advantage. Adopting this mindset will result in the improvement of security, offensively and defensively, by allowing you to see your environment objectively through the eyes of an



The Official (ISC)2 Guide to the CCSP CBK (3rd Edition)

Leslie Fife, Aaron Kraus, Bryan Lewis

9781119603436, 1119603439

Pub Date: 6/2/21

\$80.00 USD

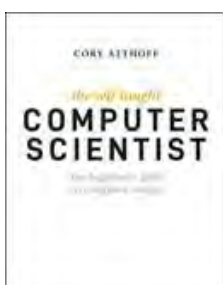
608 pages

Hardcover

Computers / Security / Network Security

Summary: The only official body of knowledge for CCSP—the most popular cloud security credential—fully revised and updated.

Certified Cloud Security Professional (CCSP) certification validates the advanced technical skills needed to design, manage, and secure data, applications, and infrastructure in the cloud. This highly sought-after global credential has been updated with revised objectives. The new third edition of *The Official (ISC)2 Guide to the CCSP CBK* is the authoritative, vendor-neutral common body of knowledge for cloud security professionals.



The Self-Taught Computer Scientist : The Beginner's Guide to Computer Science

Cory Althoff

9781119724414, 1119724414

Pub Date: 7/27/21

\$29.99 USD

304 pages

Paperback

Computers

Summary: *The Self-Taught Computer Scientist* is Cory Althoff's follow-up to *The Self-Taught Programmer*, which inspired hundreds of thousands of professionals to learn how to program outside of school.

In *The Self-Taught Programmer*, Cory showed readers why you don't need a computer science degree to program professionally and taught the programming fundamentals he used to go from a complete beginner to a software engineer at eBay without one.

In *The Self-Taught Computer Scientist*, Cory teaches you the computer science concepts that all self-taught

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Available

Understanding Infrastructure Edge Computing : Concepts, Technologies, and Considerations

Alex Marcham

9781119763239, 1119763231

Pub Date: 6/8/21

\$135.00 USD

352 pages

Hardcover

Computers / Computer Architecture

Summary: A comprehensive review of the key emerging technologies that will directly impact areas of computer technology over the next five years

Infrastructure edge computing is the model of data center and network infrastructure deployment which distributes a large number of physically small data centers around an area to deliver better performance and to enable new economical applications. It is vital for those operating at business or technical levels to be positioned to capitalize on the changes that will occur as a result of infrastructure edge computing.

Understanding Infrastructure Edge Computing provides a



Unmanned Aerial Vehicles for Internet of Things (IoT) : Concepts, Techniques, Applications and Challenges

Vandana Mohindru, Yashwant Singh, Ravindara Bhatt,...

9781119768821, 1119768829

Pub Date: 7/21/21

\$195.00 USD

300 pages

Hardcover

Computers / Artificial Intelligence

Summary: The 15 chapters in this book explore the theoretical as well as a number of technical research outcomes on all aspects of UAVs. UAVs has widely differing applications such as disaster management, structural inspection, goods delivery, transportation, localization, mapping, pollution and radiation monitoring, search and rescue, farming, etc. The advantages of using UAVs are countless and have led the way for the full integration of UAVs, as intelligent objects into the IoT system.

The book covers cover such subjects as:

- Efficient energy management systems in UAV based



Visual Studio Code for Python Programmers

April Speight
9781119773368, 1119773369
Pub Date: 7/7/21
\$50.00 USD
336 pages
Paperback
Computers / Languages / Python

Summary: Become proficient and efficient with Visual Studio Code and learn how to integrate all your external tools!

Visual Studio Code for Python Programmers helps Python developers become not just familiar, but productive in Visual Studio Code. To start, you'll find the steps for installing Visual Studio Code on Windows, Mac and Linux platforms, along with an introduction to the editing features of the workspace. Coverage of more advanced functionality includes managing source code, debugging, unit testing, and Jupyter Notebook support. The book finishes with a walk-through of real-world projects which utilize Visual Studio Code features introduced

Subject: Computing



AppleOne For Dummies

Dwight Spivey
9781119800941, 1119800943
Pub Date: 6/2/21
\$16.99 USD
192 pages
Paperback
Computers / Utilities

Summary: A bundle of insight on a bundle of apps

The world of streaming services demands that you find music, movies, news, games, and storage from different providers. As they're known to do, Apple shakes up that system with Apple One, a bundle of six of their services that fill all those needs. Get to know the catalog in Apple Music, the streaming TV lineup on Apple TV+, keep up with the events of the day on Apple News+, get in shape using Apple Fitness+, play games on Apple Arcade, and keep your files safe on iCloud. Veteran Apple author Dwight Spivey shows how to get the most of these apps on your Apple device or other device

No Image Available

Handbook on Interactive Storytelling : Fundamentals of Interactive Storytelling

Jouni Smed, Tomi Suovuo, Natasha Skult, Petter Sku...
9781119688136, 1119688132
Pub Date: 9/7/21
\$120.00 USD
240 pages
Hardcover
Computers / Programming / Games

Summary: Games are no longer just entertainment or simply a leisure activity; multiple platforms that make games available at any moment of the day and connect the player to other players to become a part of a community play a big role in modern society. Interactive storytelling focuses on creating computer systems, where users experience a dramatically compelling narrative that responds to their actions. The objective of this book is to provide readers with a cohesive picture of the research currently being undertaken in interactive storytelling. In addition to the wealth of material, systematic structure, and extensive bibliography, each chapter provides a set of exercises ranging from imp...



Mastering Microsoft Dynamics 365 Implementations

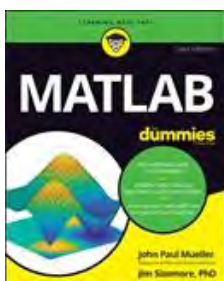
Eric Newell
9781119789321, 111978932X
Pub Date: 6/2/21
\$50.00 USD
416 pages
Paperback
Business & Economics / Customer Relations

Summary: Confidently shepherd your organization's implementation of Microsoft Dynamics 365 to a successful conclusion

In *Mastering Microsoft Dynamics 365 Implementations*, accomplished executive, project manager, and author Eric Newell delivers a holistic, step-by-step reference to implementing Microsoft's cloud-based ERP and CRM business applications. You'll find the detailed and concrete instructions you need to take your implementation project all the way to the finish line, on-time, and on-budget.

You'll learn:

For Dummies

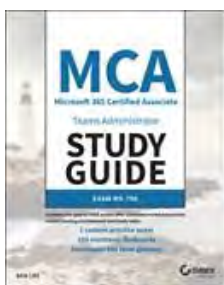
**MATLAB For Dummies (2nd Edition)**

John Paul Mueller
 9781119796886, 1119796881
 Pub Date: 6/29/21
 \$34.99 USD
 512 pages
 Paperback
 Computers / Languages

Summary: MATLAB is a high-level language and problem-solving environment used across all the STEM (science, technology, engineering, and mathematics) fields and commonly adopted for use in colleges around the world. The computational tools within the software are powerful and can be easy to use with experience, but a comprehensive and easy-to-use manual is an essential introduction. *MATLAB For Dummies* is a painless introduction to one of the most popular software tools for numerical computation, visualization, and programming and will cover everything a student or new professional would need to get started.

Updates:

Sybex

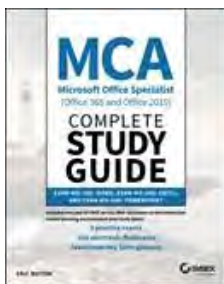
**MCA Microsoft 365 Teams Administrator Study Guide : Exam MS-700**

Ben Lee
 9781119773344, 1119773342
 Pub Date: 9/8/21
 \$60.00 USD
 408 pages
 Paperback
 Computers / Operating Systems / Windows Desktop

Summary: This Study Guide helps you understand the job role and responsibilities of a Microsoft 365 Teams Administrator. It's your one-stop resource for learning new skills, preparing to take the exam, and boosting your career!

Cloud technology has become a major component of how services are delivered to customers. It's creating new roles and expanding others in all areas of technology. The Microsoft 365 Certified Associate Teams Administrator certification shows you're keeping pace with today's technology. *MCA Microsoft 365 Certified Teams Administrator Study Guide* is your best resource for understanding the job

Sybex

**MCA Microsoft Office Specialist (Office 365 and Office 2019) Complete Study Guide : Word Associate Exam MO-100, Excel Associate Exam MO-200, and PowerPoint Associate Exam MO-300**

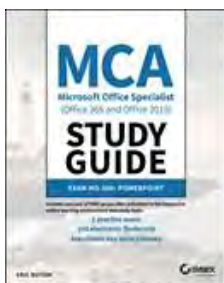
Eric Butow
 9781119718499, 111971849X
 Pub Date: 7/21/21
 \$60.00 USD
 Paperback
 Computers / Business & Productivity Software

Summary: *MCA Microsoft Office Specialist Complete Study Guide (Office 365 and Office 2019)* is your roadmap to preparing for taking Exam MO-100, Exam MO-200, and Exam MO-300. The book is organized in three parts to align with each exam:

Part I - Word and Word 2019, covering the following objectives:

- Manage documents
- Insert and format text, paragraphs, and sections
- Manage tables and lists

Sybex

**MCA Microsoft Office Specialist (Office 365 and Office 2019) Study Guide : PowerPoint Associate Exam MO-300**

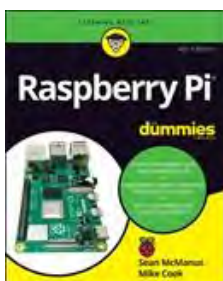
Eric Butow
 9781119718468, 1119718465
 Pub Date: 6/29/21
 \$25.00 USD
 224 pages
 Paperback
 Computers / Business & Productivity Software

Summary: *MCA Microsoft Office Specialist Study Guide: PowerPoint Associate Exam MO-300* is your roadmap to preparing for taking the MO-300 exam and earning the PowerPoint Associate (PowerPoint and PowerPoint 2019) certification. The following objectives are covered:

- Manage presentations
- Manage slides
- Insert and format text, shapes, and images
- Insert tables, charts, smartArt, 3D models, and media
- Apply transitions and animations

Major topics include creating, editing, and enhancing

For Dummies

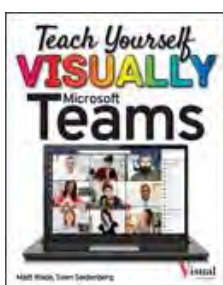
**Raspberry Pi For Dummies (4th Edition)**

Sean McManus, Mike Cook
 9781119796824, 1119796822
 Pub Date: 8/24/21
 \$26.99 USD
 512 pages
 Paperback
 Computers / Hardware

Summary: With the invention of the unique credit card-sized single-board computer comes a new wave of hardware geeks, hackers, and hobbyists who are excited about the possibilities with the Raspberry Pi—and this is the perfect guide to get you started. In *Raspberry Pi For Dummies*, veteran tech authors Sean McManus and Mike Cook make it easier than ever to get you up and running on your Raspberry Pi, from setting it up, downloading the operating system, and using the desktop environment to editing photos, playing music and videos, and programming with Scratch—and everything in between.

Updates include:

Visual

**Teach Yourself VISUALLY Microsoft Teams**

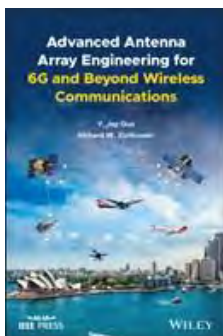
Matt Wade, Sven Seidenberg
 9781119772545, 1119772540
 Pub Date: 6/29/21
 \$35.00 USD
 400 pages
 Paperback
 Computers / Business & Productivity Software / Collaboration

Summary: Microsoft Teams is the one-stop app for chat, collaboration, meetings, and project management!

Teach Yourself VISUALLY Microsoft Teams helps you understand and learn to use Microsoft's chat- and meeting-based communication and collaboration application. Teams provides many rich features that enable teams to be more efficient and save valuable time and resources. However, as with most applications, there is a learning curve as well as pitfalls that should be avoided, which this book helps you prepare for. Topics include:

Subject: Electrical & Electronic Engineering

Wiley-IEEE Press

**Advanced Antenna Array Engineering for 6G and Beyond Wireless Communications**

Yingjie Jay Guo, Richard W. Ziolkowski
 9781119712909, 1119712904
 Pub Date: 6/16/21
 \$135.00 USD
 400 pages
 Hardcover
 Technology & Engineering / Electronics

Summary: Reviews advances in the design and deployment of antenna arrays for the next generation of cellular technology, offering new solutions for the telecommunications industry

Advanced Antenna Arrays for 5G and Beyond addresses the challenges in designing and deploying antennas which deliver 5G performance, can be collocated with 4G antennas, and are immune to interference caused by future 6G antennas mounted on airborne and spaceborne platforms. This timely and authoritative volume presents innovative solutions for developing integrated communications networks of high-gain, individually-scannable, multi-beam antennas that

Wiley-IEEE Press

**Automated Vehicles and MaaS: Removing the Barriers**

Bob Williams
 9781119765349, 111976534X
 Pub Date: 7/13/21
 \$130.00 USD
 288 pages
 Hardcover
 Science / System Theory

Summary: A topical overview of the issues facing automated driving systems and Mobility as a Service, identifies the obstacles to implementation and offers potential solutions

Advances in cooperative and automated vehicle (CAV) technologies, cultural and socio-economic shifts, measures to combat climate change, social pressures to reduce road deaths and injuries, and changing attitudes toward self-driving cars, are creating new and exciting mobility scenarios worldwide. However, many obstacles remain and are compounded by the consequences of COVID-19. Mobility as a Service (MaaS) integrates various forms of public and



Autonomous Airborne Wireless Networks

Muhammad Ali Imran, Oluwakayode Onireti,
Qammer H....

9781119751687, 1119751683

Pub Date: 9/14/21

\$140.00 USD

400 pages

Hardcover

Technology & Engineering / Telecommunications

Summary: Discover what lies beyond the bleeding-edge of autonomous airborne networks with this authoritative new resource

Autonomous Airborne Wireless Networks delivers an insightful exploration of recent advances in the theory and practice of using airborne wireless networks to provide emergency communications, coverage and capacity expansion, information dissemination, and more. The distinguished engineers and editors have selected resources that cover the fundamentals of airborne networks, including channel models, recent regulation developments, self-organized networking, AI-enabled flying networks, and

Wiley



Backscattering and RF Sensing for Future Wireless Communication

Qammer H. Abbasi, Hasan Tahir Abbas, Akram
Alomain...

9781119695653, 1119695651

Pub Date: 6/8/21

\$135.00 USD

224 pages

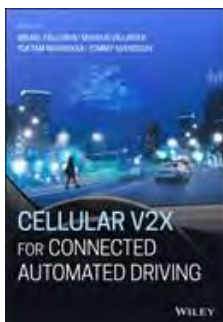
Hardcover

Technology & Engineering / Mobile & Wireless Communications

Summary: Discover what lies ahead in wireless communication networks with this insightful and forward-thinking book written by experts in the field

Backscattering and RF Sensing for Future Wireless Communication delivers a concise and insightful picture of emerging and future trends in increasing the efficiency and performance of wireless communication networks. The book shows how the immense challenge of frequency saturation could be met via the deployment of intelligent planar electromagnetic structures. It provides an in-depth coverage of the fundamental physics behind these structures and assesses the enhancement of the performance of a

Wiley



Cellular V2X for Connected Automated Driving

Mikael Fallgren, Markus Dillinger, Toktam
Mahmoodi...

9781119692645, 1119692644

Pub Date: 6/8/21

\$120.00 USD

320 pages

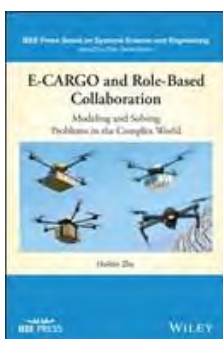
Hardcover

Technology & Engineering / Electronics

Summary: A unique examination of cellular communication technologies for connected automated driving, combining expert insights from telecom and automotive industries as well as technical and scientific knowledge from industry and academia

Cellular vehicle-to-everything (C-V2X) technologies enable vehicles to communicate both with the network, with each other, and with other road users using reliable, responsive, secure, and high-capacity communication links. Cellular V2X for Connected Automated Driving provides an up-to-date view of the role of C-V2X technologies in connected automated driving (CAD) and connected road user (CRU)

Wiley-IEEE Press



E-CARGO and Role-Based Collaboration : Modeling and Solving Problems in the Complex World

Haibin Zhu

9781119693062, 1119693063

Pub Date: 7/27/21

\$125.00 USD

Hardcover

Technology & Engineering / Electronics

Summary: This book systematically describes the fundamental understanding of collaboration, collaboration systems, and complex systems and then propose solutions to the related problems with the assistance of the model and methodology. The structure follows a typical technology development document that begins with an introduction to collaboration and problem solving, then provide a thorough survey of the fundamental concept role. After that, Role-Based Collaboration (RBC) methodology, the model E-CARGO are defined and illustrated. After a thorough description of the technical specifications, the book investigates thoroughly important problems in RBC, i.e., Group Role Assignment (GRA) Exten



EEG Signal Processing and Machine Learning (2nd Edition)

Saeid Sanei, Jonathon A. Chambers

9781119386940, 1119386942

Pub Date: 10/4/21

\$135.00 USD

700 pages

Hardcover

Technology & Engineering / Signals & Signal Processing

Summary: Explore cutting edge techniques at the forefront of electroencephalogram research and artificial intelligence from leading voices in the field

The newly revised Second Edition of EEG Signal Processing and Machine Learning delivers an inclusive and thorough exploration of new techniques and outcomes in electroencephalogram (EEG) research in the areas of analysis, processing, and decision making about a variety of brain states, abnormalities, and disorders using advanced signal processing and machine learning techniques. The book content is substantially increased upon that of the first edition and, while it retains what made the first edition so



Electromagnetic Pulse Simulations Using Finite-Difference Time-Domain Method

Shahid Ahmed

9781119526179, 1119526175

Pub Date: 6/16/21

\$150.00 USD

352 pages

Hardcover

Science / Physics / Electromagnetism

Summary: Discover the utility of the FDTD approach to solving electromagnetic problems with this powerful new resource

Electromagnetic Pulse Simulations Using Finite-Difference Time-Domain Method delivers a comprehensive overview of the generation and propagation of ultra-wideband electromagnetic pulses. The book provides a broad cross-section of studies of electromagnetic waves and their propagation in free space, dielectric media, complex media, and within guiding structures, like waveguide lines, transmission lines, and antennae.



Fundamentals of Terahertz Devices and Applications

Dimitris Pavlidis

9781119460718, 1119460719

Pub Date: 6/14/21

\$135.00 USD

600 pages

Hardcover

Technology & Engineering / Microwaves

Summary: An authoritative and comprehensive guide to the devices and applications of Terahertz technology

Terahertz (THz) technology relates to applications that span in frequency from a few hundred GHz to more than 1000 GHz. Fundamentals of Terahertz Devices and Applications offers a comprehensive review of the devices and applications of Terahertz technology. With contributions from a range of experts on the topic, this book contains in a single volume an inclusive review of THz devices for signal generation, detection and treatment.

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Game Theory and Machine Learning for Cyber Security

Charles A. Kamhoua, Christopher D. Kiekintveld, Fe...

9781119723929, 1119723922

Pub Date: 7/21/21

\$140.00 USD

500 pages

Hardcover

Technology & Engineering / Telecommunications

Summary: This book describes a comprehensive suite of solutions to a broad range of technical issues in applying game theory and machine learning to solve cyber security challenges. It begins by introducing basic concepts on game theory, machine learning, cyber security and cyber deception. Further chapters bring together the best researchers and practitioners in cyber security to share their latest research contributions in hypergames, behavioral game theory, adversarial machine learning, generative adversarial networks, and multi-agent reinforcement learning. The book provides expert insights on applying these new methods to address cyber autonomy, 5G security, blockchain technology, attac

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Handbook of Human Factors and Ergonomics (5th Edition)

Gavriel Salvendy
9781119636083, 1119636086
Pub Date: 9/15/21
\$327.50 USD
Hardcover
Technology & Engineering / Industrial Engineering

Summary: This *Fifth Edition* of the market leading reference for human factors and ergonomics has been completely revised to provide the latest indispensable advice on the design of work-place environments and human-machine interfaces and cutting-edge research on how to reduce health and safety risks and improve productivity. Well-known and respected Editors Dr. Gavriel Salvendy and Dr. Waldemar Karwowski have assembled the top experts in the field from around the world to update this volume. This *Fifth Edition* includes information culled from over 7,500 sources and features all-new coverage of topics related to artificial intelligence, social media, IT and cybersecurity, and data analytics

High Performance Control of AC Drives with Matlab/Simulink (2nd Edition)

Haitham Abu-Rub, Atif Iqbal, Jaroslaw Guzinski
9781119590781, 1119590787
Pub Date: 6/8/21
\$120.00 USD
600 pages
Hardcover
Science / System Theory

Summary: The 2nd edition of the book will include some new and popular topics related to AC motor drive systems, including a chapter dedicated to Medium Voltage Drives, which will cover the state-of-the-art and new challenges in the industrial drive system. In present practice, high power, medium voltage drive is popular in industries. Different components, their design, modelling, control and simulation of Medium Voltage Drives will also be included. A new class of inverter (DC-AC converter) called impedance source inverter (Z-source) is becoming popular for use in solar Photovoltaic application and, due to increasing use of Z-source inverters in such applications, a chapter on this topic will

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High-Density and De-Densified Smart Campus Communications : Technologies, Integration, Implementation and Applications

Daniel Minoli
9781119716051, 1119716055
Pub Date: 8/24/21
\$125.00 USD
250 pages
Hardcover
Technology & Engineering / Mobile & Wireless Communications

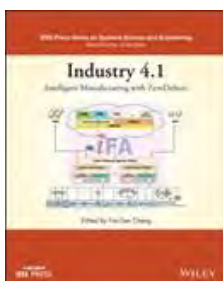
Summary: This book provides a thorough understanding of the developing higher speed wireless technologies of Wi-Fi 6 and 5G cellular. It begins with a look at functional requirements for high density communications before moving on to address the traditional voice/cellular design for campus applications, especially the Distributed Antenna system. Further chapters discuss the traditional data/WiFi Internet access, including OTT video, along with traditional sensor networks/IoT services approaches. The core of the text examines evolved hotspot connectivity; it assesses technology, users, approaches, open services, "Buffet/cafeteria/a la cart" services, intelligent integration, and use cases

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Human-Robot Interaction Control Using Reinforcement Learning

Wen Yu, Adolfo Perrusquia
9781119782742, 1119782740
Pub Date: 8/10/21
\$140.00 USD
260 pages
Hardcover
Technology & Engineering / Robotics

Summary: This book gives brief overview of human-robot interaction control schemes, and presents novel model-free and reinforcement learning controllers. It begins with a brief introduction and state of art of human-robot interaction control and reinforcement learning. It then moves on to describe the typical environment model and some of the most famous identification techniques for parameters estimation. Later chapters address the robot-interaction schemes using impedance and admittance controllers, model-free controllers, and input forces/torques of the human operator. The authors also describe using the reinforcement learning approach for the position/force control task in discrete time



Industry 4.1 : Intelligent Manufacturing with Zero Defects

Fan-Tien Cheng

9781119739890, 1119739896

Pub Date: 7/27/21

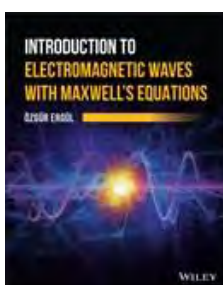
\$140.00 USD

600 pages

Hardcover

Technology & Engineering / Industrial Engineering

Summary: This book provides in-depth descriptions and functions about Intelligent Manufacturing, and also demonstrates the actual Intelligent-Manufacturing applications and implementations in various industries by virtue of the Intelligent Factory Automation (iFA) System Platform. It provides readers with a broad view and explores future trends of intelligent manufacturing. The book introduces an intelligent manufacturing platform, which leverages several advanced information-and-communication (ICT) topics such as Internet of Things (IoT), Edge Computing (EC), and Cloud Computing (CC), that consist of cyber-physical systems (CPS) in both the cloud and the factory. The book presents three adv



Introduction to Electromagnetic Waves with Maxwell's Equations

Ozgur Ergul

9781119626725, 1119626722

Pub Date: 9/27/21

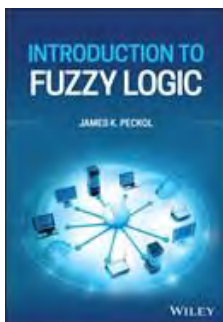
\$150.00 USD

550 pages

Hardcover

Science / Physics / Electromagnetism

Summary: Written in an accessible style, and based on the author's extensive experience of teaching electromagnetics, this text "simply" presents the well-known topics that all electromagnetics instructors would include in their syllabus. The text is carefully tuned to be relevant to an audience of engineering students who have been exposed to the basic curriculum in linear algebra and multivariate calculus. Maxwell's equations form the backbone of the book; as they are developed step by step in consecutive chapters, related electromagnetic phenomena, as well as accompanying mathematical tools, are discussed simultaneously. Whilst the book will appeal to both undergraduate and post/graduate...



Introduction to Fuzzy Logic

James K. Peckol

9781119772613, 1119772613

Pub Date: 8/23/21

\$125.00 USD

320 pages

Hardcover

Technology & Engineering / Electronics

Summary: Learn more about the history, foundations, and applications of fuzzy logic in this comprehensive resource by an academic leader

Introduction to Fuzzy Logic delivers a high-level but accessible introduction to the rapidly growing and evolving field of fuzzy logic and its applications. Distinguished engineer, academic, and author James K. Peckol covers a wide variety of practical topics, including the differences between crisp and fuzzy logic, the people and professions who find fuzzy logic useful, and the advantages of using fuzzy logic.



LOGO! 8 : A Practical Introduction, with Circuit Solutions and Example Programs (2nd Edition)

Stefan Kruse, Volker Torgau, Kai-Christian Toennse...

9783895784811, 3895784818

Pub Date: 10/11/21

\$29.95 USD

176 pages

Paperback

Technology & Engineering / Electronics

Summary: Addressing students and engineers, but also hobby engineers, this practical guide will help to easily and cost-effectively implement technical solutions in home and installation technology, as well as small-scale automation solutions in machine and plant engineering. The book descriptively illustrates how to plan LOGO! 8 projects, develop programs and how to select the hardware. Standard control technology scenarios are demonstrated by practical examples. In addition, readers are provided with practice-oriented descriptions of various basic and special LOGO! 8 modules with which specific tasks can be very flexibly implemented.

For the second edition, the book has been completely revis



Microcontroller Prototypes with Arduino and a 3D Printer : Learn, Program, Manufacture

Dimosthenis E. Bolanakis

9781119782612, 1119782619

Pub Date: 6/8/21

\$99.00 USD

368 pages

Hardcover

Technology & Engineering / Electronics / Microelectronics

Summary: Discover a complete treatment of microcomputer programming and application development with Arduino and 3D printers

Microcontroller Prototypes with Arduino and a 3D Printer: Learn, Program, Manufacture delivers a comprehensive guide to learning microcontrollers that's perfectly suited to educators, researchers, and manufacturers. The book provides readers with a seasoned expert's perspective on the process of microcomputer programming and application development. Carefully designed and written example code and explanatory figures accompany the text, helping the reader fully understand and retain the concepts described



Mobile Communications Systems Development : A Practical Introduction to System Understanding, Implementation and Deployment

Rajib Taid

9781119778684, 1119778689

Pub Date: 6/8/21

\$145.00 USD

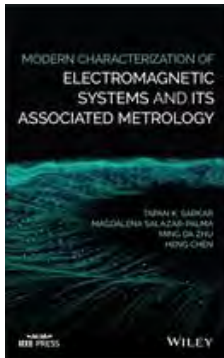
544 pages

Hardcover

Technology & Engineering / Mobile & Wireless Communications

Summary: Provides a thorough introduction to the development, operation, maintenance, and troubleshooting of mobile communications systems

Mobile Communications Systems Development: A Practical Approach for System Understanding, Implementation and Deployment is a comprehensive "how to" manual for mobile communications system design, deployment, and support. Providing a detailed overview of end-to-end system development, the book encompasses operation, maintenance, and troubleshooting of currently available mobile communication technologies and systems. Readers are introduced to different network architectures,



Modern Characterization of Electromagnetic Systems

Tapan K. Sarkar, Magdalena Salazar-Palma, Ming Da ...

9781119076469, 1119076463

Pub Date: 7/7/21

\$155.00 USD

720 pages

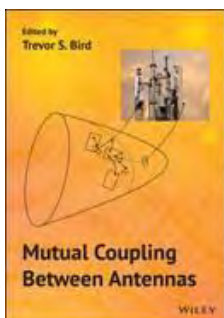
Hardcover

Science / Physics / Electromagnetism

Summary: New method for the characterization of electromagnetic wave dynamics

Modern Characterization of Electromagnetic Systems introduces a new method of characterizing electromagnetic wave dynamics and measurements based on modern computational and digital signal processing techniques. The techniques are described in terms of both principle and practice, so readers understand what they can achieve by utilizing them.

Additionally, modern signal processing algorithms are introduced in order to enhance the resolution and extract



Mutual Coupling Between Antennas

Trevor S. Bird

9781119564980, 1119564980

Pub Date: 8/9/21

\$135.00 USD

480 pages

Hardcover

Technology & Engineering / Electronics

Summary: The aim of this book to provide an up-to-date description of the physical effects of mutual coupling for a variety of antennas and for techniques for analysing and assessing its effects. Practical aspects of mutual coupling will be presented as well as applications to show where the performance is impacted both positively and negatively by taking it into account. Mutual coupling is an important aspect of antenna array design that it is often neglected due to complexity or lack of computing power. It is a function of distance between the antennas, and depends on the near fields of the individual antenna elements, their proximity and their polarization. It can be analysed rigorously b...

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Pedestrian Inertial Navigation with Self-Contained Aiding

Andrei M. Shkel, Yusheng Wang
9781119699552, 111969955X
Pub Date: 7/14/21
\$59.95 USD
Paperback
Technology & Engineering / Electronics

Summary: This book is dedicated to the topic of self-contained aiding techniques in pedestrian inertial navigation. It begins with an introduction that presents the general concept of navigation including major navigation and aiding techniques. Chapter 2 describes inertial navigation implementation, where Inertial Measurement Units (IMUs) are utilized for navigation purposes. Chapter 3 presents an error analysis in the strapdown inertial navigation. Chapter 4 discusses the zero-velocity update (ZUPT) aided inertial navigation algorithm. Chapter 5 presents ranging techniques for navigation compensation. This includes both foot-to-foot ranging and inter-agent ranging. The book concludes with a

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Resource Management for On-Demand Mission-Critical Internet of Things Applications

Muhammad Junaid Farooq, Quanyan Zhu
9781119716099, 1119716098
Pub Date: 11/16/21
\$135.00 USD
300 pages
Hardcover
Technology & Engineering / Electronics

Summary: This book provides an analytical perspective on modeling and decision support for mission-critical Internet of Things (MC-IoT) applications. It dissects the complex IoT ecosystem and provides a cross-layer perspective on the design and operation of IoT, particularly in the context of smart and connected communities. The book provides an economic perspective on the resource management in IoT systems with particular emphasis on mission-critical services and applications. It considers three main areas of resource management in MC-IoT, i.e., spectrum management via reservation, allocation of cloud/fog resources to IoT applications, and resource provisioning to smart city service request

RF and Microwave Circuit Design : Theory and Applications

Charles E. Free, Colin S. Aitchison
9781119114635, 1119114632
Pub Date: 8/16/21
\$95.00 USD
400 pages
Hardcover
Technology & Engineering / Microwaves

This textbook covers a typical modern syllabus in radio frequency or microwave design at final year undergraduate or first year postgraduate level. The content has been chosen to include all of the ba...

Summary: This textbook covers a typical modern syllabus in radio frequency or microwave design at final year undergraduate or first year postgraduate level. The content has been chosen to include all of the basic topics necessary to give a rigorous introduction to high-frequency technology. Both the content and presentation reflect the considerable

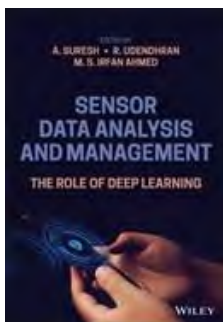
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Satellite Communications Payload and System (2nd Edition)

Teresa M. Braun
9781119384311, 1119384311
Pub Date: 9/8/21
\$110.00 USD
688 pages
Hardcover
Science / Waves & Wave Mechanics

Summary: A valuable reference on communications satellite systems

This book presents the state of the art in commercial communications satellite systems, thoroughly and in detail not to be found in any other book. These systems provide the television and some of the telephone and Internet services in use every day. The book focuses on the satellite payload, which consists of antennas, receivers, and transmitters. The book discusses the what, the how, and the why of various choices that have been made in currently operating systems.

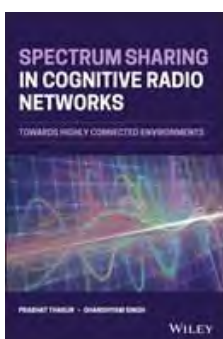


Sensor Data Analysis and Management : The Role of Deep Learning

A. Suresh, R. Udendhran, M. S. Irfan Ahmed
9781119682424, 1119682428
Pub Date: 9/7/21
\$135.00 USD
250 pages
Hardcover
Technology & Engineering / Electronics

Summary: Discover detailed insights into the methods, algorithms, and techniques for deep learning in sensor data analysis

Sensor Data Analysis and Management: The Role of Deep Learning delivers an insightful and practical overview of the applications of deep learning techniques to the analysis of sensor data. The book collects cutting-edge resources into a single collection designed to enlighten the reader on topics as varied as recent techniques for fault detection and classification in sensor data, the application of deep learning to Internet of Things sensors, and a case study on high-performance computer gathering and processing of



Spectrum Sharing in Cognitive Radio Networks : Towards Highly Connected Environments

Prabhat Thakur, Ghanshyam Singh
9781119665427, 1119665426
Pub Date: 8/3/21
\$125.00 USD
250 pages
Hardcover
Technology & Engineering / Mobile & Wireless Communications

Summary: The book starts with background information on the fundamentals with recent advances of spectrum sharing techniques. Further, it explores the advanced frame structures with spectrum accessing approaches, and the role of spectrum prediction and spectrum monitoring techniques for interference-free spectrum sharing. Effective spectrum mobility is also analyzed. Moreover, due to the popularity of distributed architectures of communication systems in various applications, the energy and spectral efficient frameworks are presented by employing the self-scheduled medium access control (SMC-MAC) protocol in the cognitive radio networks (CRNs). The frameworks of cognitive radio nonorthogonal

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The Wiley 5G REF : Security

Rahim Tafazolli, Chin-Liang Wang, Periklis Chatzim...
9781119820314, 1119820316
Pub Date: 9/27/21
\$120.00 USD
350 pages
Hardcover
Technology & Engineering / Telecommunications

Summary: **Wiley 5G Ref** offers a user-friendly format that provides the user with article-level, in-depth technical surveys on all aspects of 5G solutions, architectures, technologies and standards for researchers, practitioners and students in information and communication engineering, computer science and engineering, and telecommunication networking.



Wireless Coexistence : Standards, Challenges, and Intelligent Solutions

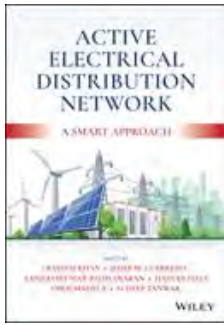
Daniel Chew, Andrew L. Adams, John Uher
9781119584186, 1119584183
Pub Date: 6/29/21
\$135.00 USD
336 pages
Hardcover
Technology & Engineering / Signals & Signal Processing

Summary: Explore a comprehensive review of the motivation for wireless coexistence and the standards and technology used to achieve it

Wireless Coexistence: Standards, Challenges, and Intelligent Solutions delivers a thorough exploration of the sharing of wireless infrastructure, including the multiple standards and key requirements driving the current state of wireless technology. The book surveys several standards, including IEEE 802.22, 802.15.2, and 802.19.1 and expands upon recent advances in machine learning and artificial intelligence to demonstrate how these technologies might be used to meet or exceed the challenges of wireless coexistence.

Subject: General Energy

Wiley

**Active Electrical Distribution Network : A Smart Approach**

Baseem Khan, Josep M. Guerrero, Sanjeevikumar Padm...

9781119599517, 1119599512

Pub Date: 9/7/21

\$145.00 USD

592 pages

Hardcover

Science / Energy

Summary: This book is about how to guide and address the major issues inside the most overlooked sector of the electrical Industry; Electrical Distribution. Various issues are discussed in detail with respect to the present smart grid scenario. It differs from other published books, as it includes a detailed framework to address generally all the major issues in the active electrical distribution sector with renewable energy integration.

Wiley-IEEE Press

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Power System Protection (2nd Edition)

Charles Henville, Rasheek Rifaat, William Kennedy,...

9781119513148, 1119513146

Pub Date: 9/15/21

\$250.00 USD

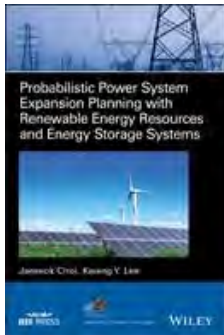
1800 pages

Hardcover

Technology & Engineering / Power Resources

Summary: This book provides the analytical basis for design, application, and setting of power system protection equipment for today's engineer. Updates from protection engineers with distinct specializations contribute to a comprehensive work covering all aspects of the field. The book identifies the components of modern protection systems and the new regulations that have been put in place to monitor them. Multiple chapters cover advances in computer-based protection, including data storage and processing, digital sampling and filtering, communications, and logic. The impact of renewable resources connected to distribution and transmission systems is also considered.

Wiley-IEEE Press

**Probabilistic Power System Expansion Planning with Renewable Energy Resources and Energy Storage Systems**

Jaeseok Choi, Kwang Y. Lee

9781119684138, 1119684137

Pub Date: 9/15/21

\$160.00 USD

528 pages

Hardcover

Technology & Engineering / Power Resources

Summary: This book presents innovative approaches to the probabilistic planning of generation and transmission systems under uncertainties. It includes renewables and energy storage calculations in using probabilistic and deterministic reliability techniques to assess system performance from a long-term expansion planning viewpoint. It is divided into two sections. The first covers topics related to Generation Expansion Planning (GEP). This includes chapters on cost assessment, methodology and optimization, renewable energy generation, and more. The second part provides information on Transmission System Expansion Planning (TEP). This part explores TEP with reliability constraints, probabilistic

Wiley-IEEE Press

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Smart Solar PV Inverters with Advanced Grid Support Functionalities

Rajiv K. Varma

9781119214182, 1119214181

Pub Date: 7/14/21

\$135.00 USD

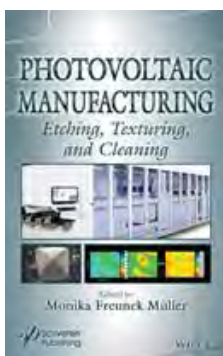
496 pages

Hardcover

Science / Energy

Summary: This book covers the full scope of smart inverter technology for PV solar power systems. It begins by introducing the need for smart inverters as well as the challenges faced by utilities in integrating PV solar systems on a large scale in distribution and transmission systems. Configurations of different types of smart inverters for both PV solar and wind power systems will be described as well as the broad structure of smart inverters, ranging from small rooftop applications to large utility scale inverters. One of the key subjects covered in this book is the functions and operating characteristics of smart inverters. Functions included are voltage regulation, reactive power control...

Wiley-Scrivener



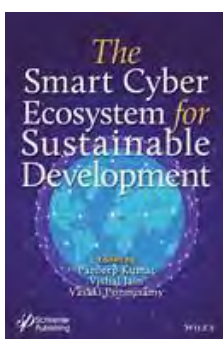
Photovoltaic Manufacturing : Etching, Texturing, and Cleaning

Monika Freunek Muller
9781119241898, 1119241898
Pub Date: 6/22/21
\$195.00 USD
Hardcover
Science / Energy

Summary: This is the first book on photovoltaic wet processing for silicon wafers, both mono- and multi-crystalline. The comprehensive book provides information to process, equipment, and device engineers and researchers in the solar manufacturing field. The authors of the chapters are world-class researchers and experts in their field of endeavor. The fundamentals of wet processing chemistry are introduced, covering etching, texturing, cleaning and metrology. New developments, innovative approaches, as well as current challenges are presented. A detailed discussion of black silicon is provided.

Subject: Industrial Engineering

Wiley-Scrivener



The Smart Cyber Ecosystem for Sustainable Development : Principles, Building Blocks, and Paradigms

Pardeep Kumar, Vishal Jain, Vasaki Ponnusamy
9781119761648, 1119761646
Pub Date: 7/7/21
\$225.00 USD
350 pages
Hardcover
Technology & Engineering / Industrial Technology

Summary: The Cyber Ecosystem can be a replica of our natural ecosystem where different living and non-living things interact with each other to perform specific tasks. Similarly, the different entities of the cyber ecosystem collaborate digitally with each other to revolutionize our lifestyle by creating smart, intelligent, and automated systems/processes. The main actors of the cyber ecosystem, among others, are the Internet of Things (IoT), Artificial Intelligence (AI), and the mechanisms providing cybersecurity.

This book documents how this blend of technologies is powering a digital sustainable socio-economic infrastructure

Subject: Mechanical Engineering

Wiley



Aircraft Propulsion : Cleaner, Leaner, and Greener (3rd Edition)

Saeed Farokhi
9781119718642, 1119718643
Pub Date: 7/13/21
\$110.00 USD
900 pages
Hardcover
Technology & Engineering / Aeronautics & Astronautics

Summary: Explore the latest edition of a leading resource on sustainable aviation, alternative jet fuels, and new propulsion systems

The newly revised Third Edition of Aircraft Propulsion delivers a comprehensive update to the successful second edition with a renewed focus on the integration of sustainable aviation concepts. The book tackles the impact of aviation on the environment at the engine component level, as well as the role of propulsion system integration on fuel burn. It also discusses combustion emissions, including greenhouse gases, carbon monoxide, unburned hydrocarbons (UHC) and oxides of nitrogen (NOx).

Wiley-ASME Press Series

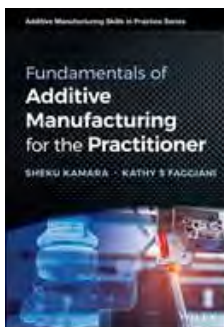


Bearing Dynamic Coefficients in Rotordynamics : Computation Methods and Practical Applications

Lukasz Brenkacz
9781119759263, 1119759269
Pub Date: 6/8/21
\$140.00 USD
192 pages
Hardcover
Science / Mechanics

Summary: A guide to bearing dynamic coefficients in rotordynamics that includes various computation methods

Bearing Dynamic Coefficients in Rotordynamics delivers an authoritative guide to the fundamentals of bearing and bearing dynamic coefficients containing various computation methods. Three of the most popular and state-of-the-art methods of determining coefficients are discussed in detail. The computation methods covered include an experimental linear method created by the author, and numerical linear and nonlinear methods using the finite element method. The author—a renowned expert on the topic—presents the results



Fundamentals of Additive Manufacturing for the Practitioner

Sheku Kamara, Kathy S. Faggiani

9781119750383, 1119750385

Pub Date: 6/29/21

\$75.00 USD

208 pages

Hardcover

Technology & Engineering / Manufacturing

Summary: Discover how to shift from traditional to additive manufacturing processes with this core resource from industry leaders

Fundamentals of Additive Manufacturing for the Practitioner delivers a vital examination of the methods and techniques needed to transition from traditional to additive manufacturing. The book explains how traditional manufacturing work roles change as various industries move into additive manufacturing and describes the flow of the typical production process in additive manufacturing. Detailed explorations of the processes, inputs, machine and build preparation, post-processing, and best practices are



Human Motion Capture and Identification for Assistive Technologies

Pubudu N. Pathirana

9781119515074, 1119515076

Pub Date: 8/30/21

\$130.00 USD

300 pages

Hardcover

Technology & Engineering / Mechanical

Summary: A guide to the core ideas in a rapidly changing technological landscape of human motion capture

Human Motion Capture and Identification fills a gap in the literature by providing a book that links sensing, data analytics and signal processing and addresses the characterisation of movements of clinical significance. The authors, noted experts on the topic, take an application focused approach to offer an essential guide that explores the various sensing forms of human motion that use more affordable and readily available technologies.

The book offers a fundamental approach to bio-kinematic



Introduction to Aerospace Engineering : Principles of Flight

Ethirajan Rathakrishnan

9781119807155, 1119807158

Pub Date: 8/24/21

\$125.00 USD

256 pages

Hardcover

Technology & Engineering / Aeronautics & Astronautics

Summary: Provides a broad and accessible introduction to the field of aerospace engineering, ideal for semester-long courses

Aerospace engineering, the field of engineering focused on the development of aircraft and spacecraft, is taught at universities in both dedicated aerospace engineering programs as well as in wider mechanical engineering curriculums around the world—yet accessible introductory textbooks covering all essential areas of the subject are rare. Filling this significant gap in the market, *Introduction to Aerospace Engineering: Basic Principles of Flight* provides beginning students with a strong foundational knowledge of



Introduction to Flight Testing

James W. Gregory, Tianshu Liu

9781118949825, 111894982X

Pub Date: 8/30/21

\$120.00 USD

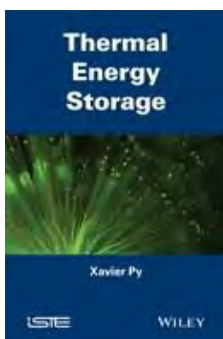
400 pages

Hardcover

Technology & Engineering / Aeronautics & Astronautics

Summary: Provides an introduction to the basic flight testing methods employed on general aviation aircraft and unmanned aerial vehicles

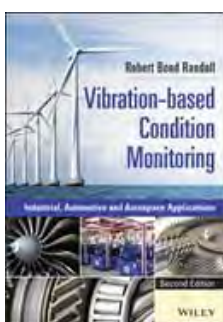
Introduction to Flight Testing of Light Aircraft and UAVs provides a concise introduction to the basic flight testing methods employed on general aviation aircraft and unmanned aerial vehicles for courses in aeronautical engineering. There is particular emphasis on the use of modern on-board instruments and inexpensive, off-the-shelf portable devices that make flight testing accessible to nearly any student.



Thermal Energy Storage

Xavier Py
9781848216662, 1848216661
Pub Date: 7/7/21
\$165.00 USD
Hardcover
Science / Mechanics / Thermodynamics

Summary: The book describes all thermal energy storage (TES) aspects including basic involved mechanisms, functionalities, conventional and advanced storage materials, envelops and heat transfer fluids, systems and their integration. All those issues are presented through practical examples of domestic and industrial applications of actual interest in order to highlight major limitations and needs in future innovations. The illustrative applications (three per basic mechanisms) have been selected in such a way to cover a wide range of temperature, capacity and power ranges.

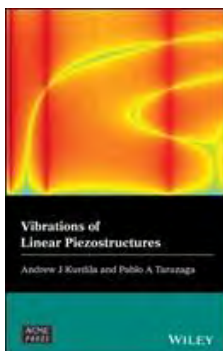


Vibration-based Condition Monitoring : Industrial, Automotive and Aerospace Applications (2nd Edition)

Robert Bond Randall
9781119477556, 1119477557
Pub Date: 7/6/21
\$145.00 USD
432 pages
Hardcover
Science / Mechanics

Summary: Stay up to date on the newest developments in machine condition monitoring with this brand-new resource from an industry leader

The newly revised second edition of *Vibration-based Condition Monitoring: Industrial, Automotive and Aerospace Applications* delivers a thorough update to the most complete discussion of the field of machine condition monitoring. The distinguished author offers readers new sections on diagnostics of variable speed machines, including wind turbines, as well as new material on the application of cepstrum analysis to the separation of forcing functions, structural model properties, and the simulation of machines



Vibrations of Linear Piezoelectric Structures

Andrew J. Kurdila, Pablo A. Tarazaga
9781119393405, 111939340X
Pub Date: 8/9/21
\$120.00 USD
240 pages
Hardcover
Science / Mechanics

Summary: A thorough guide to the fundamental development of linear piezoelectricity for vibrations

Vibrations of Linear Piezoelectric Structures is an introductory text that offers a concise examination of the general theory of vibrations of linear piezoelectric structures. This important book brings together in one comprehensive volume the most current information on the theory for modeling and analysis of piezoelectric structures. The authors explore the fundamental principles of piezoelectric structures, review the relevant mathematics, continuum mechanics and elasticity, and continuum electrodynamics as they are applied to electromechanical piezoelectric structures, and include the work that