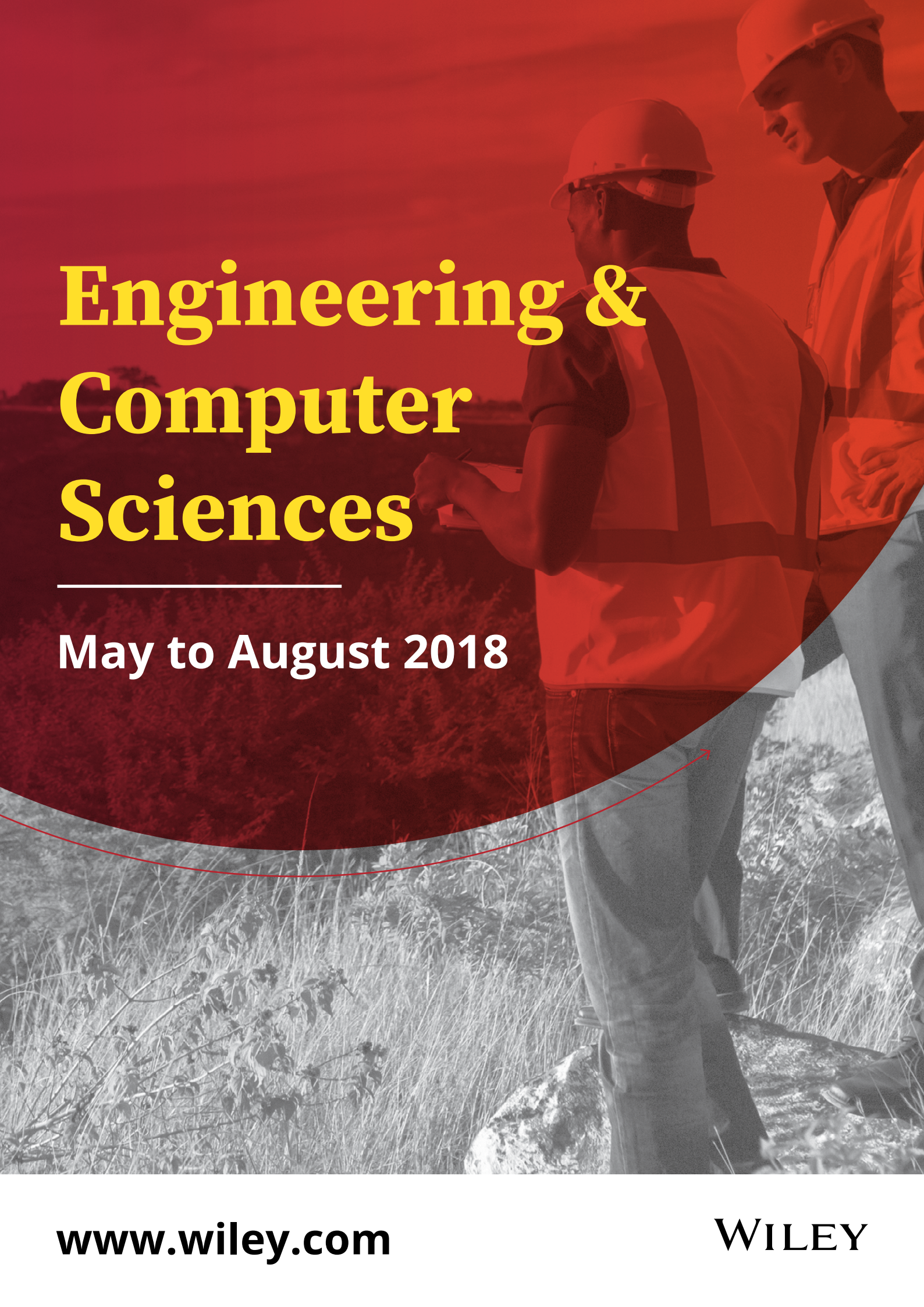


The background of the entire page is a photograph of two men in engineering attire. They are wearing hard hats and high-visibility safety vests. One man is holding a clipboard and looking at it, while the other stands beside him, also looking down. They appear to be in a field or construction site. A large, semi-circular red overlay covers the upper half of the image, serving as a background for the title and date.

Engineering & Computer Sciences

May to August 2018

www.wiley.com

WILEY

Access the leading resource
for quality research in the life,
health and physical sciences,
and social sciences & humanities
anytime, anywhere on
Wiley Online Library



Enables Discovery



Pushes Boundaries



Fosters Collaboration





Introducing **WileyPLUS**

1

Do you need your students to engage with their class?

2

Do they appear overwhelmed by the material?

3

Do they want a proven way to dramatically improve their grades?

If the answer to any of these questions is yes, it's time to take a look at **WileyPLUS**!

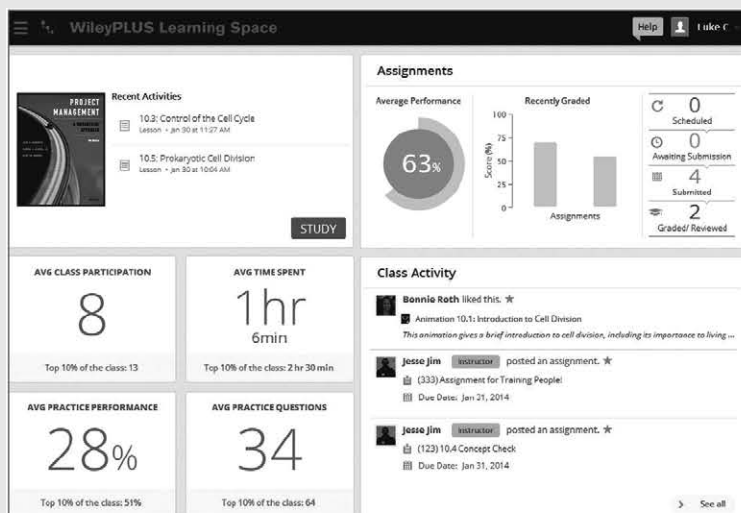
WileyPLUS is a research based online environment for effective teaching and learning. **WileyPLUS** builds students' confidence because it takes the guesswork out of studying by providing a clear roadmap; what to do, how to do it, if they did it right. With **WileyPLUS**, students take more initiative so you'll have a greater impact.

Discover more at
www.wileyplus.com

Introducing **WileyPLUS Learning Space**

Our next-generation, adaptive teaching and learning tool

An easy way to help students **learn, collaborate, and grow.**



Diagnose Early

Instructors assess the real-time proficiency of each student to inform teaching decisions. Students always know what they need to work on.



Facilitate Engagement

Instructors can quickly organize learning activities, manage students collaboration, and customize their course.



Measure Outcomes

With visual reports, it's easy for both students and instructors to gauge problem areas and act on what's most important.



Discover more at **www.wileypluslearningspace.com**

WILEY

Also available with...

WileyPLUS with ORION



A personalised, adaptive learning experience

Based on cognitive science, **WileyPLUS with ORION** provides students with a personal, adaptive learning experience so they can build the proficiency on topics and use their study time most effectively.

ORION helps students learn by learning about them.

Discover more at

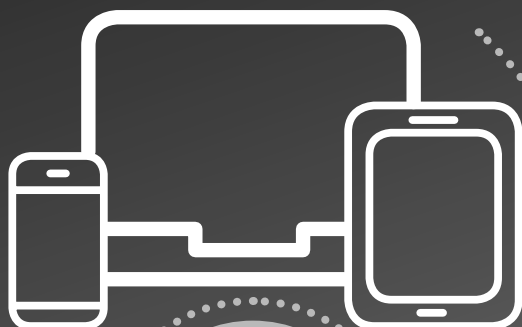
www.wiley.com/college/sc/oriondemo

Introducing

Wiley E-Textbooks

Do your students need simple, affordable e-books?
We have the answer!

Wiley in conjunction with a number of leading digital textbook platforms now offer E-Textbooks—complete digital versions of Wiley texts.



Using **Wiley E-TextBooks** enables students to study more efficiently as they:



Access content online and offline on their desktop, laptop and mobile device



Search across the entire book content



Take note and highlight paragraph



Share comments

Discover more at www.wiley.com/college/sc/etext

*All information stated is correct as of 1st December 2016

For more information, please email heasiaenquiry@wiley.com

WILEY



Table of Contents

Architecture & Planning	1	Computing	13
Building Design	1	Internet General	13
Design, Drawing & Presentation	2	Operating Systems / Microsoft Windows	14
General & Introductory Architecture	2	Other Software (Non-Microsoft)	14
Housing	2		
Urban Development	3	Electrical & Electronic Engineering	14
		Antennas & Propagation	14
Civil Engineering & Construction	4	Audio & Speech Processing & Broadcasting	15
Building Surveying	4	Circuit Theory & Design	15
Construction Management	4	Communication Technology	16
Construction: Sustainability	4	Communication Technology - Networks	16
Environmental Engineering	4	Components & Devices	17
Hydrology (Civil Engineering)	5	Control Systems Technology	17
Quantity Surveying & Construction Economics	5	Electrical Engineering - Displays	17
Steel Construction & Bridge Engineering	5	Electromagnetic Compatibility	18
Transportation Engineering	6	Electromagnetic Theory	18
Water Resources	6	Imaging Systems & Technology	18
		MEMS and Nanoelectronics	19
Computer Science	7	Mobile & Wireless Communications	19
Artificial Intelligence	7	Power Electronics	20
Computer Architecture	7	Quality & Reliability	20
Computer Hardware	8	Satellite Communications	21
Computer Science - General Interest	8	Semiconductors	21
Computer Security & Cryptography	8	Sensors, Instrumentation & Measurement	21
Database & Data Warehousing Technologies	9	Signal Processing	22
Grid & Cloud Computing	9	Systems Engineering & Management	22
Information Technologies	10		
Networking / LINUX	10	General Energy	23
Networking / Security	10	Carbon Capture & Storage	23
Networking / Windows NT & Windows 2000	12	Electric Power Systems	23
Object Technologies - Java	12	Energy Economics & Policy	24
Programming & Software Development	12	Energy Efficiency	24
Software Engineering Standards	13	Fossil Fuels	24
Web Site Development	13	Hydrogen, Batteries & Fuel Cells	25



Lead Title



Textbook

All prices are correct as at press time but are subject to change without prior notice.



Natural Gas & Petroleum Products	25
Power Technology & Power Engineering	26
Smart Grid	26
Solar Energy & Photovoltaics	26
Wind Energy	27

Industrial Engineering 27

Industrial Engineering / Manufacturing	27
Industrial Engineering / Project Management	28

Material Science 28

Electronic Materials	28
Organic Electronics	29

Mechanical Engineering 29

Automotive Engineering	29
Computational / Numerical Methods	29
Control Process & Measurements	30
Mechanical Engineering - Design	30

Test Prep 31

Certification (MSCE, Novell, etc.)	31
Misc (other) certifications	33



Lead Title



Textbook

All prices are correct as at press time but are subject to change without prior notice.



BIM Handbook

A Guide to Building Information Modeling for Owners, Designers, Engineers, Contractors, and Facility Managers, 3rd Edition

Rafael Sacks, Charles Eastman, Ghang Lee & Paul Teicholz

Building Information Modeling (BIM) offers a novel approach to design, construction, and facility management in which a digital representation of the building product and process is used to facilitate the exchange and interoperability of information in digital format. The *BIM Handbook, Third Edition* provides an in-depth understanding of BIM technologies, the business and organizational issues associated with its implementation, and the profound advantages that effective use of BIM can provide to all members of a project team. Updates to this edition include information on the ways in which professionals should use BIM to gain maximum value; new topics such as collaborative working, national and major construction clients, BIM standards and guides. It includes a discussion on how various professional roles have expanded through the widespread use and the new avenues of BIM practices and services and a wealth of new case studies that clearly illustrate exactly how BIM is applied in a wide variety of conditions.

ISBN: 978-1-119-28753-7 • Cloth • US\$98.95 • Jul 2018 • 704pp



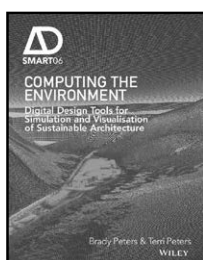
Building Codes Illustrated

A Guide to Understanding the 2018 International Building Code, 6th Edition

Francis D. K. Ching & Steven R. Winkel

This unique reference to the 2018 International Building Code marries the graphic skills of bestselling author Frank Ching with the code expertise of Steven Winkel, FAIA. It pulls out the portions of the building code that are most relevant for the architect and provides an easy-to-understand interpretation in both words and illustrations.

ISBN: 978-1-119-48035-8 • Paper • US\$64.95 • Jun 2018 • 448pp



Computing the Environment

Digital Design Tools for Simulation and Visualisation of Sustainable Architecture

Terri Peters & Brady Peters

Computing the Environment presents practical workflows and guidance for designers to get feedback on their design using digital design tools on environmental performance. Starting with an extensive state-of-the-art survey of what top international offices are currently using in their design projects, this book presents detailed descriptions of the tools, algorithms, and workflows used and discusses the theories that underlie these methods. Project examples from Transsolar Klimaengineering, Buro Happold's SMART Group, Behnisch Behnisch Architects, Thomas Herzog, Autodesk Research are contextualized with quotes and references to key thinkers in this field such as Eric Winsberg, Andrew Marsh, Michelle Addington and Ali Malkawi.

ISBN: 978-1-119-09789-1 • Cloth • US\$50.00 • Feb 2018 • 256pp



SU+RE

Sustainable + Resilient Design Systems

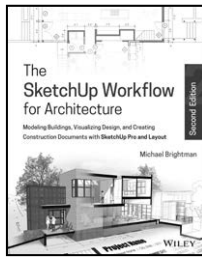
John Nastasi, Ed May & Clarke Snell

This issue of AD is guest-edited by the interdisciplinary team at Stevens Institute of Technology who developed the winning entry for the 2015 US Department of Energy Solar Decathlon competition, the SU+RE House. While particular focus is paid to this student designed and built prototype home, the publication also provides a broader discussion of the value of design-build as a model for tackling the issue of integrating sustainability and resilience, and what changes are required across education, policy, practice and industry for widespread implementation.

ISBN: 978-1-119-37951-5 • Paper • US\$45.00 • Jan 2018 • 136pp



DESIGN, DRAWING & PRESENTATION



The SketchUp Workflow for Architecture

Modeling Buildings, Visualizing Design, and Creating Construction Documents with SketchUp Pro and LayOut, 2nd Edition (Previously Announced)

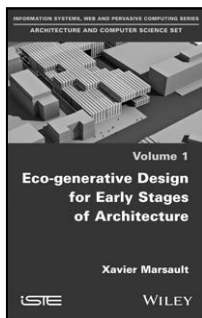
Michael Brightman

This book is for architects and related design professionals who want to take their SketchUp use to the next level. In-depth tips and techniques show users how to use SketchUp and its related suite of tools in every stage of the design process. The author presents a flexible workflow that makes common design tasks easier and allows users to incorporate varying degrees of SketchUp use into their design process. Included are best practices for organizing projects, drafting schematics. A section devoted to LayOut guides readers through an often-underused component of SketchUp Pro. Tutorial videos compliment the book, demonstrating some of the more advanced methods.

ISBN: 978-1-119-38363-5 • Paper • US\$49.95 • Jun 2018 • 400pp



GENERAL & INTRODUCTORY ARCHITECTURE



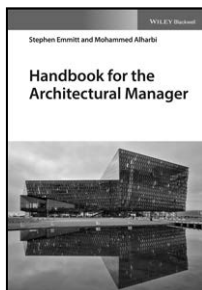
Eco-generative Design for Early Stages of Architecture

Volume 1

Xavier Marsault

This book can be first considered as a complete synthesis of the EcCoGen ANR project (2011-2012), involving researchers from different French labs (including MAP) and domains, breaking major difficulties of the real-time generative design in the early stages of a pre-architectural project. Then the scope becomes larger, and the authors introduce major prospects following recent advances on natural and artificial evolution.

ISBN: 978-1-78630-180-2 • Cloth • US\$124.95 • Feb 2018 • 210pp



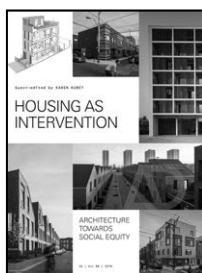
Handbook for the Architectural Manager

Stephen Emmitt & Mohammed Alharbi

Handbook for the Architectural Manager offers architects a comprehensive resource that brings together critical information on four interlinked areas: managing the architectural office, projects, stakeholders, and learning. Unlike other books on the topic that only stress management of the business or the management of projects, this book offers a guiding framework that encompasses the architectural manager's role in developing the practice's competitive strategies and overseeing the project portfolio. Written by noted experts in the field, *Handbook for the Architectural Manager* is grounded in current research in which, for the first time, the components of architectural management have been analyzed systematically, tested, and developed for practical application. Designed to explore typical architectural management issues, the book provides clear and concise direction with practical step-by-step guidance as well as helpful checklists, templates and scenarios, and case studies to illustrate best practice.

ISBN: 978-1-119-22550-8 • Paper • US\$95.00 • Jul 2018 • 160pp

HOUSING



Housing as Intervention Architecture Towards Social Equity

Karen Kubey

In prosperous US and European cities, middle- and low-income residents are being pushed out of housing markets increasingly dominated by luxury investors. The average London tenant, for example, now pays an unaffordable 49 per cent of his or her pre-tax income in rent. Parts of the developing world and areas of forced migration are experiencing insufficient affordable housing stock coupled with rapidly shifting ways of life. In response to this context, forward-thinking architects are taking the lead with a collaborative approach. By partnering with allied fields, working with residents, developing new forms of housing, and leveraging new funding systems and policies, they are providing strategic leadership for what many consider to be our cities' most pressing crisis. Amidst growing economic and health disparities, this issue of AD asks how housing projects, and the design processes behind them, might be interventions towards greater social equity, and how collaborative work in housing might reposition the architectural profession at large.

ISBN: 978-1-119-33784-3 • Paper • US\$38.95 • Jul 2018 • 136pp





International Journal of Urban and Regional Research

Volume 42, Issue 1

Qiyang Wu, Tim Edensor, Jianquan Cheng, Susanne Frank, Sabine Weck, Georgia Alexandri, Jason Hackworth, Maria Patsarika, Tatjan Schneider, Michael Edwards, Loïc Wacquant, Pierre Bourdieu, Monique Pinçon-Charlot, Michel Pinçon, Virgilio Borges Pereira, Mike Savage, Laurie Hanquinet, Niall Cunningham, Johs Hjelbrekke, Sylvie Tissot & Matthey Desmond

Since its foundation in 1977 *IJURR* has been at the cutting-edge of critical urban scholarship. *IJURR* is taking forward its commitment to interdisciplinary and international urban research, connecting with new audiences and debates, consolidating its position as a leading publication in the field. It explores questions and themes of interest to a wide readership including urban planners, architects and practitioners and includes both stand-alone articles and critical dialogues. The book connects with critical debates in the policy-making and professional arenas and uses visual materials ranging from architectural sketches, film stills and photographs to various explanatory figures and tables.

ISBN: 978-1-119-48250-5 • Paper • US\$15.95 • Mar 2018 • 184pp



International Journal of Urban and Regional Research

Volume 42, Issue 2

Rafeef Ziadah, Sylvia Croese, Paul O'Hare, Paul Chatterton, Alice Owen, Jo Cutter, Gary Dymski, Rachel Unsworth, Lisa Björkman, Andrew Harris, Antoine Picon, Mark Usher & Joseph Hillier

Since its foundation in 1977 *IJURR* has been at the cutting-edge of critical urban scholarship. *IJURR* is taking forward its commitment to interdisciplinary and international urban research, connecting with new audiences and debates, consolidating its position as a leading publication in the field. It explores questions and themes of interest to a wide readership including urban planners, architects and practitioners and includes both stand-alone articles and critical dialogues. The book connects with critical debates in the policy-making and professional arenas and uses visual materials ranging from architectural sketches, film stills and photographs to various explanatory figures and tables.

ISBN: 978-1-119-48249-9 • Paper • US\$15.95 • Apr 2018 • 115pp



International Journal of Urban and Regional Research

Volume 42, Issue 3

Mustafa Dike, Matthew Gandy & Ananya Roy

Since its foundation in 1977 *IJURR* has been at the cutting-edge of critical urban scholarship. *IJURR* is taking forward its commitment to interdisciplinary and international urban research, connecting with new audiences and debates, consolidating its position as a leading publication in the field. It explores questions and themes of interest to a wide readership including urban planners, architects and practitioners and includes both stand-alone articles and critical dialogues. The book connects with critical debates in the policy-making and professional arenas and uses visual materials ranging from architectural sketches, film stills and photographs to various explanatory figures and tables.

ISBN: 978-1-119-48246-8 • Paper • US\$15.95 • Jun 2018 • 115pp



International Journal of Urban and Regional Research

Volume 42, Issue 4

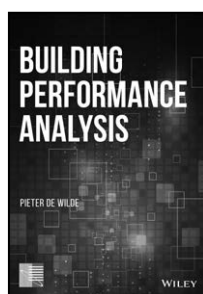
Mustafa Dike, Matthew Gandy & Ananya Roy

Since its foundation in 1977 *IJURR* has been at the cutting-edge of critical urban scholarship. *IJURR* is taking forward its commitment to interdisciplinary and international urban research, connecting with new audiences and debates, consolidating its position as a leading publication in the field. It explores questions and themes of interest to a wide readership including urban planners, architects and practitioners and includes both stand-alone articles and critical dialogues. The book connects with critical debates in the policy-making and professional arenas and uses visual materials ranging from architectural sketches, film stills and photographs to various explanatory figures and tables.

ISBN: 978-1-119-48252-9 • Paper • US\$15.95 • Aug 2018 • 115pp



BUILDING SURVEYING

**Building Performance Analysis**

Pieter de Wilde

Building Performance Analysis starts by introducing the subject of building performance: its key terms, definitions, history, and challenges. It then develops a theoretical foundation for the subject, explores the complexity of performance assessment, and the way that performance analysis impacts on actual buildings. In doing so, it attempts to answer the following questions: What is building performance? How can building performance be measured and analyzed? How does the analysis of building performance guide the improvement of buildings? And what can the building domain learn from the way performance is handled in other disciplines? This book will appeal to the building science community, both from industry and academia. It specifically targets advanced students in architectural engineering, building services design, building performance simulation and similar fields who hold an interest in ensuring that buildings meet the needs of their stakeholders.



ISBN: 978-1-119-34192-5 • Cloth • US\$135.00 • Jun 2018 • 640pp

CONSTRUCTION MANAGEMENT

**Effective Project Management**

Guidance and Checklists for Engineering and Construction

Garth G. F. Ward

This book provides the project manager with a quick reference and guide to tackling any situation or problem that they may be facing, without the need for extensive background research. It covers project initiation and execution, as well as the personal skills and techniques required to effectively manage projects. The text delivers a brief discussion of the essential principles of the specific topic concerned, followed by a check list of actions or activities that a project manager needs to ensure are complete. Some checklists comprise a simple 'tick list', but mostly they provide additional guidance and advice along with the actions required at specific stages of a project lifecycle. The book does not promulgate any specific project management methodology, promoting instead good project management practice.



ISBN: 978-1-119-46944-5 • Paper • US\$75.00 • Jul 2018 • 330pp

CONSTRUCTION: SUSTAINABILITY

**Building Urban Resilience through Change of Use**

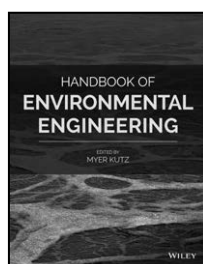
Sara J. Wilkinson & Hilde Remy

This comprehensive book explores the potential to change the character of cities with residential conversion of office space in order to withstand the negative effects of climate change. It investigates the nature and extent of sustainable conversion in a number of global cities, as well as the political, economic, social, technological, environmental, and legal drivers and barriers to successful conversion. The book also identifies the key lessons learned through international comparisons with cases in the UK, US, Australia, and The Netherlands. The book covers the benefits and aspects of sustainable conversion adaptation through the whole lifecycle from inception, planning, and design, to procurement, construction, and management and operational issues. It illustrates and quantifies, through empirical research, the changes that have been achieved or delivered in sustainable conversion adaptation. The book gives an overview of all aspects of performance characteristics and the conversion adaptation of existing buildings.



ISBN: 978-1-119-23142-4 • Cloth • US\$145.00 • Mar 2018 • 256pp

ENVIRONMENTAL ENGINEERING

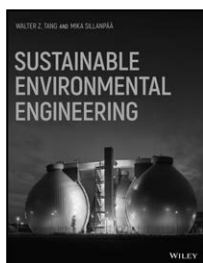
**Handbook of Environmental Engineering**

Myer Kutz

Written by noted experts, *Handbook of Environmental Engineering* offers a comprehensive guide to environmental engineers who desire to contribute to mitigating problems, such as flooding, caused by extreme weather events, protecting populations in coastal areas threatened by rising sea levels, reducing illnesses caused by polluted air, soil, and water from improperly regulated industrial and transportation activities, promoting the safety of the food supply. This important handbook enables environmental engineers to treat problems in systematic ways; discusses climate issues in ways useful for environmental engineers and covers up-to-date measurement techniques important in environmental engineering. It reviews current developments in environmental law for environmental engineers and includes information on water quality and wastewater engineering. Designed for use by practitioners, students, and researchers, *Handbook of Environmental Engineering* contains the most recent information to enable a clear understanding of major environmental issues.



ISBN: 978-1-118-71294-8 • Cloth • US\$TBA • Aug 2018 • 800pp



Sustainable Environmental Engineering

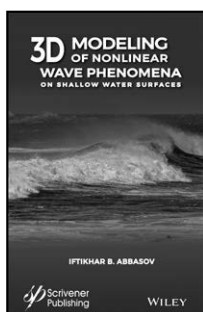
Walter Z. Tang & Mika Sillanpää



Sustainable Environmental Engineering (SEE) is to research, design, and build Environmental Engineering Infrastructure System (EEIS) in harmony with nature using life cycle cost analysis and benefit analysis and life cycle assessment and to protect human health and environments at minimal cost. The foundations of the SEE are the twelve design principles (TDPs) with three specific rules for each principle. The TDPs attempt to transform how environmental engineering could be taught by prioritizing six design hierarchies through six different dimensions. Six design hierarchies are prevention, recovery, separation, treatment, remediation, and optimization. Six dimensions are integrated system, material economy, reliability on spatial scale, resiliency on temporal scale, and cost effectiveness. In addition, the authors, two experts in the field, introduce major computer packages that are useful to solve real environmental engineering design problems.

ISBN: 978-1-119-02837-6 • Cloth • US\$149.95 • Aug 2018 • 512pp

HYDROLOGY (CIVIL ENGINEERING)



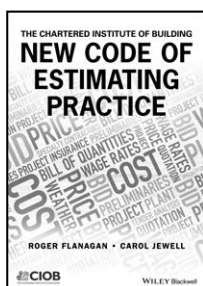
3D Modeling of Nonlinear Wave Phenomena on Shallow Water Surfaces

Iftikhar B. Abbasov

The work covers the problems of numerical simulation of the run-up of nonlinear surface gravity waves in shallow water, transformation of the surface waves for the 1D case, and models for the refraction of numerical modeling of the run-up of nonlinear surface gravity waves at beach approach of various slopes. 2D and 3D modeling of nonlinear surface gravity waves are based on Navier-Stokes equations. In 2D modeling the influence of the bottom of the coastal zone on flooding of the coastal zone during storm surges was investigated. Various stages of the run-up of nonlinear surface gravity waves are introduced and analyzed. The 3D modeling process of the run-up is tested for the coast protection work of the slope type construction. Useful for students and veteran engineers and scientists alike, this is the only book covering these important issues facing anyone working with coastal models and ocean, coastal, and civil engineering in this area.

ISBN: 978-1-119-48796-8 • Cloth • US\$194.95 • Feb 2018 • 276pp

QUANTITY SURVEYING & CONSTRUCTION ECONOMICS



New Code of Estimating Practice

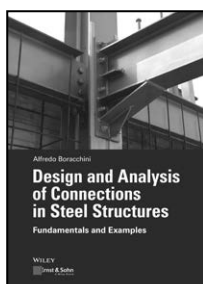
The Chartered Institute of Building, Roger Flanagan & Carol Jewell



Pricing and bidding for construction work is at the heart of every construction business, and in the minds of construction consultants' poor bids lead to poor performance and nobody wins. *New Code of Estimating Practice* examines the processes of estimating and pricing, providing best practice guidelines for those involved in procuring and pricing construction works, both in the public and private sectors. It embodies principles that are applicable to any project regardless of size or complexity. This authoritative guide has been completely rewritten to include much more contextual and educational material as well as the code of practice. It covers changes in estimating practice; the bidding process; the fundamentals in formulating a bid; the pre-qualification process; procurement options; contractual arrangements and legal issues; preliminaries; temporary works; cost estimating techniques; risk management; logistics; resource and production planning; computer-aided estimating; information and time planning; resource planning and pricing; preparation of an estimator's report; bid assembly and adjudication; pre-production planning and processes; and site production.

ISBN: 978-1-119-32946-6 • Paper • US\$95.00 • Mar 2018 • 224pp

STEEL CONSTRUCTION & BRIDGE ENGINEERING



Design and Analysis of Connections in Steel Structures Fundamentals and Examples

Alfredo Boracchini

The book introduces all the aspects needed for the safe and economic design and analysis of connections using bolted joints in steel structures. This is not treated according to any specific standard but making comparison among the different norms and methodologies used in the engineering practice, e.g. Eurocode, AISC, DIN, BS. Several examples are solved and illustrated in detail, giving the reader all the tools necessary to tackle also complex connection design problems. The book is introductory but also very helpful to advanced and specialist audiences because it covers a large variety of practice demands for connection design. Parts that are not taken to an advanced level are seismic design, welds, interaction with other materials (concrete, wood), and cold formed connections.

ISBN: 978-3-433-03122-3 • Paper • US\$80.00 • Aug 2018 • 338pp



Design and Analysis of Connections in Steel Structures

Fundamentals and Examples, eBook als PDF

Alfredo Boracchini (Previously Announced)

The book introduces all aspects needed for connection design and analysis in steel structures. This is treated making comparison among the methodologies used in the engineering practice, e.g. Eurocode, AISC, DIN, BS. With practice examples and details.

ISBN: 978-3-433-03226-8 • Paper • US\$110.00 • Aug 2018 • 352pp



Design of Composite Structures

Eurocode 4 - Design of Composite Steel and Concrete Structures Part 1-1 - General Rules and Rules for Buildings

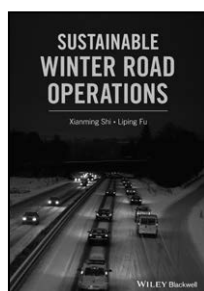
ECCS - European Convention for Constructional Steelwork

This book elucidates the design rules for composite structures according to Eurocodes 3 and 4. Numerous examples facilitate the application of the standards.

ISBN: 978-3-433-03008-0 • Paper • US\$75.00 • Aug 2018 • 350pp



TRANSPORTATION ENGINEERING



Sustainable Winter Road Operations

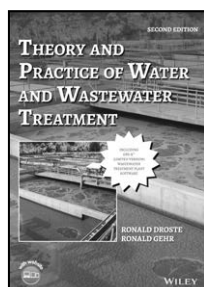
Xianming Shi & Liping Fu

Sustainable Winter Road Operations bridges the knowledge gaps, providing the first up-to-date, authoritative, single-source overview and guide to best practices in winter road operations that considers the triple bottom line of sustainability. With contributions from experts in the field from around the world, this book takes a holistic approach to the subject. The authors address the many negative impacts on regional economies and the environment of poorly planned and inadequate winter road operations, and they make a strong case for the myriad benefits of environmentally sustainable concepts and practices. Best practice applications of materials, processes, equipment, and associated technologies and how they can improve the effectiveness and efficiency of winter operations, optimize materials usage, and minimize cost, corrosion, and environmental impacts are all covered in depth.

ISBN: 978-1-119-18506-2 • Cloth • US\$195.00 • May 2018 • 512pp



WATER RESOURCES



Theory and Practice of Water and Wastewater Treatment

2nd Edition

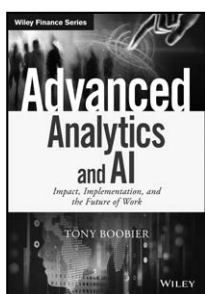
Ronald Droste & Ronald Gehr

This text, unlike most texts in this area, covers both water and wastewater treatment. It does not only address the physical/chemical treatment of water and wastewater, but also the biological treatment of water and wastewater, which again is rather unique for texts in this area. It has detailed coverage of the fundamentals: basic applied water chemistry, and applied microbiology. It then goes on to cover both physical/chemical and biological unit processes. It is the most current and comprehensive textbook available for the ever-evolving fields of water and wastewater treatment, covering the broad spectrum of technologies used in practice today, ranging from commonly used standards to the latest state of the art innovations that are absent from most existing texts. Both theory and design concepts are developed systematically, combined in a unified way, and are fully supported by comprehensive, illustrative examples.

ISBN: 978-1-119-31236-9 • Cloth • US\$TBA • Sep 2018 • 960pp



ARTIFICIAL INTELLIGENCE



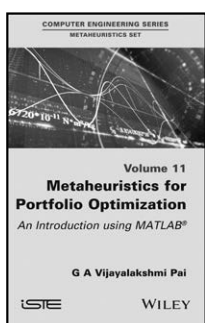
Advanced Analytics and AI

Impact, Implementation, and the Future of Work

Tony Boobier

Advanced Analytics and AI prepares business users for the era of cognitive analytics/artificial intelligence. Building on established texts and commentary, it specifically prepares you in terms of expectation, impact on personal roles, and responsibilities. It focuses on the specific impact on key industries (retail, financial services, utilities and media) and also on key professions (such as accounting, operational management, supply chain and risk management). It shows you how users interact with the system in natural language and explains how cognitive analysis/AI can source 'big data'. The book provides a roadmap for implementation and gets you up to speed now before you get left behind.

ISBN: 978-1-119-39030-5 • Cloth • US\$38.95 • May 2018 • 304pp



Metaheuristics for Portfolio Optimization

An Introduction using MATLAB®, Volume 11

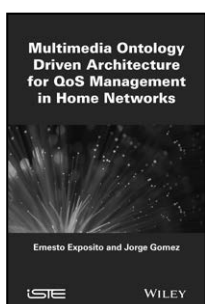
G. A. Vijayalakshmi Pai

The book is a monograph in the cross disciplinary area of Computational Intelligence in Finance and elucidates a collection of practical and strategic Portfolio Optimization models in Finance, that employ Metaheuristics for their effective solutions and demonstrates the results using MATLAB implementations, over live portfolios invested across global stock universes. The book has been structured in such a way that, even novices in finance or metaheuristics should be able to comprehend and work on the hybrid models discussed in the book.

ISBN: 978-1-78630-281-6 • Cloth • US\$144.95 • Feb 2018 • 316pp



COMPUTER ARCHITECTURE



Multimedia Ontology Driven Architecture for QoS Management in Home Networks

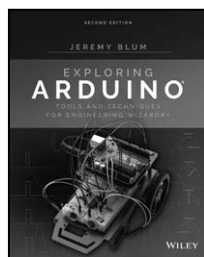
Ernesto Exposito & Jorge Gomez

Presenting an autonomic approach of QoS Management, *Multimedia Ontology Driven Architecture for QoS Management in Home Networks* focuses on QoS management for multimedia applications in the context of home networks. The book presents a QoS framework, taking into account user preferences as well as QoS application requirements. Written for computer science students and lecturers as well as IT professionals, the book shows how semantic models facilitate and drive QoS management while considering context information, such as user preferences.

ISBN: 978-1-84821-533-7 • Cloth • US\$84.95 • Aug 2018 • 192pp



COMPUTER HARDWARE

**Exploring Arduino****Tools and Techniques for Engineering Wizardry, 2nd Edition** (Previously Announced)

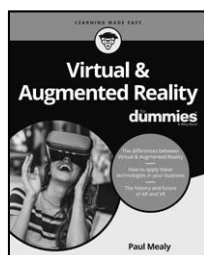
Jeremy Blum

Exploring Arduino makes electrical engineering and embedded software accessible. Learn step by step everything you need to know about electrical engineering, programming, and human-computer interaction through a series of increasingly complex projects. Arduino guru Jeremy Blum walks you through each build, providing code snippets and schematics that will remain useful for future projects. Projects are accompanied by downloadable source code, tips and tricks, and video tutorials to help you master Arduino. This new edition has been updated to cover the rapidly-expanding Arduino ecosystem, and includes new full-color graphics for easier reference. Servo motors and stepper motors are covered in richer detail, and you'll find more excerpts about technical details behind the topics covered in the book. Wireless connectivity and the Internet-of-Things are now more prominently featured in the advanced projects to reflect Arduino's growing capabilities. You'll learn how Arduino compares to its competition, and how to determine which board is right for your project. If you're ready to start creating, this book is your ultimate guide!

ISBN: 978-1-119-40537-5 • Paper • US\$34.95 • Jul 2018 • 408pp



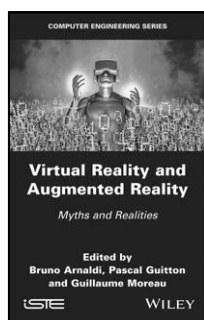
COMPUTER SCIENCE - GENERAL INTEREST

**Virtual & Augmented Reality For Dummies**

Paul Mealy

With VR and AR poised to become mainstream within the next few years, an accessible book to bring users up to speed on the subject is sorely needed — and that's where this handy reference comes in! Rather than focusing on a specific piece of hardware (HTC Vive, Oculus Rift, iOS ARKit) or software (Unity, Unreal Engine), *Virtual & Augmented Reality For Dummies* offers a broad look at both VR and AR, giving you a bird's eye view of what you can expect as they continue to take the world by storm. This book keeps you up-to-date on the pulse of this fast-changing technology; explores the many ways AR/VR are being used in fields such as healthcare, education, and entertainment; and includes interviews with designers, developers, and technologists currently working in the fields of VR and AR. Perfect for both potential content creators and content consumers, this book will change the way you approach and contribute to these emerging technologies.

ISBN: 978-1-119-48134-8 • Paper • US\$29.95 • Jun 2018 • 320pp

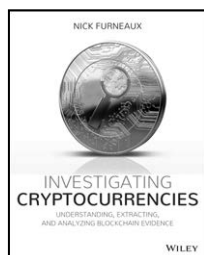
**Virtual Reality and Augmented Reality
Myths and Realities**

Bruno Arnaldi, Pascal Guitton & Guillaume Moreau

Virtual and Augmented Reality have existed for a long time but were stuck to the research world or to some large manufacturing companies. With the appearance of low-cost devices, it is expected a number of new applications, including for the general audience. This book aims at making a statement about those novelties as well as distinguishing them from the complex challenges they raise by proposing real use cases, replacing those recent evolutions through the VR/AR dynamic and by providing some perspective for the years to come.

ISBN: 978-1-78630-105-5 • Cloth • US\$164.95 • Mar 2018 • 370pp

COMPUTER SECURITY & CRYPTOGRAPHY

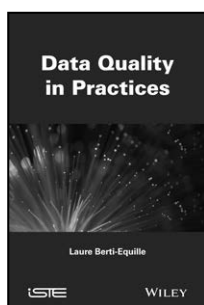
**Investigating Cryptocurrencies****Understanding, Extracting, and Analyzing Blockchain Evidence**

Nick Furneaux

Investigating Cryptocurrencies is the first book to help corporate, law enforcement, and other investigators understand the technical concepts and the techniques for investigating crimes utilizing the blockchain and related digital currencies such as Bitcoin and Ethereum. The book helps you to understand blockchain and transaction technologies; set up and run cryptocurrency accounts; build information about specific addresses; access raw data on blockchain ledgers; identify users of cryptocurrencies; extract cryptocurrency data from live and imaged computers and follow the money. With nearly \$150 billion in cryptocurrency circulating and \$3 billion changing hands daily, crimes committed with or paid for with digital cash are a serious business. Luckily, *Investigating Cryptocurrencies* shows you how to detect it and, more importantly, stop it in its tracks.

ISBN: 978-1-119-48058-7 • Paper • US\$59.95 • May 2018 • 350pp





Data Quality in Practices

Laure Berti-Equille

This is the first book to be published on the topic of data quality exploration, analytics and quantitative data cleaning. The author provides a sound technical grounding in the subject and shows readers, through examples and practical case studies, how to apply statistics and data mining techniques to their own data quality issues. An overview of data quality analytics and techniques for data quality improvement is provided, and the author also present an iterative framework for the detection, explanation and quantitative cleaning of data quality problems and anomalies. The book then goes on to describe the methods for data quality measuring, monitoring and improvement and explains how readers can identify the best strategies for cleaning their data and for automating the process of data quality exploration and remediation.

ISBN: 978-1-84821-570-2 • Cloth • US\$94.95 • Aug 2018



Gillenson's Database Management Systems Global Edition 3e

Mark L. Gillenson

This lean, focused text concentrates on giving students a clear understanding of database fundamentals while providing a broad survey of all the major topics of the field. The result is a text that is easily covered in one semester, and that only includes topics relevant to the database course. The author writes in a clear, friendly style that progresses step-by-step through all of the major database topics. Each chapter begins with a story about a real company's database application, and is packed with examples. When students finish the text, they will be able to immediately apply what they've learned in business.

ISBN: 978-1-119-45413-7 • Paper • US\$TBA • Apr 2018

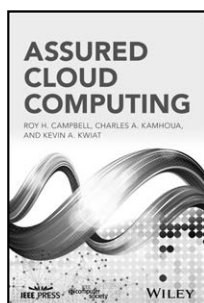


Social Media Data Mining and Analytics

Gabor Szabo & Oscar Boykin

Written by Dr. Gabor Szabo, a Senior Data Scientist at Twitter, and Dr. Oscar Boykin, a Software Engineer at Twitter, *Social Media Data Mining and Analytics* shows analysts how to use sophisticated techniques to mine social media data, obtaining the information they need to generate amazing results for their businesses. *Social Media Data Mining and Analytics* isn't just another book on the business case for social media. Rather, this book provides hands-on examples for applying state-of-the-art tools and technologies to mine social media - examples include Twitter, Facebook, Pinterest, Wikipedia, Reddit, Flickr, Web hyperlinks, and other rich data sources. In it, you will learn the four key characteristics of online services-users, social networks, actions, and content and the full data discovery lifecycle-data extraction, storage, analysis, and visualization. Szabo and Boykin wrote this book to provide businesses with the competitive advantage they need to harness the rich data that is available from social media platforms.

ISBN: 978-1-118-82485-6 • Paper • US\$44.95 • May 2018 • 432pp



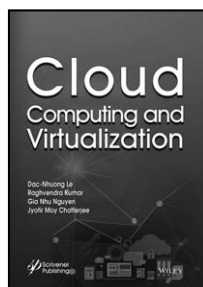
Assured Cloud Computing

Roy H. Campbell, Charles A. Kamhoua & Kevin A. Kwiat

This book offers readers a comprehensive suite of solutions for resolving many of the key challenges to achieving high levels of assurance in cloud computing. A survivable and distributed cloud-computing-based infrastructure can enable the configuration of any dynamic systems-of-systems that contain both trusted and partially trusted resources and services sourced from multiple organizations. To assure mission-critical computations and workflows that rely on such systems-of-systems it is necessary to ensure that a given configuration does not violate any security or reliability requirements. Furthermore, it is necessary to model the trustworthiness of a workflow or computation fulfillment to a high level of assurance. In presenting the substance of the work done by the ACC-UCoE, this book provides a vision for assured cloud computing illustrating how individual research contributions relate to each other and to the big picture of assured cloud computing. In addition, the book:

ISBN: 978-1-119-42863-3 • Cloth • US\$139.95 • Jun 2018 • 400pp





Cloud Computing and Virtualization

Dac-Nhuong Le, Raghvendra Kumar, Gia Nhu Nguyen & Jyotir Moy Chatterjee

The purpose of this book is first to study cloud computing concepts, security concern in clouds and data centers, live migration and its importance for cloud computing, the role of firewalls in domains with particular focus on virtual machine (VM) migration and its security concerns. The book then tackles design, implementation of the frameworks and prepares test-beds for testing and evaluating VM migration procedures as well as firewall rule migration. The book demonstrates how cloud computing can produce an effective way of network management, especially from a security perspective.

ISBN: 978-1-119-48790-6 • Cloth • US\$194.95 • Mar 2018 • 234pp



INFORMATION TECHNOLOGIES



Insider Threats

Information Systems, Web and Pervasive Computing Series, Volume 10

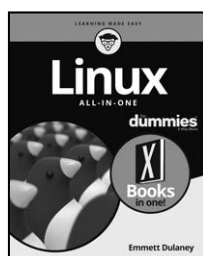
Pierre-Emmanuel Arduin

An information system may be regarded as an organized set of resources, both technological and human. Security should take this specificity into consideration in order to ensure an overall security of information systems. The security of information systems is usually tackled in a technological perspective. This book proposes to focus not only on information systems' security in a technological perspective, but also in a human, managerial and organizational perspective.

ISBN: 978-1-84821-972-4 • Cloth • US\$119.95 • Mar 2018 • 164pp



NETWORKING / LINUX



Linux All-in-One For Dummies

6th Edition

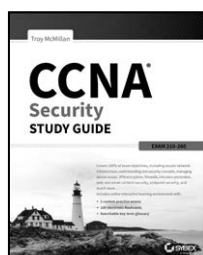
Emmett Dulaney

Inside, over 800 pages of Linux topics are organized into eight task-oriented mini books that help you understand all aspects of the latest OS distributions of the most popular open-source operating system in use today. Topics include getting up and running with basics, desktops, networking, internet services, administration, security, scripting, Linux certification, and more. This new edition of *Linux All-in-One For Dummies* has a unique focus on Ubuntu, while still including coverage of Debian, Red Hat, SuSE, and others. The market is looking for administrators, and part of the qualifications needed for job openings is the authentication of skills by vendor-neutral third parties (CompTIA/Linux Professional Institute) and that's something other books out there don't address. This book is for anyone getting familiar with the Linux OS, and those looking for test-prep content as they study for the level-1 Linux certification!

ISBN: 978-1-119-49046-3 • Paper • US\$39.95 • Jun 2018 • 816pp



NETWORKING / SECURITY



CCNA Security Study Guide

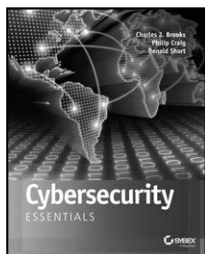
Exam 210-260

Troy McMillan

CCNA Security Study Guide offers comprehensive review for Exam 210-260. Packed with concise explanations of core security concepts, this book is designed to help you successfully prepare for the exam. Expert instruction guides you through critical concepts relating to secure network infrastructure, access management, VPN encryption, Firewalls, intrusion prevention and more, with complete coverage of the CCNA exam objectives. Practical examples allow you to apply your skills in real-world scenarios, helping you transition effectively from "learning" to "doing". You also get access to the Sybex online learning environment, featuring the tools you need to maximize your study time: key terminology and flash cards allow you to study anytime, anywhere, while chapter tests and practice exams help you track your progress and gauge your readiness along the way.

ISBN: 978-1-119-40993-9 • Paper • US\$49.95 • Jan 2018 • 384pp





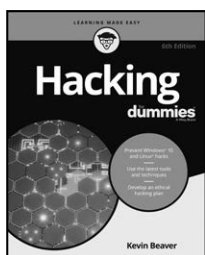
Cybersecurity Essentials

Charles J. Brooks, Philip Craig & Donald Short



Cybersecurity Essentials provides a comprehensive introduction to the field, with expert coverage of essential topics required for entry-level cybersecurity certifications. An effective defense consists of four distinct challenges: securing the infrastructure, securing devices, securing local networks, and securing the perimeter. Overcoming these challenges requires a detailed understanding of the concepts and practices within each realm. This book covers each challenge individually for greater depth of information, with real-world scenarios that show what vulnerabilities look like in everyday computing scenarios. Each part concludes with a summary of key concepts, review questions, and hands-on exercises, allowing you to test your understanding while exercising your new critical skills. Cybersecurity jobs range from basic configuration to advanced systems analysis and defense assessment. This book provides the foundational information you need to understand the basics of the field, identify your place within it, and start down the security certification path.

ISBN: 978-1-119-36239-5 • Paper • US\$39.95 • May 2018 • 450pp



Hacking For Dummies

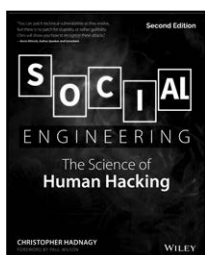
6th Edition

Kevin Beaver



In order to outsmart a would-be hacker, you need to get into the hacker's mindset. And with this book, thinking like a bad guy has never been easier. In *Hacking For Dummies*, expert author Kevin Beaver shares his knowledge on penetration testing, vulnerability assessments, security best practices, and every aspect of ethical hacking that is essential in order to stop a hacker in their tracks. Whether you're worried about your laptop, smartphone, or desktop computer being compromised, this no-nonsense book helps you learn how to recognize the vulnerabilities in your systems so you can safeguard them more diligently — with confidence and ease.

ISBN: 978-1-119-48547-6 • Paper • US\$29.95 • Jun 2018 • 408pp



Social Engineering

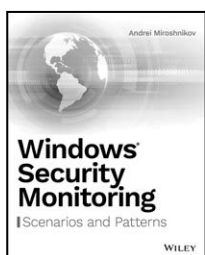
The Science of Human Hacking, 2nd Edition

Christopher Hadnagy



Social Engineering: The Science of Human Hacking reveals the craftier side of the hacker's repertoire — why hack into something when you could just ask for access? Undetectable by firewalls and antivirus software, social engineering relies on human fault to gain access to sensitive spaces; in this book, renowned expert Christopher Hadnagy explains the most commonly-used techniques that fool even the most robust security personnel, and shows you how these techniques have been used in the past. The way that we make decisions as humans affects everything from our emotions to our security. Hackers, since the beginning of time, have figured out ways to exploit that decision-making process and get you to take an action not in your best interest. This new Second Edition has been updated with the most current methods used by sharing stories, examples, and scientific study behind how those decisions are exploited.

ISBN: 978-1-119-43338-5 • Paper • US\$34.95 • May 2018 • 416pp



Windows® Security Monitoring

Scenarios and Patterns

Andrei Miroshnikov

Windows Security Monitoring goes beyond Windows admin and security certification guides to provide in-depth information for security professionals. Written by a Microsoft security program manager, DEFCON organizer and CISSP, this book digs deep into the underused tools that help you keep Windows systems secure. Expert guidance brings you up to speed on Windows auditing, logging, and event systems to help you exploit the full capabilities of these powerful native tools, while scenario-based instruction provides clear illustration of how these events unfold in the real world. From security monitoring and event detection to incident response procedures and best practices, this book provides detailed information on all of the security tools your Windows system has to offer. This book takes you deep into Windows' underutilized built-in security tools to help you beef up your monitoring, detection, and response processes. It detects anomalous events and implement centralized alerting infrastructure and digs into the native Windows tools that enable robust security measures.

ISBN: 978-1-119-39064-0 • Paper • US\$49.95 • Apr 2018 • 648pp





Mastering Windows Server 2016

Brian Svidergol, Vladimir Meloski, Byron Wright, Santos Martinez & Doug Bassett



Mastering Windows Server 2016 is a complete resource for IT professionals needing to get quickly up to date on the latest release. Designed to provide comprehensive information in the context of real-world usage, this book offers expert guidance through the new tools and features to help you get Windows Server 2016 up and running quickly. Straightforward discussion covers all aspects, including virtualization products, identity and access, automation, networking, security, storage and more, with clear explanations and immediately-applicable instruction. Find the answers you need, and explore new solutions as Microsoft increases their focus on security, software-defined infrastructure, and the cloud; new capabilities including containers and Nano Server, Shielded VMs, Failover Clustering, PowerShell, and more give you plenty of tools to become more efficient, more effective, and more productive. This book provides a comprehensive resource grounded in real-world application to help you get up to speed quickly.

ISBN: 978-1-119-40497-2 • Paper • US\$59.95 • May 2018 • 1000pp

OBJECT TECHNOLOGIES - JAVA



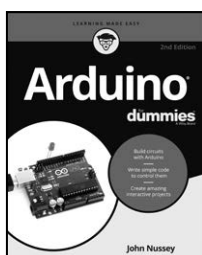
Concurrent, Real-Time and Distributed Programming in Java Threads, RTSJ and RMI

Badr Benmammar

This book provides an introduction to concurrent, real-time, distributed programming with Java object-oriented language support as an algorithm description tool. It describes in particular the mechanisms of synchronization (cooperative and competitive) and sharing of data (internal class, static variables) between threads in Java. He then discusses the use of Java for real-time applications. Consequently, a presentation of the RTSJ (Real Time Specification for Java) specification dedicated to the development of real-time applications in Java is also introduced in this book. Finally, a presentation of programming distributed in Java is presented in this book. We are particularly interested in communication using the TCP Sockets and high-level communication using Java Remote Method Invocation (RMI). The book also contains an annex which contains a practical set of application exercises in relation to the theme of the book. Knowledge of the Java language is a prerequisite for understanding the book.

ISBN: 978-1-78630-258-8 • Cloth • US\$119.95 • Feb 2018 • 176pp

PROGRAMMING & SOFTWARE DEVELOPMENT



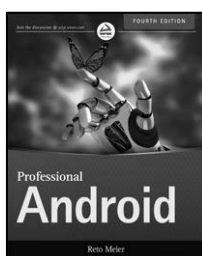
Arduino For Dummies

2nd Edition

John Nussey

Arduino For Dummies is a great place to start if you want to find out about Arduino and make the most of its incredible capabilities. It helps you become familiar with Arduino and what it involves, and offers inspiration for completing new and exciting projects. It covers the latest software and hardware currently on the market and includes updated examples and circuit board diagrams in addition to new resource chapters. The book offers simple examples to teach fundamentals needed to move onto more advanced topics and helps you grasp what's possible with this fantastic little board. Whether you're a teacher, student, programmer, hobbyist, hacker, engineer, designer, or scientist, get ready to learn the latest this new technology has to offer!

ISBN: 978-1-119-48954-2 • Paper • US\$26.95 • Aug 2018 • 408pp



Professional Android

4th Edition

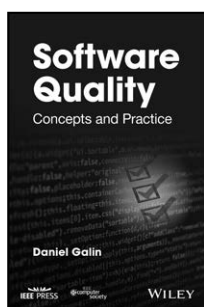
Reto Meier



Professional Android, 4th Edition shows developers how to leverage the latest features of Android to create robust and compelling mobile apps. This hands-on approach provides in-depth coverage through a series of projects, each introducing a new Android platform feature and highlighting the techniques and best practices that exploit its utmost functionality. The exercises begin simply, and gradually build into advanced Android development. Clear, concise examples show you how to quickly construct real-world mobile applications. This book is your guide to smart, efficient, effective Android development.

ISBN: 978-1-118-94952-8 • Paper • US\$49.95 • May 2018 • 984pp

SOFTWARE ENGINEERING STANDARDS



Software Quality Concepts and Practice

Daniel Galin

The book presents a comprehensive discussion on software quality issues and software quality assurance (SQA) principles and practices, and lays special emphasis on implementing and managing SQA. Primarily designed to serve three audiences; universities and college students, vocational training participants, and software engineers and software development managers, the book may be applicable to all personnel engaged in a software projects. The book delves into SQA issues, going beyond the classic boundaries of custom-made software development to also cover in-house software development, subcontractors, and readymade software. Providing comprehensive coverage on multifarious SQA subjects, including topics, hardly explored till in SQA texts. A systematic presentation of the SQA function and its tasks: establishing the SQA processes, planning, coordinating, follow-up, review and evaluation of SQA processes. Each chapter includes a real-life mini case study, examples, a summary, selected bibliography, review questions and topics for discussion. The book is also supported by an Instructor's Guide.

ISBN: 978-1-119-13449-7 • Cloth • US\$124.95 • Mar 2018 • 720pp



WEB SITE DEVELOPMENT

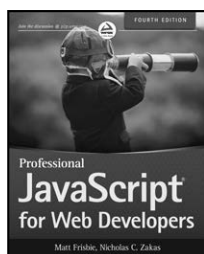


Front-end Development with ASP.NET Core, Angular, and Bootstrap

Simone Chiaretta

Front-End Development with ASP.NET Core, Angular, and Bootstrap is the professional's guide to fast, responsive web development. Utilizing the most popular combination of web technologies for Microsoft developers, this guide provides the latest best practices and ASP.NET MVP guidance to get you up to speed quickly. The newest ASP.NET — now called ASP.NET Core — is leaner, easier to use, and less bound to the operating system and IDE, giving you the perfect opportunity to leverage third-party frameworks and libraries that provide functionalities not native to ASP.NET Core and Visual Studio. This book shows you how to integrate ASP.NET Core with Angular, Bootstrap, and similar frameworks, with a bit of jQuery Mobile, Nuget, continuous deployment, Bower dependencies, and Gulp/Grunt build systems, including development beyond Windows on Mac and Linux. With clear, concise instruction and expert insight, this guide is an invaluable resource for meeting the demands of modern web development.

ISBN: 978-1-119-18131-6 • Paper • US\$49.95 • Feb 2018 • 288pp



Professional JavaScript for Web Developers

4th Edition (Previously Announced)

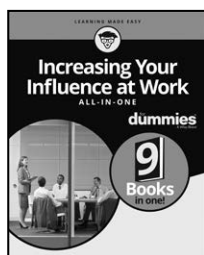
Matt Frisbie & Nicholas C. Zakas

Professional JavaScript for Web Developers is the essential guide to next-level JavaScript development. Written for intermediate-to-advanced programmers, this book jumps right into the technical details to help you clean up your code and become a more sophisticated JavaScript developer. From JavaScript-specific object-oriented programming and inheritance, to combining JavaScript with HTML and other markup languages, expert instruction walks you through the fundamentals and beyond. This new fourth edition has been updated to cover ECMAScript 6 and 7 (also known as ES2015 and ES2016) and the major re-imagination and departure from ES 5.1; new frameworks and libraries, new techniques, new testing tools, and more are explained in detail for the professional developer, with a practical focus that helps you put your new skills to work on real-world projects.

ISBN: 978-1-119-36644-7 • Paper • US\$44.95 • Jun 2018 • 900pp



INTERNET GENERAL



Increasing Your Influence at Work All-in-One For Dummies

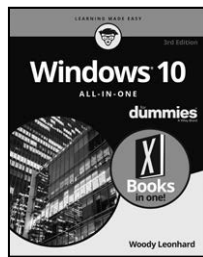
Dummies Press

Influence is a timeless topic for business leaders and others in positions of power, but the world has evolved to the point where everyone needs these skills. No matter your job, role, rank, or function, if you want to get things done you need to know how to influence up, down, across, and outside the organization. *Increasing Your Influence at Work All-in-One For Dummies* shows you how to contribute more fully to important decisions, resolve conflicts more easily, lead and manage more effectively, and much more. Plus, you'll discover how to develop the most important attributes necessary for influence — trustworthiness, reliability, and assertiveness — and find out how to move beyond. The book includes easy-to-apply information for influencing managers, peers, and subordinates and shows you how to build trust with your co-workers and cultivate reliability through consistency and being personal.

ISBN: 978-1-119-48906-1 • Paper • US\$29.95 • Jun 2018 • 600pp



OPERATING SYSTEMS / MICROSOFT WINDOWS



Windows 10 All-in-One For Dummies

3rd Edition

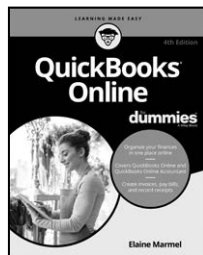
Woody Leonhard

Are you ready to become the resident Windows 10 expert in your office? Look no further! This book is your one-stop shop for everything related to the latest updates to this popular operating system. With the help of this comprehensive resource, you'll be able to back up your data and ensure the security of your network, use Universal Apps to make your computer work smarter, and personalize your Windows 10 experience. Windows 10 powers more than 400 million devices worldwide — and now you can know how to make it work better for you with *Windows 10 All-in-One For Dummies*. You'll find out how to personalize Windows, use the universal apps, control your system, secure Windows 10, and so much more.

ISBN: 978-1-119-48483-7 • Paper • US\$39.95 • Jun 2018 • 1008pp



OTHER SOFTWARE (NON-MICROSOFT)



QuickBooks Online For Dummies

4th Edition

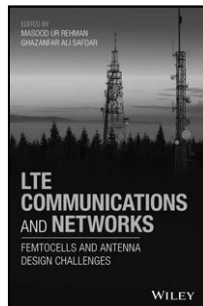
Elaine Marmel

Searching for a cloud-based solution for your small business? Master the fundamentals of QuickBooks Online, the world's most popular software for fast and easy mobile accounting! *QuickBooks Online For Dummies* teaches about building the perfect budget, processing payroll, simplifying tax return preparation, creating invoices and credit memos, managing inventory, sharing your data with your accountant, generating income statements and financial reports, and balancing accounts — all with quick and easy access to this cloud-based software through an internet connection. QuickBooks Online brings this software to your browser for a monthly fee, allowing you access to its tools from any device with an internet connection. For the money, it provides a good value and a reasonable assortment of features to meet the needs of small business owners looking to make their accounting tasks easier and more manageable. And now you too can benefit from all it has to offer!

ISBN: 978-1-119-47393-0 • Paper • US\$29.95 • Mar 2018 • 408pp



ANTENNAS & PROPAGATION



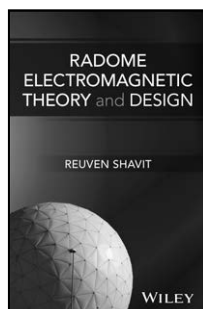
LTE Communications and Networks

Femtocells and Antenna Design Challenges

Masood Ur Rehman & Ghazanfar Ali Safdar

LTE Communications and Networks fills a gap in the literature to offer a comprehensive review of the most current developments of LTE Femtocells and antennas and explores their future growth. With contributions from a group of experts that represent the fields of wireless communications and mobile communications, signal processing and antenna design, this text identifies technical challenges and presents recent results related to the development, integration and enhancement of LTE systems in portable devices. The authors examine topics such as application of cognitive radio with efficient sensing mechanisms, interference mitigation and power management schemes for the LTE systems. They also provide a comprehensive account of design challenges and approaches, performance enhancement techniques and effects of user's presence on the LTE antennas. *LTE Communications and Networks* also highlights the promising technologies of multiband, multimode and reconfigurable antennas for efficient design of portable LTE devices.

ISBN: 978-1-119-38522-6 • Cloth • US\$135.00 • Jun 2018 • 360pp



Radome Electromagnetic Theory and Design

Reuven Shavit

Radome Electromagnetic Theory and Design explores the theoretical tools and methods required to design radomes that are fully transparent to the electromagnetic energy transmitted or received by the enclosed antenna. A radome is a weatherproof and camouflaged enclosure that protects the enclosed radar or communication antenna. Radomes are typically used on a fixed or moving platform such as an aircraft, ship or missile. The author — a noted expert in the field — examines the theoretical methods that apply to all type of radomes: planar, conformal, airborne and ground based. The text offers a description of the various measurement methods that characterise the electrical parameters of a radome, and discusses their merits in terms of accuracy. This groundbreaking book brings together in one volume all the necessary theoretical tools to design radomes.

ISBN: 978-1-119-41079-9 • Cloth • US\$165.00 • Jun 2018 • 328pp



AUDIO & SPEECH PROCESSING & BROADCASTING



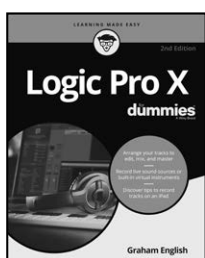
High Performance Loudspeakers

Optimising High Fidelity Loudspeaker Systems, 7th Edition

Martin Colloms

This *Seventh Edition* of the highly successful guide to the design and specifications of high quality loudspeakers and loudspeaker systems addresses the issue of where higher performance and sound quality is required and shows how the numerous considerations — including application, target price, size, aspiration and particular market — lead to a complex mix of design and engineering decisions. The book has also been substantially revised to reflect the many changes in the technology of loudspeakers and includes two brand new chapters — one covering ultra-compact systems and DSP integration, and the second providing details of a worked example of the loudspeaker systems design process. It offers a complete overview of the technology. Thoroughly updated with new content to reflect the latest advances in the field while retaining the firm theoretical foundation of previous editions, it presents a designer's point of view of the field, helping to equip both amateur enthusiasts and academically trained graduates with industry practice.

ISBN: 978-1-118-41353-1 • Paper • US\$99.99 • Aug 2018 • 552pp



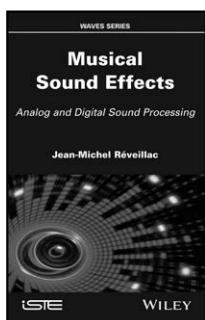
Logic Pro X For Dummies

2nd Edition

Graham English

Logic Pro X offers Mac users the tools and power they need to create recordings ready to share with the world. This book provides the know-how for navigating the interface, tweaking the settings, picking the sounds, and all the other tech tasks that get in the way of capturing the perfect take. Written by a Logic Pro X trainer who's used the software to further his own music career, *Logic Pro X For Dummies* cuts back on the time needed to learn the software and allows for more time making amazing recordings. A favorite among Logic Pro X beginners, this book is updated to reflect the ongoing changes added to enhance Logic Pro X's recording power.

ISBN: 978-1-119-50620-1 • Paper • US\$29.95 • Aug 2018 • 408pp



Musical Sound Effects

Analog and Digital Sound Processing

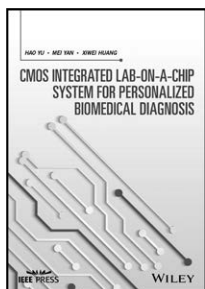
Jean-Michel Reveillac

For decades performers, instrumentalists, composers, technicians and sound engineers continue to manipulate sound material. They are trying with more or less success to create, to innovate, improve, enhance, restore or modify the musical message. The sound of distorted guitar of Jimi Hendrix, Pierre Henry's concrete music, Pink Floyd's rock psychedelic, Kraftwerk's electronic music, Daft Punk and rap T-Pain, have let emerge many effects: reverb, compression, distortion, auto-tune, filter, chorus, phasing, etc. The aim of this book is to introduce and explain these effects and sound treatments by addressing their theoretical and practical aspects.

ISBN: 978-1-78630-131-4 • Cloth • US\$144.95 • Feb 2018 • 376pp



CIRCUIT THEORY & DESIGN



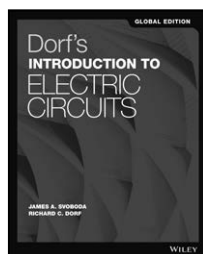
CMOS Integrated Lab-on-a-chip System for Personalized Biomedical Diagnosis

Hao Yu, Mei Yan & Xiwei Huang

A rapidly aging population demands rapid, cost-effective, flexible, personalized diagnostics. Existing systems tend to fall short in one or more capacities, making the development of alternatives a priority. *CMOS Integrated Lab-on-a-Chip System for Personalized Biomedical Diagnosis* provides insight toward the solution, with a comprehensive, multidisciplinary reference to the next wave of personalized medicine technology. From CMOS fundamentals to end-user applications, all aspects of CMOS sensors are covered, with frequent diagrams and illustrations that clarify complex structures and processes. Detailed yet concise, and designed to help students and engineers develop smaller, cheaper, smarter lab-on-a-chip systems, this invaluable reference provides clarity and insight on the design of lab-on-a-chip personalized biomedical sensors and systems. It features concise analyses of the integration of microfluidics and micro-electro-mechanical systems and highlights the use of compressive sensing, super-resolution, and machine learning through the use of smart SoC processing.

ISBN: 978-1-119-21832-6 • Cloth • US\$130.00 • Apr 2018 • 304pp





Dorf's Introduction to Electric Circuits

Global Edition, 9th Edition

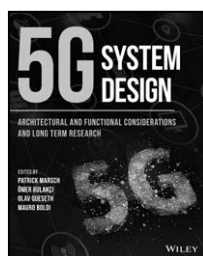
James A. Svoboda & Richard C. Dorf

Dorf's Introduction to Electric Circuits, Global Edition, is designed for a one- to -three term course in electric circuits or linear circuit analysis. The book endeavors to help students who are being exposed to electric circuits for the first time and prepares them to solve realistic problems involving these circuits. Abundant design examples, design problems, and the How Can We Check feature illustrate the text's focus on design. The Global Edition continues the expanded use of problem-solving software such as PSpice and MATLAB.

ISBN: 978-1-119-45415-1 • Paper • US\$218.95 • Feb 2018 • 912pp



COMMUNICATION TECHNOLOGY



5G System Design

Architectural and Functional Considerations and Long Term Research

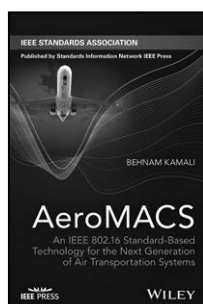
Patrick Marsch, Omer Bulakci & Olav Queseth

This book provides a comprehensive overview of the latest research and standardization progress towards the 5th generation (5G) of mobile communications technology and beyond. It covers a wide range of topics from 5G use cases and their requirements, to spectrum, 5G end-to-end (E2E) system architecture including core network (CN), transport network (TN) and radio access network (RAN) architecture, network slicing, security and network management. It further dives into the detailed functional design and the evaluation of different 5G concepts, and provides details on planned trials and pre-commercial deployments across the globe. While the book naturally captures the latest agreements in 3rd generation partnership project (3GPP) new radio (NR) Release 15, it goes significantly beyond this by describing the likely developments towards the final 5G system that will ultimately utilize a wide range of spectrum bands and address all envisioned 5G use cases and meet or exceed the International Mobile Telecommunications (IMT) for year 2020 and beyond (IMT-2020) requirements.

ISBN: 978-1-119-42512-0 • Cloth • US\$145.00 • Apr 2018 • 608pp



COMMUNICATION TECHNOLOGY - NETWORKS



AeroMACS

An IEEE 802.16 Standard-Based Technology for the Next Generation of Air Transportation Systems

Behnam Kamali

AeroMACS: An IEEE 802.16 Standard-Based Technology for the Next Generation of Air Transportation Systems covers topics such as Orthogonal Frequency Division Multiple Access (OFDMA), coded OFDMA, scalable OFDMA, Adaptive Modulation-Coding (AMC), Multiple-Input Multiple-Output (MIMO) systems, Error Control Coding (ECC) and Automatic Repeat Request (ARQ) techniques, Time Division Duplexing (TDD), Inter-Application Interference (IAI), and so on. It also looks at future trends and developments of AeroMACS networks as they are deployed across the world, focusing on concepts that may be applied to improve the future capacity. In addition, this text discusses the challenges posed by complexities of airport radio channels as well as those pertaining to broadband transmissions and examines physical layer (PHY) and Media Access Control (MAC) sublayer protocols and signal processing techniques of AeroMACS inherited from IEEE 802.16 standard and WiMAX networks.

ISBN: 978-1-119-28110-8 • Cloth • US\$149.95 • Aug 2018 • 700pp



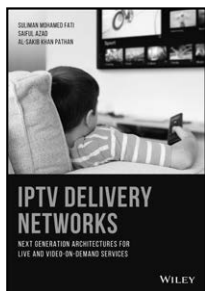
Autonomic Intelligence Evolved Cooperative Networking

Michal Wodczak

Autonomic Intelligence Evolved Cooperative Networking offers a comprehensive advancement of the state-of-the-art technological developments in the fields of Cooperative Networking and Autonomic Computing. Based on his track record in industrial standardisation, as well as academic and applied research, the author presents a fully-fledged Autonomic Cooperative Networking Architectural Model that encompasses the relevant workings of both the Layers of the Open Systems Interconnection Reference Model and the Levels of the Generic Autonomic Network Architecture.

ISBN: 978-1-118-32541-4 • Cloth • US\$130.00 • Mar 2018 • 288pp





IPTV Delivery Networks

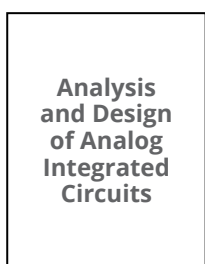
Next Generation Architectures for Live and Video-on-Demand Services

Suliman Mohamed Fati, Saiful Azad & Al-Sakib Khan Pathan

IPTV Delivery Networks is an important resource that offers an in-depth discussion to the IPTV (Internet Protocol Television) delivery networks for both live and on demand IPTV services. This important book also includes a review of the issues and challenges surrounding the delivery of IPTV over various emerging networking and communications technologies. The authors — an international team of experts — introduce a framework for delivery network applicable for live and video-on-demand services. They review the fundamental issues of IPTV delivery networks and explore the QoS (Quality of Service) issue for IPTV delivery networks that highlights the questions of security and anomaly detection as related to quality. *IPTV Delivery Networks* also contains a discussion of the mobility issues and next-generation delivery networks. This guide captures the latest available and usable technologies in the field and explores the technologies related to delivery process for both live (real time) and on demand services in highly accessible terms.

ISBN: 978-1-119-39791-5 • Cloth • US\$125.00 • Jun 2018 • 392pp

COMPONENTS & DEVICES



Analysis and Design of Analog Integrated Circuits

6th Edition International Student Version

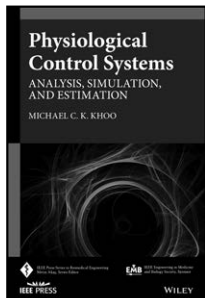
Paul R. Gray, Paul J. Hurst & Stephen H. Lewis

This Sixth Edition of *Analysis and Design of Analog Integrated Circuits* provides a comprehensive treatment of analog integrated circuit analysis and design starting from the basics and through current industrial practices. The authors combine bipolar, CMOS and BiCMOS analog integrated-circuit design into a unified treatment that stresses their commonalities and highlights their differences. Coverage of the material provides valuable insights into the relative strengths and weaknesses of these important technologies.

ISBN: 978-1-118-32261-1 • Paper • US\$TBA • Apr 2018 • 896pp



CONTROL SYSTEMS TECHNOLOGY



Physiological Control Systems

Analysis, Simulation, and Estimation, 2nd Edition

Michael C. K. Khoo

The second edition of *Physiological Control Systems* offers an updated and comprehensive resource that reviews the fundamental concepts of classical control theory and how engineering methodology can be applied to obtain a quantitative understanding of physiological systems. The revised text also contains more advanced topics that feature applications to physiology of nonlinear dynamics, parameter estimation methods, and adaptive estimation and control. The author — a noted expert in the field — includes a wealth of worked examples that illustrate key concepts and methodology and offers in-depth analyses of selected physiological control models that highlight the topics presented. The author discusses the most noteworthy developments in system identification, optimal control, and nonlinear dynamical analysis and targets recent bioengineering advances. Designed to be a practical resource, the text includes guided experiments with simulation models (using Simulink/Matlab). *Physiological Control Systems* focuses on common control principles that can be used to characterize a broad variety of physiological mechanisms.

ISBN: 978-1-119-05533-4 • Cloth • US\$134.95 • May 2018 • 456pp



ELECTRICAL ENGINEERING - DISPLAYS



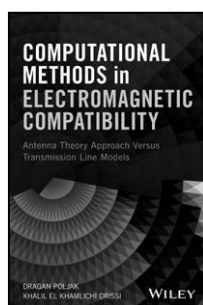
Flat Panel Display Manufacturing

Jun Souk, Shinji Morozumi, Fang-Chen Luo & Ion Bita

This book provides a broad overview of the manufacturing of flat panel displays, with a particular emphasis on the display systems at the forefront of the current mobile device revolution. It is structured to cover a broad spectrum of topics within the unifying theme of display systems manufacturing. An important theme of this book is treating displays as systems, which expands the scope beyond the technologies and manufacturing of traditional display panels (LCD and OLED) to also include key components for mobile device applications, such as flexible OLED, thin LCD backlights, as well as the manufacturing of display module assemblies. It fills an important gap in the current book literature describing the state of the art in display manufacturing for today's displays, and looks to create a reference the development of next generation displays.

ISBN: 978-1-119-16134-9 • Cloth • US\$135.00 • Aug 2018 • 352pp

ELECTROMAGNETIC COMPATIBILITY

**Computational Method in Electromagnetic Compatibility**

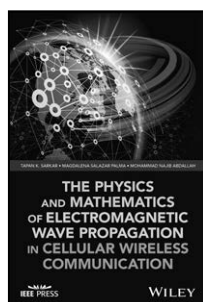
Dragan Poljak PhD & Khalil E. Drissi



Computational Method in Electromagnetic Compatibility offers a review of the most recent advances in computational electromagnetics. The authors — noted experts in the field — examine similar problems by taking different approaches related to antenna theory models and transmission line methods. They discuss various solution methods related to boundary integral equation techniques and finite difference techniques. The topics covered are related to realistic antenna systems including antennas for air traffic control or ground penetrating radar antennas; grounding systems (such as grounding systems for wind turbines); biomedical applications of electromagnetic fields (such as transcranial magnetic stimulation); and much more. The text features a number of illustrative computational examples and a reference list at the end of each chapter. The book is grounded in a rigorous theoretical approach and offers mathematical details of the formulations and solution methods. This important text provides a trade-off between a highly efficient transmission line approach and antenna theory models providing analysis of high frequency and transient phenomena.

ISBN: 978-1-119-33717-1 • Cloth • US\$129.95 • Apr 2018 • 432pp

ELECTROMAGNETIC THEORY

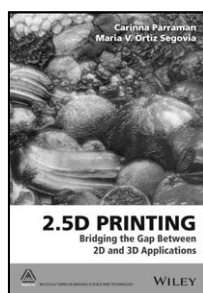
**The Physics and Mathematics of Electromagnetic Wave Propagation in Cellular Wireless Communication**

Tapan K. Sarkar, Magdalena Salazar-Palma & Mohammad Najib Abdallah

The Physics and Mathematics of Electromagnetic Wave Propagation in Cellular Wireless Communication describes the electromagnetic principles for designing a cellular wireless system and includes the subtle electromagnetic principles that are often overlooked in designing such a system. This important text explores both the physics and mathematical concepts used in deploying antennas for transmission and reception of electromagnetic signals and examines how to select the proper methodology from a wide range of scenarios. In this much-needed guide, the authors — noted experts in the field — explore the principle of electromagnetics as developed through the Maxwellian principles and describe the properties of an antenna in the frequency domain. The text also includes a review of the characterization of propagation path loss in a cellular wireless environment and examines ultrawideband antennas and the mechanisms of broadband transmission of both power and information. Written for engineers, researchers, and educators who are or plan to work in the field, the text offers an essential resource for understanding the principles underpinning wireless communications.

ISBN: 978-1-119-39311-5 • Cloth • US\$119.95 • Jul 2018 • 392pp

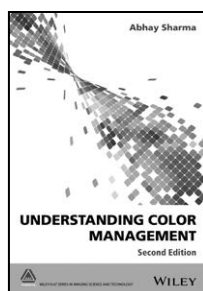
IMAGING SYSTEMS & TECHNOLOGY

**2.5D Printing****Bridging the Gap Between 2D and 3D Applications**

Carinna Parraman & Maria V. Ortiz Segovia

2.5D Printing: Bridging the Gap Between 2D and 3D Applications examines the relationship between two- and three-dimensional printing and explores the current ideas, methods, and applications. It provides insights about the diversity of our material culture and heritage and how this knowledge can be used to design and develop new methods for texture printing. The authors review the evolving research and interest in working towards developing methods to: capture, measure and model the surface qualities of 3D and 2D objects, represent the appearance of surface, material and textural qualities, and print or reproduce the material and textural qualities. The text reflects information on the topic from a broad range of fields including science, technology, art, design, conservation, perception, and computer modelling. *2.5D Printing: Bridging the Gap Between 2D and 3D Applications* provides a survey of traditional methods of capturing 2.5D through painting and sculpture, and how the human perception is able to judge and compare differences.

ISBN: 978-1-118-96730-0 • Cloth • US\$125.00 • Aug 2018 • 264pp

**Understanding Color Management****2nd Edition**

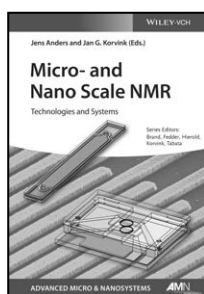
Abhay Sharma



Understanding Color Management, 2nd Edition explains the basics of color science as needed to understand color profiling software, color measuring instruments, and software applications, such as Adobe Photoshop and proofing RIPs. It also serves as a practical guide to International Color Consortium (ICC) profiles describing procedures for managing color with digital cameras, LCD displays, inkjet proofers, digital presses and web browsers and tablets. Updates since the first edition include new chapters on iPads, tablets and smartphones; home-cinema projection systems, as well as, with the industrial user in mind, new additional chapters on large-format inkjet for signage and banner printing, flexography, xerography and spot color workflows. Key features include managing color in digital cameras with Camera Raw and DNG; step-by-step approach to using color management in Adobe Photoshop CC; detailed explanation of M0, M1, M2 instrument measurement modes; and testing of low cost, iPhone color measuring instruments.

ISBN: 978-1-119-22363-4 • Cloth • US\$115.00 • Aug 2018 • 376pp

MEMS AND NANOELECTRONICS



Micro- and Nano Scale NMR Technologies and Systems

Jens Anders & Jan G. Korvink

This must-have book is the first self-contained summary of recent developments in the field of microscale nuclear magnetic resonance hardware, covering the entire technology from miniaturized detectors, the signal processing chain, and detection sequences. Chapters cover the latest advances in interventional NMR and implantable NMR sensors, as well as in using CMOS technology to manufacture miniaturized, highly scalable NMR detectors for NMR microscopy and high-throughput arrays of NMR spectroscopy detectors.

ISBN: 978-3-527-34056-9 • Cloth • US\$215.00 • Jun 2018 • 500pp



MOBILE & WIRELESS COMMUNICATIONS

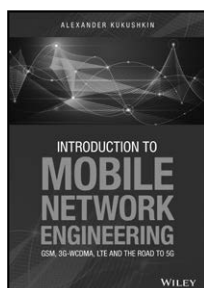


Internet of Things A to Z Technologies and Applications

Qusay F. Hassan

This book provides holistic coverage of the Internet of things (IoT) model. This includes concepts and enabling technologies as well as some advanced topics. In addition, the book includes chapters on some popular areas that integrate IoT concepts and technologies in their applications. The author discusses recent development and emerging trends in the IoT, and also presents innovative applications and case studies. Main security and privacy challenges, both for individuals and organizations, are also explored. Moreover, the book includes detailed chapters on emerging applications. This book meets a critical need for up-to-date information on IoT concepts, technologies, and emerging application domains.

ISBN: 978-1-119-45674-2 • Cloth • US\$149.95 • May 2018 • 688pp

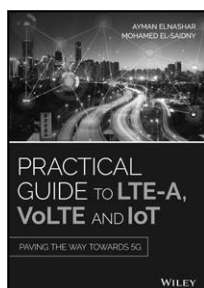


Introduction to Mobile Network Engineering GSM, 3G-WCDMA, LTE and the Road to 5G

Alexander Kukushkin

Introduction to Mobile Network Engineering: GSM, 3G-WCDMA, LTE and the Road to 5G covers the types of Mobile Network by Multiple Access Scheme; the cellular system; radio propagation; mobile radio channel; radio network planning; EGPRS - GPRS/EDGE; Third Generation Network (3G), UMTS; High Speed Packet data access (HSPA); 4G-Long Term Evolution (LTE) system; LTE-A; and Release 15 for 5G. Written as a modified and expanded set of lectures on wireless engineering taught by the author, *Introduction to Mobile Network Engineering: GSM, 3G-WCDMA, LTE and the Road to 5G* is an ideal text for post-graduate and graduate students studying wireless engineering, and industry professionals requiring an introduction or refresher to existing technologies. Written at a level that enables readers to understand principles of radio network deployment and operation, it is fully illustrated with tables, figures, photographs, working examples with problems and solutions, and section summaries highlighting the key features of each technology described.

ISBN: 978-1-119-48417-2 • Cloth • US\$130.00 • Aug 2018 • 350pp



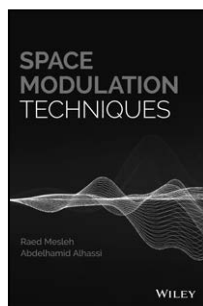
Practical Guide to LTE-A, VoLTE and IoT Paving the Way Towards 5G

Ayman Elnashar & Mohamed El-Saidny

This book is a practical guide to the design, deployment, and performance of LTE-A, VoLTE/IMS and IoT. A comprehensive practical performance analysis for VoLTE is conducted based on field measurement results from live LTE networks. Also, it provides a comprehensive introduction to IoT and 5G evolutions. Practical aspects and best practice of LTE-A/IMS/VoLTE/IoT are presented. Practical aspects of LTE-Advanced features are presented. In addition, LTE/LTE-A network capacity dimensioning and analysis are demonstrated based on live LTE/LTE-A networks KPIs. A comprehensive foundation for 5G technologies is provided including massive MIMO, eMBB, URLLC, mMTC, NGCN and network slicing, cloudification, virtualization and SDN. *Practical Guide to LTE-A, VoLTE and IoT: Paving the Way Towards 5G* can be used as a practical comprehensive guide for best practices in LTE/LTE-A/VoLTE/IoT design, deployment, performance analysis and network architecture and dimensioning. It offers tutorial introduction on LTE-A/IoT/5G networks, enabling the reader to use this advanced book without the need to refer to more introductory texts.

ISBN: 978-1-119-06330-8 • Cloth • US\$135.00 • May 2018 • 456pp





Space Modulation Techniques

Raed Mesleh & Abdelhamid Alhasssi

This book focuses on the concept of space modulation techniques (SMTs), and covers those emerging high data rate wireless communication techniques. The book discusses the advantages and disadvantages of SMTs along with their performance. A general framework for analyzing the performance of SMTs is provided and used to detail their performance over several generalized fading channels. The book also addresses the transmitter design of these techniques with the optimum number of hardware components and the use of these techniques in cooperative and mm-Wave communications. The book provides readers with the expertise of the inventors of space modulation techniques (SMTs) and analyzes error performance, capacity performance, and system complexity. It discusses practical implementation of SMTs and studies SMTs with cooperative and mm-Wave communications and explores and compares MIMO schemes. This is an ideal book for professional and academic readers that are active in the field of SMT MIMO systems.

ISBN: 978-1-119-37565-4 • Cloth • US\$134.95 • Jun 2018 • 320pp



Switch/Router Architectures

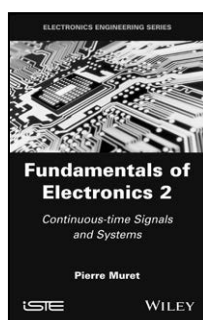
Shared-Bus and Shared-Memory Based Systems

James Aweya

This book delves into the inner workings of router and switch design in a comprehensive manner that is accessible to a broad audience. The author discusses use of bus versus shared-memory for communication within a design, and also covers Quality of Service (QoS) mechanisms and configuration tools. Written in a simple style and language to allow readers to easily understand and appreciate the material presented, *Switch/Router Architectures: Shared-Bus and Shared-Memory Based Systems* discusses the design of multilayer switches — starting with the basic concepts and on to the basic architectures. It describes the evolution of multilayer switch designs and highlights the major performance issues affecting each design. It addresses the need to build faster multilayer switches and examines the architectural constraints imposed by the various multilayer switch designs. The book also discusses design issues including performance, implementation complexity, and scalability to higher speeds.

ISBN: 978-1-119-48615-2 • Cloth • US\$124.95 • May 2018 • 352pp

POWER ELECTRONICS



Fundamentals of Electronics 2

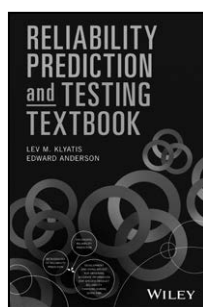
Continuous-time Signals and Systems

Pierre Muret

This book presents a synthesis of Electronics through keynotes which are substantiated in three volumes. The first one comprises four chapters devoted to elementary devices, i.e. diodes, bipolar transistors and related devices, field effect transistors and amplifiers. In each of one, device physics, non-linear and linearized models, and applications are studied. The second volume is devoted to systems in the continuous time regime and contains two chapters: one describes different approaches to the transfer function concept and applications, and the following deals with the quadripole properties, filtering and filter synthesis. The third volume presents the various aspects of sampling systems and quantized level systems in the two last chapters.

ISBN: 978-1-78630-182-6 • Cloth • US\$TBA • Feb 2018 • 258pp

QUALITY & RELIABILITY



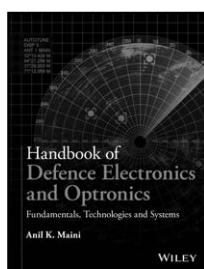
Reliability Prediction and Testing Textbook

Lev M. Klyatis & Edward Anderson

This textbook reviews the methodologies of reliability prediction as currently used in industries such as electronics, automotive, aircraft, aerospace, off-highway, farm machinery, and others. It then discusses why these are not successful; and, presents methods developed by the authors for obtaining accurate information for successful prediction. The approach is founded on approaches that accurately duplicate the real-world use of the product. Their approach is based on two fundamental components needed for successful reliability prediction; first, the methodology necessary; and, second, use of accelerated reliability and durability testing as a source of the necessary data. Applicable to all areas of engineering, this textbook details the newest techniques and tools to achieve successful reliability prediction and testing. It demonstrates practical examples of the implementation of the approaches described. This book is a tool for engineers, managers, researchers, in industry, teachers, and students.

ISBN: 978-1-119-41188-8 • Cloth • US\$149.95 • Jul 2018 • 288pp

SATELLITE COMMUNICATIONS



Handbook of Defence Electronics and Optronics

Fundamentals, Technologies and Systems

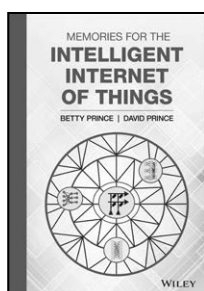
Anil K. Maini

This book provides a complete account of defence electronics and optronics. The content is broadly divided into three categories: topics specific to defence electronics; topics relevant to defence optronics; and topics that have both electronics and optronics counterparts. The book covers each of the topics in their entirety from fundamentals to advanced concepts, military systems in use and related technologies, thereby leading the reader logically from the operational basics of military systems to involved technologies and battlefield deployment and applications. Key features include fundamentals, operational aspects, involved technologies and application potential of a large cross-section of military systems. Amply illustrated with approximately 1000 diagrams and photographs and around 30 tables, *Handbook of Defence Electronics and Optronics* is an essential guide for graduate students, R&D scientists, engineers engaged in manufacturing defence equipment and professionals handling the operation and maintenance of these systems in the Armed Forces.



ISBN: 978-1-119-18470-6 • Cloth • US\$260.00 • Apr 2018 • 1152pp

SEMICONDUCTORS



Memories for the Intelligent Internet of Things

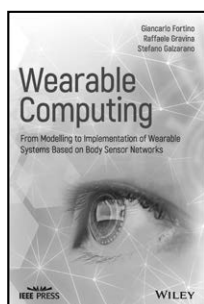
Betty Prince & David Prince

Memories for the Intelligent Internet of Things covers an array of common and cutting-edge IoT embedded memory implementations. Ultra-low-power memories for IoT devices-including plastic and polymer circuitry for specialized applications, such as medical electronics-are described. The authors explore microcontrollers with embedded memory used for smart control of a multitude of Internet devices. They also consider neuromorphic memories made in Ferroelectric RAM (FeRAM), Resistance RAM (ReRAM), and Magnetic RAM (MRAM) technologies to implement artificial intelligence (AI) for the collection, processing, and presentation of large quantities of data generated by IoT hardware. Throughout the focus is on memory technologies which are complementary metal oxide semiconductor (CMOS) compatible, including embedded floating gate and charge trapping EEPROM/Flash along with FeRAMs, FeFETs, MRAMs and ReRAMs.



ISBN: 978-1-119-29635-5 • Cloth • US\$135.00 • Jun 2018 • 344pp

SENSORS, INSTRUMENTATION & MEASUREMENT



Wearable Computing

From Modelling to Implementation of Wearable Systems Based on Body Sensor Networks

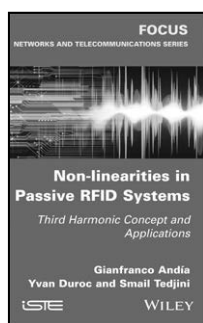
Giancarlo Fortino, Raffaele Gravina & Stefano Galzarano

This book has a specific focus on advanced methods for programming Body Sensor Networks (BSNs) based on the reference SPINE project. It features an on-line website (<http://spine.deis.unical.it>) to support readers in developing their own BSN application/systems and covers new emerging topics on BSNs such as collaborative BSNs, BSN design methods, autonomic BSNs, integration of BSNs and pervasive environments, and integration of BSNs with cloud computing. The book provides a description of real BSN prototypes with the possibility to see on-line demos and download the software to test them on specific sensor platforms and includes case studies for more practical applications. It provides a future roadmap by learning advanced technology and open research issues and gathers the background knowledge to tackle key problems, for which solutions will enhance the evolution of next-generation wearable systems. The book includes SPINE case studies and span topics like human activity recognition, rehabilitation of elbow/knee, handshake detection, emotion recognition systems and is a great reference for systems architects, practitioners, and product developers.



ISBN: 978-1-118-86457-9 • Cloth • US\$98.95 • Apr 2018 • 256pp

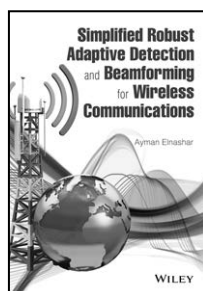
SIGNAL PROCESSING

**Non-Linearities in Passive RFID Systems****Third Harmonic Concept and Applications**

Gianfranco Andia, Yvan Duroc & Smail Tedjini

This book concerns a new paradigm in the field of UHF RFID systems: the positive exploitation of nonlinear signals generated by the chips integrated into the RFID tags. After having recalled the main principles in RFID technology and its current challenges notably with the emergence of Internet of Things or the smart connected environments, the purpose is to focus on the presence of nonlinearities produced by the nonlinear circuits of RFID chips: effects, nuisances and solutions but also and especially use of the phenomena. The presentation covers all aspects from the characterization of the nonlinear behavior of RFID tags and the associated platforms (distinguishing conducted and radiated measurement) to the design of new types of tags where nonlinearities are exploited in order to offer new capabilities or enhanced performance.

ISBN: 978-1-78630-226-7 • Cloth • US\$134.95 • Feb 2018 • 192pp

**Simplified Robust Adaptive Detection and Beamforming for Wireless Communications**

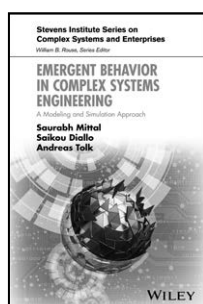
Ayman Elnashar

This book presents an alternative and simplified approaches for the robust adaptive detection and beamforming in wireless communications. It adopts several systems models including DS/CDMA, OFDM/MIMO with antenna array, and general antenna arrays beamforming model. It presents and analyzes recently developed detection and beamforming algorithms with an emphasis on robustness. In addition, simplified and efficient robust adaptive detection and beamforming techniques are presented and compared with exiting techniques. Practical examples based on the above systems models are provided to exemplify the developed detectors and beamforming algorithms. Moreover, the developed techniques are implemented using MATLAB — and the relevant MATLAB scripts are provided to help the readers to develop and analyze the presented algorithms.

ISBN: 978-1-118-93824-9 • Cloth • US\$150.00 • Jun 2018 • 448pp



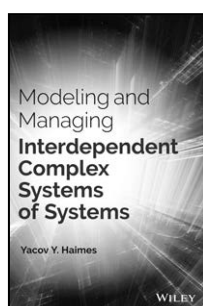
SYSTEMS ENGINEERING & MANAGEMENT

**Emergent Behavior in Complex Systems Engineering****A Modeling and Simulation Approach**

Saurabh Mittal, Saikou Diallo & Andreas Tolk

In *Emergent Behavior in Complex Systems Engineering*, the authors present the theoretical considerations and the tools required to enable the study of emergent behaviors in manmade systems. Information Technology is key to today's modern world. Scientific theories introduced in the last five decades can now be realized with the latest computational infrastructure. Modeling and simulation, along with Big Data technologies are at the forefront of such exploration and investigation. The text offers a number of simulation-based methods, technologies, and approaches that are designed to encourage the reader to incorporate simulation technologies to further their understanding of emergent behavior in complex systems. The authors present a resource for those designing, developing, managing, operating, and maintaining systems, including system of systems. The guide is designed to help better detect, analyse, understand, and manage the emergent behaviour inherent in complex systems engineering in order to reap the benefits of innovations and avoid the dangers of unforeseen consequences.

ISBN: 978-1-119-37886-0 • Cloth • US\$129.95 • Mar 2018 • 416pp

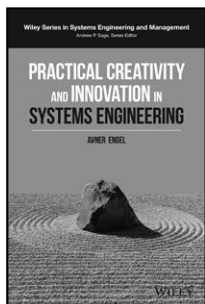
**Modeling and Managing Interdependent Complex Systems of Systems**

Yacov Y. Haimes

Modeling and Managing Interdependent Complex Systems of Systems examines the complexity of, and the risk to, emergent interconnected and interdependent complex systems of systems in the natural and the constructed environment, and in its critical infrastructures. For systems modelers, this book focuses on what constitutes complexity and how to understand, model and manage it. Previous modeling methods for complex systems of systems were aimed at developing theory and methodologies for uncoupling the interdependencies and interconnections that characterize them. In this book, the author extends the above by utilizing public- and private- sector case studies; identifies, explores, and exploits the core of interdependencies; and seeks to understand their essence via the states of the system, and their dominant contributions to the complexity of systems of systems. The book proposes a reevaluation of fundamental and practical systems engineering and risk analysis concepts on complex systems of systems developed over the past 40 years.

ISBN: 978-1-119-17365-6 • Cloth • US\$149.95 • Jul 2018 • 912pp





Practical Creativity and Innovation in Systems Engineering

Avner Engel

Practical Creativity and Innovation in Systems Engineering exposes engineers to a broad set of creative methods they can adopt in their daily practices. In addition, this book guides engineers to become entrepreneurs within traditional engineering companies, promoting creative and innovative culture around them. The author describes basic systems engineering concepts and includes an abbreviated summary of Standard 15288 systems' life cycle processes. He then provides an extensive collection of practical creative methods which are linked to the various systems' life cycle processes. Next, the author discusses obstacles to innovation and, in particular, how engineers can push creative ideas through layers of reactionary bureaucracy within non-innovative organizations. Finally, the author provides a comprehensive description of an exemplary creative and innovative case study recently completed. The book is filled with illustrative examples and offers effective guidelines that can enhance individual engineers' creative prowess as well as be used to create an organizational culture where creativity and innovation flourishes.

ISBN: 978-1-119-38323-9 • Cloth • US\$139.95 • Aug 2018 • 512pp

CARBON CAPTURE & STORAGE

Biomass Energy with Carbon Capture and Storage (BECCS)

Biomass Energy with Carbon Capture and Storage (BECCS)

Unlocking Negative Emissions

Clair Gough, Patricia Thornley & Sarah Mander

Biomass Energy with Carbon Capture and Storage (BECCS) offers a comprehensive review of the characteristics of BECCS technologies in relation to its various applications. The authors — a team of expert professionals — bring together in one volume the technical, scientific, social, economic and governance issues relating to the potential deployment of BECCS as a key approach to climate change mitigation. The text contains information on the current and future opportunities and constraints for biomass energy, explores the technologies involved in BECCS systems and the performance characteristics of a variety of technical systems. In addition, the text includes an examination of the role of BECCS in climate change mitigation, carbon accounting across the supply chain and policy frameworks. The authors also offer a review of the social and ethical aspects as well as the costs and economics of BECCS.

ISBN: 978-1-119-23772-3 • Cloth • US\$110.00 • Jul 2018 • 312pp



Cutting-Edge Technology for Carbon Dioxide Capture, Utilization, and Storage

Cutting-Edge Technology for Carbon Dioxide Capture, Utilization, and Storage

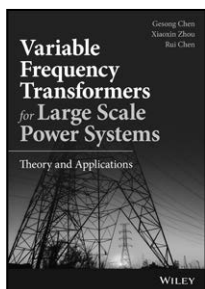
Karine Ballerat-Busserolles, Ying Wu & John J. Carroll

This volume, a collection of papers presented during the *Cutting-Edge Technology for Carbon Capture, Utilization, and Storage (CETCCUS)*, held in Clermont-Ferrand, France in the fall of 2017, is dedicated to these technologies that surround CO₂ capture. Written by some of the most well-known engineers and scientists in the world on this topic, the editors, also globally known, have chosen the most important and cutting-edge papers that address these issues to present in this groundbreaking new volume, which follows their industry-leading series, *Advances in Natural Gas Engineering*, a seven-volume series also available from Wiley-Scrivener.

ISBN: 978-1-119-36348-4 • Cloth • US\$TBA • Apr 2018 • 382pp



ELECTRIC POWER SYSTEMS



Variable Frequency Transformers for Large Scale Power Systems

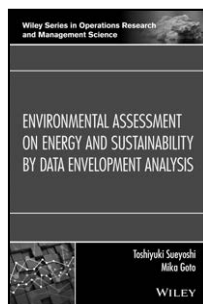
Theory and Applications

Gesong Chen, Xiaoxin Zhou & Rui Chen

This book is an all-in-one resource on the development and application of variable frequency transformers to power systems and smart grids. It introduces the main technical issues of variable frequency transformers (VFT) systematically, including its basic construction, theory equations, and simulation models. Readers will then gain an in-depth discussion of its control system, operation performance, low frequency power oscillation, and technical economics, before proceeding to practical implementation and future developments. The related concepts of energy revolution, third generation grids, and power system interconnection are discussed as well. *Variable Frequency Transformers for Large Scale Power Systems* is a timely overview of the state of the art for VFT as it is increasingly adopted in smart grids. It is intended for engineers and researchers specializing in power system planning and operation, as well as advanced students and industry professionals of power engineering.

ISBN: 978-1-119-12897-7 • Cloth • US\$135.00 • Jul 2018 • 280pp

ENERGY ECONOMICS & POLICY



Environmental Assessment on Energy and Sustainability by Data Envelopment Analysis

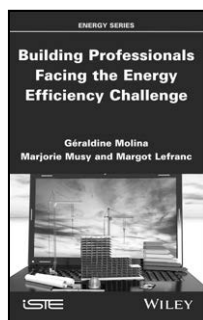
Toshiyuki Sueyoshi & Mika Goto

Balancing industrial pollution prevention with economic growth is one of the knottiest problems faced by industry today. This book introduces a novel approach to using data envelopment analysis (DEA) as a powerful tool for achieving that balance in the energy industries — the world's largest producers of greenhouse gases. It describes a rigorous framework that integrates elements of the social sciences, corporate strategy, regional economics, energy economics, and environmental policy, and delivers a methodology and a set of strategies for promoting green innovation while solving key managerial challenges to greenhouse gas reduction and business growth. In writing this book the authors draws upon their pioneering work and considerable experience in the field to develop an unconventional, holistic approach to using DEA to assess key aspects of sustainability development.



ISBN: 978-1-118-97934-1 • Cloth • US\$120.00 • Jan 2018 • 720pp

ENERGY EFFICIENCY



Building Professionals Facing the Energy Efficiency Challenge

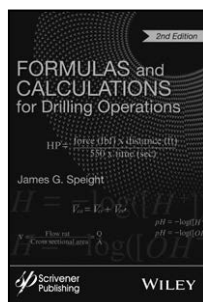
Géraldine Molina, Marjorie Musy & Margot Lefranc

The aim of this book is to deepen the knowledge of dynamic evolution of professional practices (recomposition of knowledge and know-how, inter-relations, strategic positioning) taking place at the time of the injunction to energy efficiency in the design field, construction and management of real estate. From their experience feedback, the challenge of this book is to question the logic of innovation, to enlighten the dynamic learning and renewal of professional skills.

ISBN: 978-1-78630-149-9 • Cloth • US\$134.95 • Feb 2018 • 346pp



FOSSIL FUELS



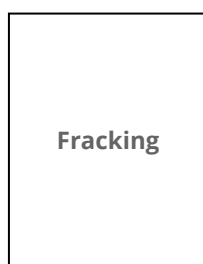
Formulas and Calculations for Drilling Operations 2nd Edition

James G. Speight

Presented in an easy-to-use format, this second edition of *Formulas and Calculations for Drilling Operations* is a quick reference for day-to-day work out on the rig. It also serves as a handy study guide for drilling and well-control certification courses. Virtually all the mathematics required on a drilling rig is here in one convenient source, including formulas for pressure gradient, specific gravity, pump, output, annular velocity, buoyancy factor, and many other topics. There is no other source for these useful formulas and calculations that is this thorough. An instant classic when the first edition was published, the much-improved revision is even better, offering new information not available in the first edition, making it as up-to-date as possible in book form. Truly a state-of-the-art masterpiece for the oil and gas industry, if there is only one book you buy to help you do your job, this is it!



ISBN: 978-1-119-08362-7 • Cloth • US\$TBA • Apr 2018 • 400pp



Fracking

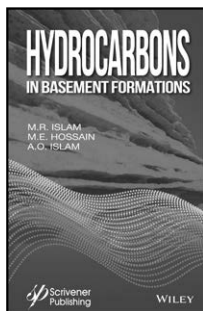
Further Investigations into the Environmental Consideration and Operations of Hydraulic Fracturing, 2nd Edition

Michael D. Holloway & Oliver Rudd

Since the first edition of *Fracking* was published, hydraulic fracturing has continued to be hotly debated. Credited with bringing the US and other countries closer to "energy independence," and blamed for tainted drinking water and earthquakes, hydraulic fracturing ("fracking") continues to be one of the hottest topics and fiercely debated issues in the energy industry and in politics. Covering all of the latest advances in fracking since the first edition was published, this expanded and updated revision still contains all of the valuable original content for the engineer or layperson to understand the technology and its ramifications. Useful not only as a tool for the practicing engineer solve day-to-day problems that come with working in hydraulic fracturing, it is also a wealth of information covering the possible downsides of what many consider to be a very valuable practice. Many others consider it dangerous, and it is important to see both sides of the argument, from an apolitical, logical standpoint.



ISBN: 978-1-119-36342-2 • Cloth • US\$TBA • Mar 2018 • 300pp



Hydrocarbons in Basement Formations

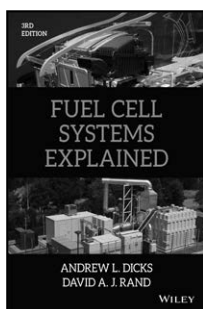
M. R. Islam, M. E. Hossain & A. O. Islam

Covering the basic theories and the underlying scientific concepts, the authors then go on to explain the best practices and new technologies and processes for utilizing basement formations for the petroleum and natural gas industries. Covering all of the hottest issues in the industry, from oil shale, tar sands, and hydraulic fracturing, this book is a must-have for any engineer working in the industry. This textbook is an excellent resource for petroleum engineering students, reservoir engineers, supervisors & managers, researchers and environmental engineers for planning every aspect of rig operations in the most sustainable, environmentally responsible manner, using the most up-to-date technological advancements in equipment and processes.

ISBN: 978-1-119-29422-1 • Cloth • US\$248.95 • Feb 2018 • 642pp



HYDROGEN, BATTERIES & FUEL CELLS



Fuel Cell Systems Explained

3rd Edition

Andrew L. Dicks & David A. J. Rand

Since publication of the first edition of *Fuel Cell Systems Explained*, three compelling drivers have supported the continuing development of fuel cell technology. New fuel cell materials, enhanced stack performance and increased lifetimes are leading to the emergence of the first truly commercial systems in applications that range from fork-lift trucks to power sources for mobile phone towers. Leading vehicle manufacturers have embraced the use of electric drive-trains and now see hydrogen fuel cells complementing advanced battery technology in zero-emission vehicles. After many decades of laboratory development, a global but fragile fuel cell industry is bringing the first commercial products to market. This thoroughly revised edition includes several new sections devoted to, for example, fuel cell characterisation, improved materials for low-temperature hydrogen and liquid-fuelled systems, and real-world technology implementation.

ISBN: 978-1-118-61352-8 • Cloth • US\$120.00 • Apr 2018 • 488pp



Hydrogen Storage and Technologies

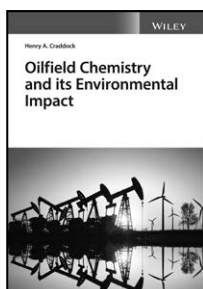
Mehmet Sankir & Nurdan Demirci Sankir

Hydrogen storage is considered a key technology for stationary and portable power generation especially for transportation. This volume covers the novel technologies to efficiently store and distribute hydrogen and discusses the underlying basics as well as the advanced details in hydrogen storage technologies. The book has two major parts: Chemical and electrochemical hydrogen storage and Carbon-based materials for hydrogen storage.

ISBN: 978-1-119-45988-0 • Cloth • US\$TBA • Jul 2018 • 500pp



NATURAL GAS & PETROLEUM PRODUCTS



Oilfield Chemistry and its Environmental Impact

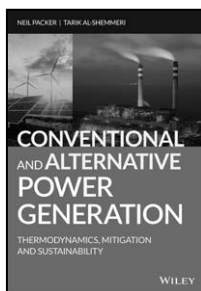
Henry A. Craddock

This book discusses the development and application of green chemistry in the oil and gas exploration and production industry over the last 25 years — bringing together the various chemistries that are utilised for creating suitable environmental products. Topics covered in *Oilfield Chemistry and its Environmental Impact* include polymer chemistry, surfactants and amphiphiles, phosphorus chemistry, inorganic salts, low molecular weight organics, silicon chemistry and green solvents. It also looks at sustainability in an extractive industry, examining the approaches used and the other methodologies that could be applied in the development of better chemistries, along with discussions about where the application of green chemistry is leading in this industry sector. This book provides the reader with a ready source of reference when considering what chemistries are appropriate for application to oilfield problems and looking for green chemistry solutions and brings together the pertinent regulations which workers in the field will find useful, alongside the chemistries which meet the regulatory requirements.

ISBN: 978-1-119-24425-7 • Cloth • US\$170.00 • Jul 2018 • 536pp



POWER TECHNOLOGY & POWER ENGINEERING



Conventional and Alternative Power Generation

Thermodynamics, Mitigation and Sustainability

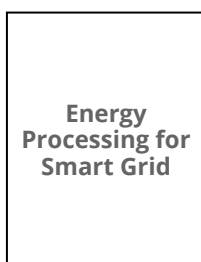
Neil Packer & Tarik Al-Shemmeri

This book goes beyond the traditional methods of power generation. It introduces the many recent innovations on the production of electricity and the way they play a major role in combating global warming and improving the efficiency of generation. It contains a strong analytical approach to underpin the theory of power plants — for those using conventional fuels, as well as those using renewable fuels — and looks at the problems from a unique environmental engineering perspective. The book also includes numerous worked examples and case studies to demonstrate the working principles of these systems. *Conventional and Alternative Power Generation: Thermodynamics, Mitigation and Sustainability* is divided into 8 chapters that comprehensively cover: thermodynamic systems; vapor power cycles, gas power cycles, combustion; control of particulates; carbon capture and storage; air pollution dispersal; and renewable energy and power plants.

ISBN: 978-1-119-47935-2 • Cloth • US\$130.00 • Aug 2018 • 288pp



SMART GRID



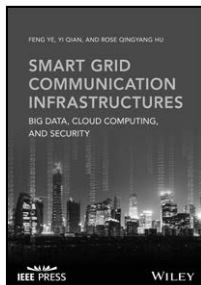
Energy Processing for Smart Grid

James Momoh



This book provides an overview of how multiple sources and loads are connected via power electronic devices. Issues of storage technologies are discussed, and a comparison summary is given to facilitate the design and selection of storage types. The need for real-time measurement and controls are pertinent in future grid, and this book dedicates several chapters to real-time measurements such as PMU, smart meters, communication scheme, and protocol and standards for processing and controls of energy options. Organized into nine sections, *Energy Processing for the Smart Grid* gives an introduction to the energy processing concepts/topics needed by students in electrical engineering or non-electrical engineering who need to work in areas of future grid development. It covers such modern topics as renewable energy, storage technologies, inverter and converter, power electronics, and metering and control for microgrid systems.

ISBN: 978-1-119-37614-9 • Cloth • US\$134.95 • Jun 2018 • 480pp



Smart Grid Communication Infrastructures

Big Data, Cloud Computing, and Security

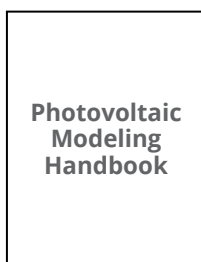
Feng Ye, Yi Qian & Rose Qingyang Hu

Smart grid is a transformational upgrade to the traditional power grid that adds communication capabilities, intelligence and modern control. *Smart Grid Communication Infrastructures* is a comprehensive guide that addresses communication infrastructures, related applications and other issues related to the smart grid. The text shows how smart grid departs from the traditional power grid technology. Fundamentally, smart grid has advanced communication infrastructures to achieve two-way information exchange between service providers and customers. *Smart Grid Communication Infrastructures* examines and summarizes the recent advances in smart grid communications, big data analytics and network security. The authors — noted experts in the field — review the technologies, applications and issues in smart grid communication infrastructure. This important resource offers a comprehensive review of all areas of smart grid communication infrastructures and includes an ICT framework for smart grid.

ISBN: 978-1-119-24015-0 • Cloth • US\$120.00 • Jul 2018 • 350pp



SOLAR ENERGY & PHOTOVOLTAICS



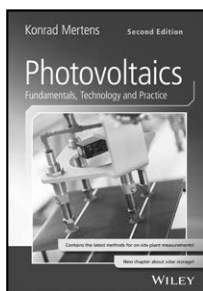
Photovoltaic Modeling Handbook

Monika Freunek Muller

This book provides the reader with a solid understanding of the fundamental modeling of photovoltaic devices. After the material independent limit of photovoltaic conversion, the readers are introduced to the most well-known theory of "classical" silicon modeling. Based on this, for each of the most important PV materials, their performance under different conditions is modeled. This book also covers different modeling approaches, from very fundamental theoretic investigations to applied numeric simulations based on experimental values. The book concludes with a chapter on the influence of spectral variations. The information is supported by providing the names of simulation software and basic literature to the field. The information in the book gives the user specific application with a solid background in hand, to judge which materials could be appropriate as well as realistic expectations of the performance the devices could achieve.

ISBN: 978-1-119-36352-1 • Cloth • US\$TBA • Aug 2018 • 500pp



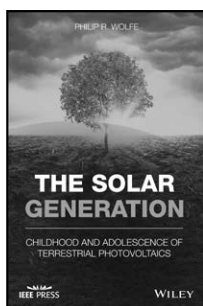


Photovoltaics Fundamentals, Technology and Practice, 2nd Edition

Konrad Mertens

Starting with the basic principles of solar energy, this fully updated, practical text explains the fundamentals of semiconductor physics and the structure and functioning of the solar cell. It describes the latest measurement techniques for solar modules, and the planning and operation of grid-connected and off-grid PV systems. It also looks at other thin film cells, hybrid wafer cells, and concentrator systems. Additionally, this *Second Edition* covers solar modules and solar generators; system technology of grid connected plants; the storage of solar energy; photovoltaic measurement technology; the planning and operation of grid-connected systems; economic efficiency of PV systems; and the future development of PV. The book offers expanded tutorial sections to aid teaching and self-study and includes a brand-new chapter on Solar Energy Storage. It comes along with the accompanying website www.textbook-pv.org which offers free downloadable figures of the book, solutions of exercises, additional free PV software etc.

ISBN: 978-1-119-40104-9 • Cloth • US\$89.95 • Jun 2018 • 376pp



The Solar Generation Childhood and Adolescence of Terrestrial Photovoltaics

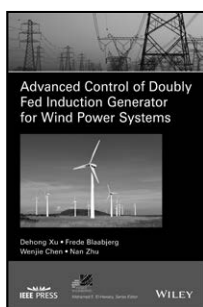
Philip R. Wolfe

Written by a leader in the field with more than 40 years of experience and an international reputation in the sustainable energy industry, *The Solar Generation: Childhood and Adolescence of Terrestrial Photovoltaics* offers enlightening coverage on the terrestrial PV industry. The first part of this 3-volume set provides a historical backdrop to the technology and tracks the development of research, markets, prices, applications, policies, and more. Part II is called the 'encyclopedia' and features a Who's Who of the most influential people and profiles of key companies, events, and developments. Finally, Part III is the reference section and comes complete with glossaries, bibliography, and an incredibly comprehensive index. This text also addresses the early development of the PV sector from a global perspective and focuses on a defined period, leaving scope for later follow-ups as the sector matures. It offers a study on the interactions between technology, policy, and market drivers. *The Solar Generation* is an ideal book for all professionals in the power and energy field from every corner of the globe.

ISBN: 978-1-119-42558-8 • Paper • US\$109.95 • May 2018 • 384pp



WIND ENERGY



Advanced Control of Doubly Fed Induction Generator for Wind Power Systems

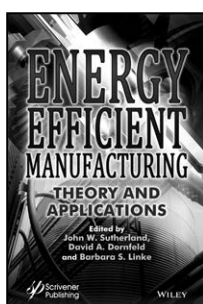
Dehong Xu, Frede Blaabjerg, Wenjie Chen & Nan Zhu

Filled with illustrations, problems, models, analyses, case studies, selected simulation and experimental results, *Advanced Control of Doubly Fed Induction Generator for Wind Power Systems* provides the basic concepts for modelling and controlling of Doubly Fed Induction Generator (DFIG) wind power systems and their power converters. It explores both the challenges and concerns of DFIG under a non-ideal grid and introduces the control strategies and effective operations performance options of DFIG under a non-ideal grid. Other topics of this book include thermal analysis of DFIG wind power converters under grid faults; implications of the DFIG test bench; advanced control of DFIG under harmonic distorted grid voltage, including multiple-loop and resonant control; modeling of DFIG and GSC under unbalanced grid voltage; the LFRT of DFIG, including the recurring faults ride through of DFIG; and more.

ISBN: 978-1-119-17206-2 • Cloth • US\$139.95 • Aug 2018 • 512pp



INDUSTRIAL ENGINEERING / MANUFACTURING



Energy Efficient Manufacturing

Theory and Applications (Previously Announced)

John W. Sutherland, David A. Dornfeld & Barbara S. Linke

Over the last several years, manufacturers have expressed increasing interest in reducing their energy consumption and have begun to search for opportunities to reduce their energy usage. In this book, the authors explore a variety of opportunities to reduce the energy footprint of manufacturing. These opportunities cover the entire spatial scale of the manufacturing enterprise: from unit process-oriented approaches to enterprise-level strategies. Each chapter examines some aspect of this spatial scale, and discusses and describes the opportunities that exist at that level. Case studies demonstrate how the opportunity may be acted on with practical guidance on how to respond to these opportunities.

ISBN: 978-1-118-42384-4 • Cloth • US\$194.95 • Jun 2018 • 460pp



Quality Function Deployment for Sustainable Development

Quality Function Deployment for Sustainable Development

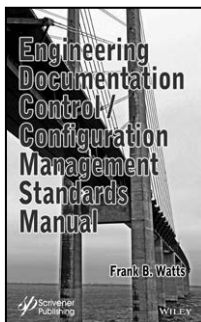
Hendry Rahardjo

Providing a general overview of QFD methodology, *Quality Function Deployment for Sustainable Development* present engineering managers, quality engineers, students, and researchers with recent developments to enhance the basic QFD approach in some specific applications and decision analysis. An example-based approach is used throughout all chapters. To be self-contained, a concise description of QFD principles and how it works are provided to give a smooth start for those who are new to QFD.

ISBN: 978-1-118-46963-7 • Cloth • US\$184.95 • Aug 2018 • 300pp



INDUSTRIAL ENGINEERING / PROJECT MANAGEMENT



Engineering Documentation Control / Configuration Management Standards Manual

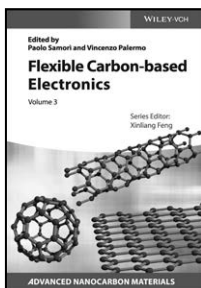
Frank B. Watts

With this manual, you have the best of the best management practices for the configuration management processes. It goes a long way toward satisfying Total Quality Management, FDA, GMP, Lean CM and ISO/QS/AS 9XXX process documentation requirements. The one requirement common to all those standards is to document the processes and to do what you document.

ISBN: 978-1-119-47903-1 • Cloth • US\$TBA • Mar 2018 • 210pp



ELECTRONIC MATERIALS



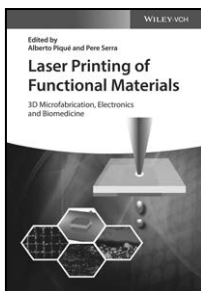
Flexible Carbon-based Electronics

Volume 3

Paolo Samori, Vincenzo Palermo & Xinliang Feng

This third volume in the Advanced Nanocarbon Materials series covers the topic of flexible electronics both from a material and an applications perspective. Comprehensive in its scope, the monograph examines organic, inorganic and composite materials with a section devoted to carbon-based materials with a special focus on the generation and properties of 2D materials. It also presents carbon modifications and derivatives, such as carbon nanotubes, graphene oxide and diamonds. In terms of the topical applications covered these include, but are not limited to, flexible displays, organic electronics, transistors, integrated circuits, semiconductors and solar cells. These offer perspectives for today's energy and healthcare challenges, such as electrochemical energy storage and wearable devices. Finally, a section on fundamental properties and characterization approaches of flexible electronics rounds off the book. Each contribution points out the importance of the structure-function relationship for the target-oriented fabrication of electronic devices, enabling the design of complex components.

ISBN: 978-3-527-34191-7 • Cloth • US\$205.00 • Aug 2018 • 480pp



Laser Printing of Functional Materials

3D Microfabrication, Electronics and Biomedicine

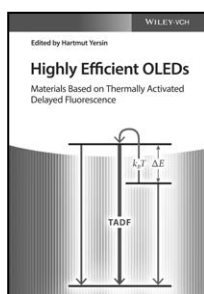
Alberto Pique & Pere Serra

The first book on this hot topic includes such major research areas as printed electronics, sensors, biomaterials and 3D cell printing. Well-structured and with a strong focus on applications, the text is divided in three sections with the first describing the fundamentals of laser transfer. The second provides an overview of the wide variety of materials that can be used for laser transfer processing, while the final section comprehensively discusses a number of practical uses, including printing of electronic materials, printing of 3D structures as well as large-area, high-throughput applications. The whole is rounded off by a look at the future for laser printed materials. Invaluable reading for a broad audience ranging from material developers to mechanical engineers, from academic researchers to industrial developers and for those interested in the development of micro-scale additive manufacturing techniques.

ISBN: 978-3-527-34212-9 • Cloth • US\$215.00 • Jan 2018 • 480pp



ORGANIC ELECTRONICS



Highly Efficient OLEDs

Materials Based on Thermally Activated Delayed Fluorescence

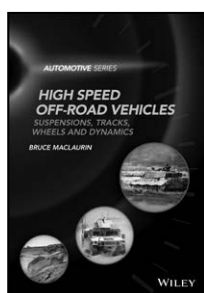
Hartmut Yersin

Edited by a pioneer in this fast developing field, the book compiles the latest results in OLED optimization. It discusses in detail the theoretical principles as well as various emitting materials, both organic and inorganic, along with display and lighting applications.

ISBN: 978-3-527-33900-6 • Cloth • US\$205.00 • Aug 2018 • 600pp



AUTOMOTIVE ENGINEERING



High Speed Off-Road Vehicles

Suspensions, Tracks, Wheels and Dynamics

Bruce MacLaurin

High Speed Off-Road Vehicles is an excellent, in-depth review of vehicle performance in off-road conditions with a focus on key elements of the running gear systems of vehicles. In particular, elements such as suspension systems, wheels, tyres, and tracks are addressed in-depth. It is a well-written text that provides a pragmatic discussion of off-road vehicles from both a historical and analytical perspective. Some of the unique topics addressed in this book include link and flexible tracks, ride performance of tracked vehicles, and active and semi-active suspension systems for both armoured and unarmoured vehicles. The book provides spreadsheet-based analytic approaches to model these topic areas giving insight into steering, handling, and overall performance of both tracked and wheeled systems. The author further extends these analyses to soft soil scenarios and thoroughly addresses rollover situations. The text also provides some insight into more advanced articulated systems.

ISBN: 978-1-119-25878-0 • Cloth • US\$140.00 • Aug 2018 • 240pp



COMPUTATIONAL / NUMERICAL METHODS



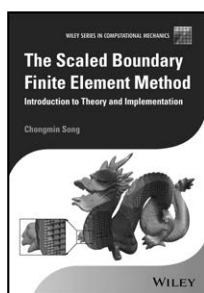
Aerospace Actuators

European Commercial Aircraft and Tiltrotor Aircraft, Volume 3

Jean-Charles Maré

This book is the third in a series dedicated to aerospace actuators. It uses the contributions of the first two volumes to conduct case studies on actuation for flight controls, landing gear and engines. The actuation systems are seen in several aspects: signal and power architectures, generation and distribution of hydraulic or mechanical power, control and reliability, and evolution towards more electrical systems. The first three chapters are dedicated to the European commercial airplanes that marked their era: Caravelle, Concorde, Airbus A320 and Airbus A380. The final chapter deals with the flight controls of the Boeing V-22 and AgustaWestland AW609 tiltrotor aircraft. These address concerns that also apply to electromechanical actuators, which should be fitted on more electrical aircraft in the future. The topics covered in this series of books constitute a significant source of information for individuals and engineers from a variety of disciplines, seeking to learn more about aerospace actuation systems and components.

ISBN: 978-1-84821-943-4 • Cloth • US\$114.95 • Feb 2018 • 222pp



The Scaled Boundary Finite Element Method

Introduction to Theory and Implementation

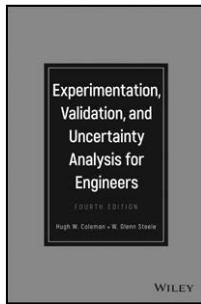
Chongmin Song

The Scaled Boundary Finite Element Method: Introduction to Theory and Implementation covers the static and dynamic stress analysis of solids in two and three dimensions. The relevant concepts, theory and modelling issues of the scaled boundary finite element method are discussed and the unique features of the method are highlighted. The applications in computational fracture mechanics are detailed with numerical examples. A unified mesh generation procedure based on quadtree/octree algorithm is described. It also presents examples of fully automatic stress analysis of geometric models in NURBS, STL and digital images. Written in lucid and easy to understand language by the co-inventor of the scaled boundary element method, it provides MATLAB as an integral part of the book with the code cross-referenced in the text and the use of the code illustrated by examples and presents new developments in the scaled boundary finite element method with illustrative examples so that readers can appreciate the significant features.

ISBN: 978-1-119-38815-9 • Cloth • US\$139.95 • Aug 2018 • 500pp



CONTROL PROCESS & MEASUREMENTS



Experimentation, Validation, and Uncertainty Analysis for Engineers

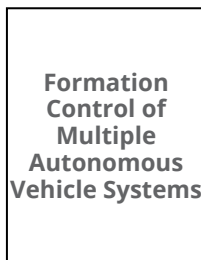
4th Edition

Hugh W. Coleman & W. Glenn Steele

Fully updated from its previous edition, *Experimentation, Validation, and Uncertainty Analysis for Engineers, Fourth Edition* includes expanded coverage and new examples of applying the Monte Carlo Method (MCM) in performing uncertainty analyses. Presenting the current, internationally accepted methodology from ISO, ANSI, and ASME standards for propagating uncertainties using both the MCM and the Taylor Series Method (TSM), it provides a logical approach to experimentation and validation through the application of uncertainty analysis in the planning, design, construction, debugging, execution, data analysis, and reporting phases of experimental and validation programs. It also illustrates how to use a spreadsheet approach to apply the MCM and the TSM, based on the authors' experience in applying uncertainty analysis in complex, large-scale testing of real engineering systems. *Experimentation, Validation, and Uncertainty Analysis for Engineers, Fourth Edition* includes examples throughout, contains end of chapter problems, and is accompanied by the authors' website www.uncertainty-analysis.com.



ISBN: 978-1-119-41751-4 • Cloth • US\$129.95 • Apr 2018 • 400pp



Formation Control of Multiple Autonomous Vehicle Systems

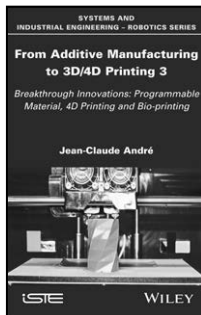
Hugh H. T. Liu & Bo Zhu

Formation Control of Multiple Autonomous Vehicle Systems offers a review of the core concepts of dynamics and control and examines the dynamics and control aspects of formation control in order to study a wide spectrum of dynamic vehicle systems such as spacecraft, unmanned aerial vehicles and robots. The text puts the focus on formation control that enables and stabilizes formation configuration, as well as formation reconfiguration of these vehicle systems. The authors develop a uniform paradigm of describing vehicle systems' dynamic behaviour that addresses both individual vehicle's motion and overall group's movement, as well as interactions between vehicles. The authors explain how the design of proper control techniques regulate the formation motion of these vehicles and the development of a system level decision-making strategy that increases the level of autonomy for the entire group of vehicles to carry out their missions. The text is filled with illustrative case studies in the domains of space, aerial and robotics.



ISBN: 978-1-119-26306-7 • Cloth • US\$150.00 • Aug 2018 • 288pp

MECHANICAL ENGINEERING - DESIGN



From Additive Manufacturing to 3D/4D Printing

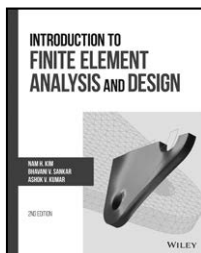
Breakthrough Innovations: Programmable Material, 4D Printing and Bio-printing, Volume 3

Jean-Claude André

With a turnover of some 5-15 billion € / year, the additive manufacturing has industrial niches bearers thanks to processes and materials more and more optimized. While some niches still exist on the application of additive techniques in traditional fields (from jewelry to food for example), several trends emerge, using new concepts: collective production, realization of objects at once (without addition Of material), micro-fluidic, 4D printing exploiting programmable materials and materials, bio-printing, etc. There are both opportunities for new markets, promises not envisaged less than 10 years ago, but difficulties in reaching them.



ISBN: 978-1-78630-232-8 • Cloth • US\$149.95 • Feb 2018 • 468pp



Introduction to Finite Element Analysis and Design

2nd Edition

Nam H. Kim, Bhavani V. Sankar & Ashok V. Kumar

The all-new, second edition of *Introduction to Finite Element Analysis and Design* provides many more exercise problems than the first edition. It includes a significant amount of material in modelling issues by using several practical examples from engineering applications. The book features new coverage of buckling of beams and frames and extends heat transfer analyses from 1D (in the previous edition) to 2D. It also covers 3D solid element and its application, as well as 2D. Additionally, readers will find an increase in coverage of finite element analysis of dynamic problems. There is also a companion website with examples that are concurrent with the most recent version of the commercial programs. It offers elaborate explanations of basic finite element procedures and delivers clear explanations of the capabilities and limitations of finite element analysis.



ISBN: 978-1-119-07872-2 • Cloth • US\$130.00 • Jul 2018 • 400pp



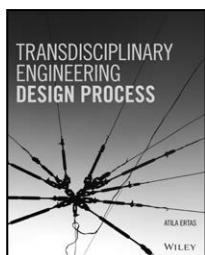
Primer on Engineering Standards Expanded Textbook Edition

Owen R. Greulich & Maan H. Jawad



Primer on Engineering Standards: Expanded Textbook Edition delves into standards creation and compliance to provide students and engineers with a comprehensive reference. The different types of standards are dissected and discussed in terms of development, value, impact, interpretation, and compliance, and options are provided for situations where conformance is not possible. The process of standards creation is emphasized in terms of essential characteristics and common pitfalls to avoid, with detailed guidance on how, where, and with whom one may get involved in official development. Organized for both quick reference and textbook study, this new Expanded Textbook Edition provides a quick, clear understanding of critical concepts, ramifications, and implications as it introduces the concepts, history, and classification of standards, rules, and regulations; discusses the federal, state, and local government's role in standards development and enforcement; and distinguishes voluntary consensus standards, limited consensus standards, and jurisdictional versus non-jurisdictional government standards.

ISBN: 978-1-119-46617-8 • Paper • US\$49.00 • Apr 2018 • 168pp



Transdisciplinary Engineering Design Process

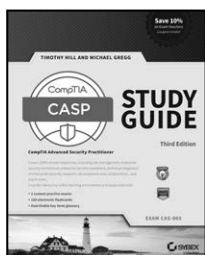
Atila Ertas



Transdisciplinary Engineering Design Process outlines a collaborative approach to the engineering design process that includes input from planners, economists, politicians, physicists, biologists, domain experts, and others that represent a wide variety of disciplines. As the author explains, by including other disciplines to have a voice, the process goes beyond traditional interdisciplinary design to a more productive and creative transdisciplinary process. The transdisciplinary approach to engineering outlined leads to greater innovation through a collaboration of transdisciplinary knowledge, reaching beyond the borders of their own subject area to conduct "useful" research that benefits society. The author — a noted expert in the field — argues that by adopting transdisciplinary research to solving complex, large-scale engineering problems it produces more innovative and improved results. This important guide takes a holistic approach to solving complex engineering design challenges and includes a wealth of topics such as modeling and simulation, optimization, reliability, statistical decisions, ethics and project management.

ISBN: 978-1-119-47475-3 • Cloth • US\$129.95 • Jul 2018 • 848pp

CERTIFICATION (MSCE, NOVELL, ETC.)



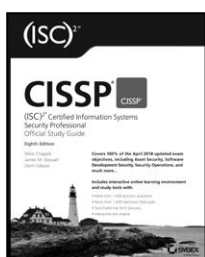
CASP CompTIA Advanced Security Practitioner Study Guide Exam CAS-003, 3rd Edition

Timothy Hill & Michael Gregg



Building on the popular Sybex Study Guide approach, this book will provide 100% coverage of the CASP Exam CAS-003 objectives. The book will contain clear and concise information on crucial security topics. It will include practical examples and insights drawn from real-world experience, as well as exam highlights and end-of-chapter review. The comprehensive study resource provides authoritative coverage of key exam topics, including Enterprise management; Risk management and incident response; Research and analysis; Integration of computing, communications and business disciplines; and Technical integration of enterprise components. Because the exam focuses on practical application of key security concepts, the book will include an appendix of additional hands-on labs. Readers will also have access to an interactive online test bank and study tools, including bonus practice exam questions, electronic flashcards, and a searchable glossary of key terms.

ISBN: 978-1-119-47764-8 • Paper • US\$59.95 • Aug 2018 • 624pp



CISSP®

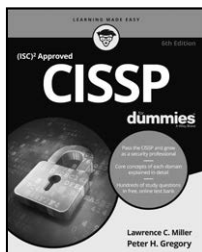
Certified Information Systems Security Professional Study Guide, 8th Edition

Mike Chapple, James M. Stewart & Darril Gibson



CISSP® (ISC)²® Certified Information Systems Security Professional Official Study Guide, 8th Edition has been completely updated for the latest 2018 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, advice on passing each section of the exam, access to the Sybex online interactive learning environment, and much more. Reinforce what you've learned with key topic exam essentials and chapter review questions. Along with the book, you also get access to Sybex's superior online interactive learning environment that includes four unique 250 question practice exams to help you identify where you need to study more. Get more than 90 percent of the answers correct, and you're ready to take the certification exam. It includes more than 650 Electronic Flashcards to reinforce your learning and give you last-minute test prep before the exam and a searchable glossary in PDF to give you instant access to the key terms you need to know for the exam.

ISBN: 978-1-119-47593-4 • Paper • US\$69.95 • Apr 2018 • 1100pp



CISSP For Dummies

6th Edition

Lawrence C. Miller & Peter H. Gregory

If you're a security professional seeking your CISSP certification, this book is a perfect way to prepare for the exam. Covering in detail all eight domains, the expert advice inside gives you the key information you'll need to pass the exam. Plus, you'll get tips on setting up a 60-day study plan, tips for exam day, and access to an online test bank of questions. *CISSP For Dummies* is fully updated and reorganized to reflect upcoming changes (ISC)² has made to the Common Body of Knowledge. Complete with access to an online test bank this book is the secret weapon you need to pass the exam and gain certification. This book gets key information for all eight exam domains and find test-taking and exam-day tips and tricks. Benefits from access to free online practice questions and flash cards and be prepared for the CISSP certification in 2018 and beyond!

ISBN: 978-1-119-50581-5 • Paper • US\$44.95 • May 2018 • 504pp



CISSP Official (ISC)² Practice Tests

2nd Edition

Mike Chapple & David Seidl

The *CISSP Official (ISC)² Practice Tests* is a major resource for CISSP candidates, providing 1300 unique practice questions. The first part of the book provides 100 questions per domain so you can practice on any domains you know you need to brush up on. After that, you get two unique 250-question practice exams to help you master the material and practice simulated exam taking well in advance of the exam. The two practice exams cover all exam domains, and are included in identical proportion to the exam itself to help you gauge the relative importance of each topic covered. As the only official practice tests endorsed by (ISC)², this book gives you the advantage of full and complete preparation. The CISSP credential signifies a body of knowledge and a set of guaranteed skills that put you in demand in the marketplace.

ISBN: 978-1-119-47592-7 • Paper • US\$39.95 • May 2018 • 480pp



CompTIA Network+ Certification Kit

Exam N10-007, 5th Edition

Todd Lammle & Jon Buhagiar

The *CompTIA Network+ Certification Kit* is the savvy candidate's smart choice for the ultimate in preparation. Featuring full coverage of all Exam N10-007 objectives, this kit bundles the *Deluxe Study Guide* and the *Review Guide* to give you a one-stop resource for comprehensive Network+ review. Detailed discussion of networking concepts, infrastructure, operations, security, and troubleshooting are backed by practical examples and insights drawn from real-world experience to give you the perspective you need to succeed on the exam — and on the job. Concise domain-by-domain review helps you refresh your understanding, while challenging practice questions allow you to gauge your progress toward exam day. As an indispensable component of comprehensive review, you also get access to the Sybex online learning environment, which features flashcards, bonus practice exams, and more so you can study anytime, anywhere, from nearly any device.

ISBN: 978-1-119-43228-9 • Paper • US\$99.95 • Apr 2018 • 1320pp



CompTIA Security+ Certification Kit

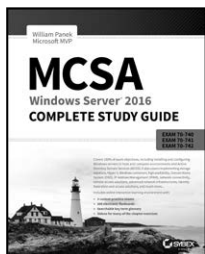
Exam SY0-501, 7th Edition

Emmett Dulaney & Chuck Easttom

The *CompTIA Security+ Certification Kit* is the ultimate preparation experience for Exam SY0-501. Updated to align with the latest changes to the exam, this kit provides complete, expert coverage of all six exam domains. The *CompTIA Security+ Study Guide* clarifies crucial security topics and provides practical examples drawn from real-world experience, while the *CompTIA Security+ Review Guide* condenses essential information down into bite-sized pieces organized by domain. The *CompTIA Security+ Practice Tests* help you gauge your progress along the way, with six unique practice tests that help you diagnose weak points while there is still time to review. You also get a year of FREE access to the Sybex interactive online learning environment, which features a pre-assessment test, hundreds of practice questions, flashcards, and other tools to help you plan, prepare, and perform. Studying both content and technique gives you an advantage on test day, and the Sybex advantage means going into the exam with confidence.

ISBN: 978-1-119-41697-5 • Paper • US\$99.95 • Apr 2018 • 1104pp





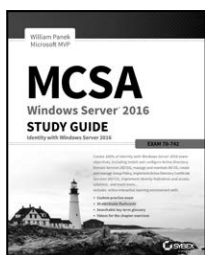
MCSA Windows Server® 2016 Complete Study Guide

Exam 70-740, Exam 70-741, Exam 70-742

William Panek

MCSA Windows Server® 2016 Complete Study Guide is your ultimate companion on the journey to MCSA certification. Covering exams 70-740, 70-741, 70-742, plus the upgrade exam 70-743, this book walks you through 100 percent of all exam objectives to help you achieve complete readiness. Hands-on exercises strengthen your practical skills, and real-world scenarios help you understand how these skills are used on the job. Over 500 practice questions allow you to test your understanding along the way, and the companion website gives you access to electronic flashcards, practice exams, and over an hour of expert video demonstrations. From basic networking concepts and services to Active Directory and Hyper-V, this guide provides full coverage of critical MCSA concepts and skills. This new edition has been updated for the latest Windows Server 2016 release, featuring the latest exam blueprints for the most relevant coverage.

ISBN: 978-1-119-35914-2 • Paper • US\$99.95 • Mar 2018 • 1248pp



MCSA Windows Server® 2016 Study Guide

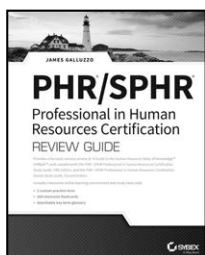
Identify with Windows Server 2016, Exam 70-742

William Panek

MCSA Windows Server® 2016 Study Guide: Exam 70-742 is the ultimate preparation resource for the third and final MCSA exam. Tightly focused and highly relevant, this guide provides everything you need to go into the exam fully prepared; expert coverage of *all* exam objectives helps ensure comprehensive understanding, and hundreds of practice questions help you track your progress and prioritize areas most in need of review. Access to online study aids allows you to study on the go, with electronic flashcards, practice tests, and a glossary to help you get the most out of your preparation plan. Hands-on exercises test your practical skills, while real-world scenarios give you a preview of how MCSA skills and concepts are applied in the workplace.

ISBN: 978-1-119-35932-6 • Paper • US\$39.95 • Mar 2018 • 384pp

MISC (OTHER) CERTIFICATIONS



PHR and SPHR Professional in Human Resources Certification Review Guide

2018 Exams (Previously Announced)

James Galluzzo

These self-study guides are intended for HR professionals seeking to validate their skills and knowledge acquired through years of practical experience, or for relative newcomers to the HR field looking to strengthen their resume. Organized by those areas of knowledge and practices specific and necessary to human resource management (HRM), this handy review guide covers tasks, processes, and strategies as detailed in the updated *A Guide to the Human Resource Body of Knowledge*, giving you clear guidance on what you need to know for the exams. You also get a year of FREE access to the Sybex online interactive learning environment and study tools, which feature flashcards, chapter tests, two bonus practice exams, and more. The review guide aligns with the HRCI test specifications, which detail the responsibilities and knowledge needed by today's HR professionals.

ISBN: 978-1-119-42668-4 • Paper • US\$29.95 • Aug 2018 • 456pp



Engineering & Computer Sciences

May to August 2018 New Titles

TITLE	AUTHOR	ISBN	PAGE REFERENCE	BIND	PRICES (US\$)	QUANTITY
2.5D Printing: Bridging the Gap Between 2D and 3D Applications	Parraman, Ortiz Segovia	978-1-118-96730-0	18	Cloth	125.00	
3D Modeling of Nonlinear Wave Phenomena on Shallow Water Surfaces	Abbasov	978-1-119-48796-8	5	Cloth	194.95	
5G System Design: Architectural and Functional Considerations and Long Term Research	Marsch, Bulakci, Queseth	978-1-119-42512-0	16	Cloth	145.00	
AComputing the Environment: Digital Design Tools for Simulation and Visualisation of Sustainable Architecture	Peters, Peters	978-1-119-09789-1	1	Cloth	50.00	
Advanced Analytics and AI: Impact, Implementation, and the Future of Work	Boobier	978-1-119-39030-5	7	Cloth	38.95	
Advanced Control of Doubly Fed Induction Generator for Wind Power Systems	Xu, Blaabjerg, Chen, Zhu	978-1-119-17206-2	27	Cloth	139.95	
AeroMACS: An IEEE 802.16 Standard-Based Technology for the Next Generation of Air Transportation Systems	Kamali	978-1-119-28110-8	16	Cloth	149.95	
Aerospace Actuators: European Commercial Aircraft and Tiltrotor Aircraft, Volume 3	Maré	978-1-84821-943-4	29	Cloth	114.95	
Analysis and Design of Analog Integrated Circuits, 6th Edition International Student Version	Gray, Hurst, Lewis	978-1-118-32261-1	17	Paper	TBA	
Arduino For Dummies, 2nd Edition	Nussey	978-1-119-48954-2	12	Paper	26.95	
Assured Cloud Computing	Campbell, Kamhoua, Kwiat	978-1-119-42863-3	9	Cloth	139.95	
Autonomic Intelligence Evolved Cooperative Networking	Wodczak	978-1-118-32541-4	16	Cloth	130.00	
BIM Handbook: A Guide to Building Information Modeling for Owners, Designers, Engineers, Contractors, and Facility Managers, 3rd Edition	Sacks, Eastman, Lee, Teicholz	978-1-119-28753-7	1	Cloth	98.95	
Biomass Energy with Carbon Capture and Storage (BECCS): Unlocking Negative Emissions	Gough, Thornley, Mander	978-1-119-23772-3	23	Cloth	110.00	
Building Codes Illustrated: A Guide to Understanding the 2018 International Building Code, 6th Edition	Ching, Winkel	978-1-119-48035-8	1	Paper	64.95	
Building Performance Analysis	de Wilde	978-1-119-34192-5	4	Cloth	135.00	

TITLE	AUTHOR	ISBN	PAGE REFERENCE	BIND	PRICES (US\$)	QUANTITY
Building Professionals Facing the Energy Efficiency Challenge	Molina, Musy, Lefranc	978-1-78630-149-9	24	Cloth	134.95	
Building Urban Resilience through Change of Use	Wilkinson, Remy	978-1-119-23142-4	4	Cloth	145.00	
CASP CompTIA Advanced Security Practitioner Study Guide: Exam CAS-003, 3rd Edition	Hill, Gregg	978-1-119-47764-8	31	Paper	59.95	
CCNA Security Study Guide, Exam 210-260	McMillan	978-1-119-40993-9	10	Paper	49.95	
CISSP For Dummies, 6th Edition	Miller, Gregory	978-1-119-50581-5	32	Paper	44.95	
CISSP Official (ISC)2 Practice Tests, 2nd Edition	Chapple, Seidl	978-1-119-47592-7	32	Paper	39.95	
CISSP®: Certified Information Systems Security Professional Study Guide, 8th Edition	Chapple, Stewart, Gibson	978-1-119-47593-4	31	Paper	69.95	
Cloud Computing and Virtualization	Le, Kumar, Nguyen, Chatterjee	978-1-119-48790-6	10	Cloth	194.95	
CMOS Integrated Lab-on-a-chip System for Personalized Biomedical Diagnosis	Yu, Yan, Huang	978-1-119-21832-6	15	Cloth	130.00	
CompTIA Network+ Certification Kit: Exam N10-007, 5th Edition	Lammle, Buhagiar	978-1-119-43228-9	32	Paper	99.95	
CompTIA Security+ Certification Kit: Exam SY0-501, 7th Edition	Dulaney, Easttom	978-1-119-41697-5	32	Paper	99.95	
Computational Method in Electromagnetic Compatibility	Poljak, Drissi	978-1-119-33717-1	18	Cloth	129.95	
Concurrent, Real-Time and Distributed Programming in Java: Threads, RTSJ and RMI	Benmammar	978-1-78630-258-8	12	Cloth	119.95	
Conventional and Alternative Power Generation: Thermodynamics, Mitigation and Sustainability	Packer, Al-Shemmeri	978-1-119-47935-2	26	Cloth	130.00	
Cutting-Edge Technology for Carbon Dioxide Capture, Utilization, and Storage	Ballerat-Busserolles, Wu, Carroll	978-1-119-36348-4	23	Cloth	TBA	
Cybersecurity Essentials	Brooks, Craig, Short	978-1-119-36239-5	11	Paper	39.95	
Data Quality in Practices	Berti-Equille	978-1-84821-570-2	9	Cloth	94.95	
Design and Analysis of Connections in Steel Structures: Fundamentals and Examples	Boracchini	978-3-433-03122-3	5	Paper	80.00	
Design and Analysis of Connections in Steel Structures: Fundamentals and Examples, eBook als PDF	Boracchini	978-3-433-03226-8	6	Paper	110.00	

TITLE	AUTHOR	ISBN	PAGE REFERENCE	BIND	PRICES (US\$)	QUANTITY
Design of Composite Structures: Eurocode 4 - Design of Composite Steel and Concrete Structures Part 1-1 - General Rules and Rules for Buildings	ECCS - European Convention for Constructional Steelwork	978-3-433-03008-0	6	Paper	75.00	
Dorf's Introduction to Electric Circuits, Global Edition, 9th Edition	Svoboda, Dorf	978-1-119-45415-1	16	Paper	218.95	
Eco-generative Design for Early Stages of Architecture, Volume 1	Marsault	978-1-78630-180-2	2	Cloth	124.95	
Effective Project Management: Guidance and Checklists for Engineering and Construction	Ward	978-1-119-46944-5	4	Paper	75.00	
Emergent Behavior in Complex Systems Engineering: A Modeling and Simulation Approach	Mittal, Diallo, Tolk	978-1-119-37886-0	22	Cloth	129.95	
Energy Efficient Manufacturing: Theory and Applications	Sutherland, Dornfeld, Linke	978-1-118-42384-4	27	Cloth	194.95	
Energy Processing for Smart Grid	Momoh	978-1-119-37614-9	26	Cloth	134.95	
Engineering Documentation Control / Configuration Management Standards Manual	Watts	978-1-119-47903-1	28	Cloth	TBA	
Environmental Assessment on Energy and Sustainability by Data Envelopment Analysis	Sueyoshi, Goto	978-1-118-97934-1	24	Cloth	120.00	
Experimentation, Validation, and Uncertainty Analysis for Engineers, 4th Edition	Coleman, Steele	978-1-119-41751-4	30	Cloth	129.95	
Exploring Arduino: Tools and Techniques for Engineering Wizardry, 2nd Edition	Blum	978-1-119-40537-5	8	Paper	34.95	
Flat Panel Display Manufacturing	Souk, Morozumi, Luo, Bitá	978-1-119-16134-9	17	Cloth	135.00	
Flexible Carbon-based Electronics, Volume 3	Samori, Palermo, Feng	978-3-527-34191-7	28	Cloth	205.00	
Formation Control of Multiple Autonomous Vehicle Systems	Liu, Zhu	978-1-119-26306-7	30	Cloth	150.00	
Formulas and Calculations for Drilling Operations, 2nd Edition	Speight	978-1-119-08362-7	24	Cloth	TBA	
Fracking: Further Investigations into the Environmental Consideration and Operations of Hydraulic Fracturing, 2nd Edition	Holloway, Rudd	978-1-119-36342-2	24	Cloth	TBA	
From Additive Manufacturing to 3D/4D Printing: Breakthrough Innovations: Programmable Material, 4D Printing and Bio-printing, Volume 3	André	978-1-78630-232-8	30	Cloth	149.95	

TITLE	AUTHOR	ISBN	PAGE REFERENCE	BIND	PRICES (US\$)	QUANTITY
Front-end Development with ASP.NET Core, Angular, and Bootstrap	Chiaretta	978-1-119-18131-6	13	Paper	49.95	
Fuel Cell Systems Explained, 3rd Edition	Dicks, Rand	978-1-118-61352-8	25	Cloth	120.00	
Fundamentals of Electronics: Continuous-time Signals and Systems	Muret	978-1-78630-182-6	20	Cloth	TBA	
Gillenson's Database Management Systems Global Edition 3e	Gillenson	978-1-119-45413-7	9	Paper	TBA	
Hacking For Dummies, 6th Edition	Beaver	978-1-119-48547-6	11	Paper	29.95	
Handbook for the Architectural Manager	Emmitt, Alharbi	978-1-119-22550-8	2	Paper	95.00	
Handbook of Defence Electronics and Optronics: Fundamentals, Technologies and Systems	Maini	978-1-119-18470-6	21	Cloth	260.00	
Handbook of Environmental Engineering	Kutz	978-1-118-71294-8	4	Cloth	TBA	
High Performance Loudspeakers: Optimising High Fidelity Loudspeaker Systems, 7th Edition	Colloms	978-1-118-41353-1	15	Paper	99.99	
High Speed Off-Road Vehicles: Suspensions, Tracks, Wheels and Dynamics	MacLaurin	978-1-119-25878-0	29	Cloth	140.00	
Highly Efficient OLEDs: Materials Based on Thermally Activated Delayed Fluorescence	Yersin	978-3-527-33900-6	29	Cloth	205.00	
Housing as Intervention: Architecture Towards Social Equity	Kubey	978-1-119-33784-3	2	Paper	38.95	
Hydrocarbons in Basement Formations	Islam, Hossain, Islam	978-1-119-29422-1	25	Cloth	248.95	
Hydrogen Storage and Technologies	Sankir, Sankir	978-1-119-45988-0	25	Cloth	TBA	
Increasing Your Influence at Work All-in-One For Dummies	Dummies Press	978-1-119-48906-1	13	Paper	29.95	
Insider Threats: Information Systems, Web and Pervasive Computing Series, Volume 10	Arduin	978-1-84821-972-4	10	Cloth	119.95	
International Journal of Urban and Regional Research, Volume 42, Issue 1	Wu, Edensor, Cheng, Frank, Weck, Alexandri, Hackworth, Patsarika, Schneider, Edwards, Wacquant, Bourdieu, Pinçon-Charlot, Pinçon, Pereira, Savage, Hanquinet, Cunningham, Hjellbrekke, Tissot, Desmond	978-1-119-48250-5	3	Paper	15.95	

TITLE	AUTHOR	ISBN	PAGE REFERENCE	BIND	PRICES (US\$)	QUANTITY
International Journal of Urban and Regional Research, Volume 42, Issue 2	Ziadah, Croese, O'Hare, Chatterton, Owen, Cutter, Dymski, Unsworth, Björkman, Harris, Picon, Usher, Hillier	978-1-119-48249-9	3	Paper	15.95	
International Journal of Urban and Regional Research, Volume 42, Issue 3	Dike, Gandy, Roy	978-1-119-48246-8	3	Paper	15.95	
International Journal of Urban and Regional Research, Volume 42, Issue 4	Dike, Gandy, Roy	978-1-119-48252-9	3	Paper	15.95	
Internet of Things A to Z: Technologies and Applications	Hassan	978-1-119-45674-2	19	Cloth	149.95	
Introduction to Finite Element Analysis and Design, 2nd Edition	Kim, Sankar, Kumar	978-1-119-07872-2	30	Cloth	130.00	
Introduction to Mobile Network Engineering: GSM, 3G-WCDMA, LTE and the Road to 5G	Kukushkin	978-1-119-48417-2	19	Cloth	130.00	
Investigating Cryptocurrencies: Understanding, Extracting, and Analyzing Blockchain Evidence	Furieux	978-1-119-48058-7	8	Paper	59.95	
IPTV Delivery Networks: Next Generation Architectures for Live and Video-on-Demand Services	Fati, Azad, Khan Pathan	978-1-119-39791-5	17	Cloth	125.00	
Laser Printing of Functional Materials: 3D Microfabrication, Electronics and Biomedicine	Pique, Serra	978-3-527-34212-9	28	Cloth	215.00	
Linux All-In-One For Dummies, 6th Edition	Dulaney	978-1-119-49046-3	10	Paper	39.95	
Logic Pro X For Dummies, 2nd Edition	English	978-1-119-50620-1	15	Paper	29.95	
LTE Communications and Networks: Femtocells and Antenna Design Challenges	Ur Rehman, Ali Safdar	978-1-119-38522-6	14	Cloth	135.00	
Mastering Windows Server 2016	Svidergol, Meloski, Wright, Martinez, Bassett	978-1-119-40497-2	12	Paper	59.95	
MCSA Windows Server® 2016 Complete Study Guide: Exam 70-740, Exam 70-741, Exam 70-742	Panek	978-1-119-35914-2	33	Paper	99.95	
MCSA Windows Server® 2016 Study Guide: Identify with Windows Server 2016, Exam 70-742	Panek	978-1-119-35932-6	33	Paper	39.95	
Memories for the Intelligent Internet of Things	Prince, Prince	978-1-119-29635-5	21	Cloth	135.00	

TITLE	AUTHOR	ISBN	PAGE REFERENCE	BIND	PRICES (US\$)	QUANTITY
Metaheuristics for Portfolio Optimization: An Introduction using MATLAB®, Volume 11	Vijayalakshmi Pai	978-1-78630-281-6	7	Cloth	144.95	
Micro- and Nano Scale NMR: Technologies and Systems	Anders, Korvink	978-3-527-34056-9	19	Cloth	215.00	
Modeling and Managing Interdependent Complex Systems of Systems	Haimes	978-1-119-17365-6	22	Cloth	149.95	
Multimedia Ontology Driven Architecture for QoS Management in Home Networks	Exposito, Gomez	978-1-84821-533-7	7	Cloth	84.95	
Musical Sound Effects: Analog and Digital Sound Processing	Reveillac	978-1-78630-131-4	15	Cloth	144.95	
New Code of Estimating Practice	The Chartered Institute of Building, Flanagan, Jewell	978-1-119-32946-6	5	Paper	95.00	
Non-Linearities in Passive RFID Systems: Third Harmonic Concept and Applications	Andia, Duroc, Tedjini	978-1-78630-226-7	22	Cloth	134.95	
Oilfield Chemistry and its Environmental Impact	Craddock	978-1-119-24425-7	25	Cloth	170.00	
Photovoltaic Modeling Handbook	Muller	978-1-119-36352-1	26	Cloth	TBA	
Photovoltaics: Fundamentals, Technology and Practice, 2nd Edition	Mertens	978-1-119-40104-9	27	Cloth	89.95	
PHR and SPHR Professional in Human Resources Certification Review Guide, 2018 Exams	Galluzzo	978-1-119-42668-4	33	Paper	29.95	
Physiological Control Systems: Analysis, Simulation, and Estimation, 2nd Edition	Khoo	978-1-119-05533-4	17	Cloth	134.95	
Practical Creativity and Innovation in Systems Engineering	Engel	978-1-119-38323-9	23	Cloth	139.95	
Practical Guide to LTE-A, VoLTE and IoT: Paving the Way Towards 5G	Elnashar, El-Saidny	978-1-119-06330-8	19	Cloth	135.00	
Primer on Engineering Standards: Expanded Textbook Edition	Greulich, Jawad	978-1-119-46617-8	31	Paper	49.00	
Professional Android, 4th Edition	Meier	978-1-118-94952-8	12	Paper	49.95	
Professional JavaScript for Web Developers, 4th Edition	Frisbie, Zakas	978-1-119-36644-7	13	Paper	44.95	

TITLE	AUTHOR	ISBN	PAGE REFERENCE	BIND	PRICES (US\$)	QUANTITY
Quality Function Deployment for Sustainable Development	Rahardjo	978-1-118-46963-7	28	Cloth	184.95	
QuickBooks Online For Dummies, 4th Edition	Marmel	978-1-119-47393-0	14	Paper	29.95	
Radome Electromagnetic Theory and Design	Shavit	978-1-119-41079-9	14	Cloth	165.00	
Reliability Prediction and Testing Textbook	Klyatis, Anderson	978-1-119-41188-8	20	Cloth	149.95	
Simplified Robust Adaptive Detection and Beamforming for Wireless Communications	Elnashar	978-1-118-93824-9	22	Cloth	150.00	
Smart Grid Communication Infrastructures: Big Data, Cloud Computing, and Security	Ye, Qian, Hu	978-1-119-24015-0	26	Cloth	120.00	
Social Engineering: The Science of Human Hacking, 2nd Edition	Hadnagy	978-1-119-43338-5	11	Paper	34.95	
Social Media Data Mining and Analytics	Szabo, Boykin	978-1-118-82485-6	9	Paper	44.95	
Software Quality: Concepts and Practice	Galin	978-1-119-13449-7	13	Cloth	124.95	
Space Modulation Techniques	Mesleh, Alhassi	978-1-119-37565-4	20	Cloth	134.95	
SU+RE: Sustainable + Resilient Design Systems	Nastasi, May, Snell	978-1-119-37951-5	1	Paper	45.00	
Sustainable Environmental Engineering	Tang, Sillanpää	978-1-119-02837-6	5	Cloth	149.95	
Sustainable Winter Road Operations	Shi, Fu	978-1-119-18506-2	6	Cloth	195.00	
Switch/Router Architectures: Shared-Bus and Shared-Memory Based Systems	Aweya	978-1-119-48615-2	20	Cloth	124.95	
The Physics and Mathematics of Electromagnetic Wave Propagation in Cellular Wireless Communication	Sarkar, Salazar-Palma, Abdallah	978-1-119-39311-5	18	Cloth	119.95	
The Scaled Boundary Finite Element Method: Introduction to Theory and Implementation	Song	978-1-119-38815-9	29	Cloth	139.95	
The SketchUp Workflow for Architecture: Modeling Buildings, Visualizing Design, and Creating Construction Documents with SketchUp Pro and LayOut, 2nd Edition	Brightman	978-1-119-38363-5	2	Paper	49.95	
The Solar Generation: Childhood and Adolescence of Terrestrial Photovoltaics	Wolfe	978-1-119-42558-8	27	Paper	109.95	
Theory and Practice of Water and Wastewater Treatment, 2nd Edition	Droste, Gehr	978-1-119-31236-9	6	Cloth	TBA	

TITLE	AUTHOR	ISBN	PAGE REFERENCE	BIND	PRICES (US\$)	QUANTITY
Transdisciplinary Engineering Design Process	Ertas	978-1-119-47475-3	31	Cloth	129.95	
Understanding Color Management, 2nd Edition	Sharma	978-1-119-22363-4	18	Cloth	115.00	
Variable Frequency Transformers for Large Scale Power Systems: Theory and Applications	Chen, Zhou, Chen	978-1-119-12897-7	23	Cloth	135.00	
Virtual & Augmented Reality For Dummies	Mealy	978-1-119-48134-8	8	Paper	29.95	
Virtual Reality and Augmented Reality: Myths and Realities	Arnaldi, Guitton, Moreau	978-1-78630-105-5	8	Cloth	164.95	
Wearable Computing: From Modelling to Implementation of Wearable Systems Based on Body Sensor Networks	Fortino, Gravina, Galzarano	978-1-118-86457-9	21	Cloth	98.95	
Windows 10 All-in-One For Dummies, 3rd Edition	Leonhard	978-1-119-48483-7	14	Paper	39.95	
Windows® Security Monitoring: Scenarios and Patterns	Miroshnikov	978-1-119-39064-0	11	Paper	49.95	

Wiley Offices in Asia Pacific Region

For product and order inquiries, please contact our Customer Services Department.

1 Fusionopolis Walk, #07-01 Solaris South Tower, Singapore 138628

Mainline: (65) 6643 8000 ■ Fax: (65) 6643 8008

Email: asiaorders@wiley.com

Customer Hotline: (65) 6643 8333 ■ Fax: (65) 6643 8397

For Marketing and Publicity inquiries,
email publicityasia@wiley.com

Wiley Homepage: www.wiley.com

China

Beijing

Room 805-808, Floor 8, Sun Palace,
No. 12A, Taiyanggong Middle Road
Chaoyang District, Beijing, P.R. China
Postal code 100028
Tel: (86) 10 8418 7800
Fax: (86) 10 8418 7810
china_marketing@wiley.com

Shanghai

Units A&B, 15th Floor, Office Building Phase II, Shinmay Union Square, No. 506 Shang Cheng Road, Pudong New District, Shanghai 200120, P.R. China
Tel: (86) 21 8036 1200
Fax: (86) 21 6160 1661
china_marketing@wiley.com
www.wileychina.com

Hong Kong

Unit 2203, APEC Plaza, 49 Hoi Yuen Road Kwun Tong, Kowloon, Hong Kong
Tel: (852) 2793 4652
Fax: (852) 2793 4663
ahongkong@wiley.com

India

New Delhi

4435-36/7, Ansari Road, Daryaganj,
New Delhi 110 002, India
Tel: (91) 11 4 363 0000/01
Fax: (91) 11 2 327 5895
csupport@wileyindia.com

East India

Tel: (91) 9973156158
csupport@wileyindia.com

Bangalore

Tel: (91) 80 23132383
Fax: (91) 80 23124319
csupport@wileyindia.com

Mumbai

Tel: (91) 22 27889272
Fax: (91) 22 27889263
csupport@wileyindia.com

Chennai

Tel: (91) 98410 22399
csupport@wileyindia.com

Hyderabad

Tel: (91) 98661 43949
csupport@wileyindia.com

Indonesia

Ruko Golden Boulevard II,
Block R/41 Jl. Pahlawan Seribu,
Bumi Serpong Damai,
Sector IV Com, Tangerang,
Indonesia
Tel: (62) 21 5316 3245
Fax: (62) 21 537 0309
aindonesia@wiley.com

Japan

Koishikawa Sakura Bldg. 4F
1-28-1 Koishikawa, Bunkyo-ku
Tokyo 112-0002, Japan
Tel: (81) 3 3830 1232
Fax: (81) 3 5689 7276
marketing@wiley.co.jp
www.wiley.co.jp

Malaysia

Unit B-3A-3A, Menara BATA,
PJ Trade Centre
No 8, Jalan PJU 8/8A,
Bandar Damansara Perdana
47800 Petaling Jaya, Selangor
Tel: (60) 3 7712 2000
Fax: (60) 3 7722 5901
ayeo@wiley.com

Philippines

Unit C Ground Floor
Belvedere Tower San Miguel Avenue,
Ortigas Center Pasig City 1605,
Philippines
Tel: (63) 2 687 3186
Fax: (63) 2 687 3187
aphilippines@wiley.com

South Korea

Suite #405, BR Elitel Building,
101, Dongmak-ro, Mapo-gu,
Seoul (04068), Rep of Korea
Tel: (82) 2 338 9700
Fax: (82) 2 337 1929
akorea@wiley.com

Taiwan

4F, 218 Sec 2 JinShan S Road
Taipei 10643, Taiwan
Tel: (886) 2 2357 3900
Fax: (886) 2 2391 1068
ataiwan@wiley.com

Thailand

1 Fusionopolis Walk
#07-01 Solaris South Tower
Singapore 138628
Tel: (65) 6643 8000
Fax: (65) 6643 8008
ayeo@wiley.com

Singapore

1 Fusionopolis Walk
#07-01 Solaris South Tower
Singapore 138628
Customer Hotline: (65) 6643 8333
Fax: (65) 6643 8397
Email: asiaorders@wiley.com
Returns Centre Email: returnsasia@wiley.com

Australia & New Zealand

For marketing, please contact:

155 Cremorne Street,
Richmond, Victoria 3121
Australia
Tel: (61) 3 9274 3100
Fax: (61) 3 9274 3101
melbourne_office@johnwiley.com.au

For orders in ANZ region, please contact:

PO Box 3065
Stafford BC
Queensland 4053
Australia
Toll-free telephone: 1800 777 474
Toll-free fax: 1800 802 258
Aus-custservice@wiley.com

Asian Publishing & Distribution Centre for

Australia • Bangladesh • Brunei • Cambodia • Hong Kong • India • Indonesia • Japan • Laos • Maldives • Malaysia • Mauritius • Myanmar • Nepal • People's Republic of China • Philippines • Singapore • South Korea • Sri Lanka • Taiwan • Thailand • Vietnam

WILEY