



MERCURY

LEARNING AND INFORMATION

Fall 2020

Computer Science & Technology 1

Engineering 41

Mathematics/Statistics 56

Science & Health 62



www.merclearning.com

Distributed by  www.styluspub.com

Recently Published!**3D Printing***An Introduction***Stephanie Torta and Jonathan Torta**

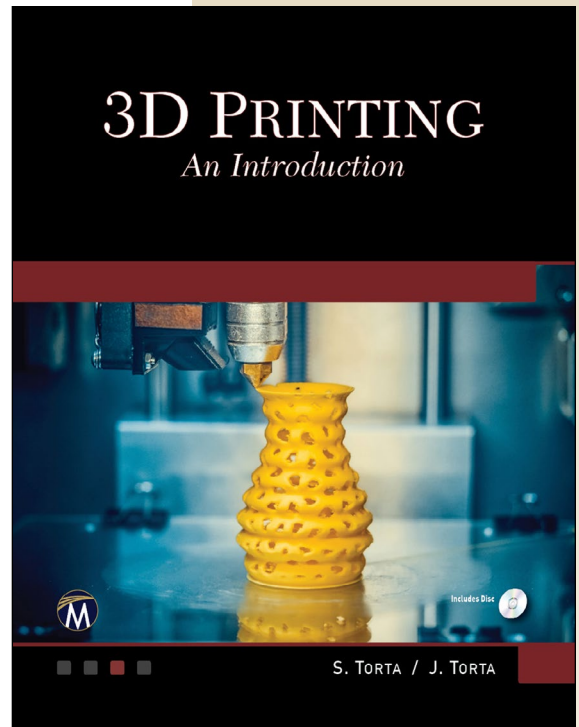
This book is designed as an introduction to the field of 3D printing. It includes an overview of 3D printing technology in industry, education, and the exploding area of Do-It-Yourself. It contains a detailed look at the common 3D printers, materials, and software. Using full-color images throughout, the book guides you on setting up your own printer and performing calibration tasks, including descriptions of printing methods, best practices, pitfalls to avoid, and how to finish a completed project. Divided into three parts, the book covers a brief history and evolution of 3D printers, along with their use in industry and in personal consumer use in Part 1. Part 2 gets you started with the set up and use of a common 3D printer, from initial hardware and material calibration and safety, to how the software functions work, and how to acquire 3D objects to print. It then showcases three different projects from start to finish. Part 3 concentrates on buying your own printer, the common features of personal 3D printers, and includes sections for the adventurous on post-market modifications. Companion files are included with videos, applications, and examples of 3D printing.

FEATURES:

- Companion files are included with printable 3D objects in common formats, additional lessons, checklists, figures from the text, and videos showing time-lapse, printing, and print refinement
- Provides an overview of the technology, applications, and design issues associated with 3D printing technology
- Includes review questions, discussion/essay questions and “Applying What You’ve Learned” in every chapter

Stephanie Torta is a Senior Media Developer and an accomplished graphic designer, videographer, and photographer with over twenty years’ experience including teaching graphic design at Boston University and Emerson College.

Jonathan Torta is a lifetime DIY enthusiast constructing various automated devices, computers, Tesla coils, and robots, with over 8 years constructing and modifying a variety of 3D printers to maximize their capabilities.

**MARCH 2019**

7 x 9, 370 pages

Paperback + CD, US \$49.95

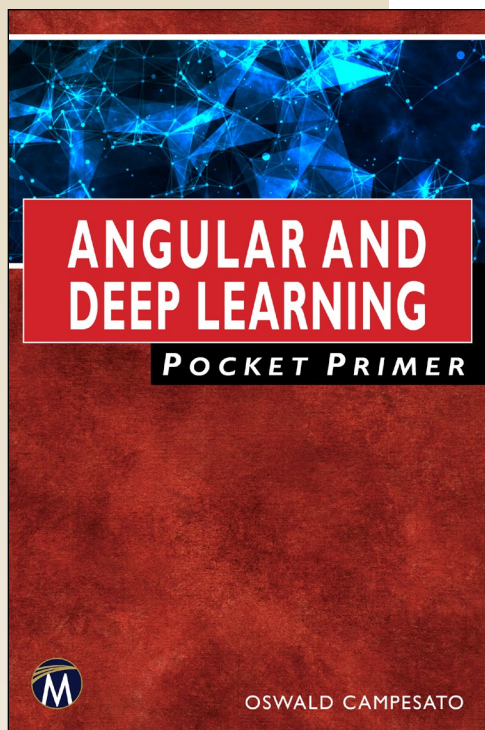
978-1-683922-09-4

E-book, US \$29.95

978-1-683922-10-0

Library E-book, US \$124.95

978-1-683922-45-2



SEPTEMBER 2020

6 x 9, 250 pages

Paperback + CD, US \$39.95

978-1-683924-73-9

E-book, US \$34.95

978-1-683924-72-2

Library E-book, US \$179.95

978-1-683924-71-5

Pocket Primer series

Coming Soon!

Angular and Deep Learning

Pocket Primer

Oswald Campesato

As part of the best-selling Pocket Primer series, this book provides readers with enough information to develop Angular applications that incorporate deep learning. The first three chapters contain a short tour of basic Angular functionality, such as UI components and forms in Angular applications. The fourth chapter introduces you to deep learning, the problems it can solve, and some challenges for the future. You will also learn about MLPs (MultiLayer Perceptrons), CNNs (Convolutional Neural Networks), and a Keras-based code sample of a CNN with the MNIST dataset. The fifth chapter discusses RNNs, BPTT, as well as LSTMs and AEs (Auto Encoders). The sixth chapter introduces basic TensorFlow concepts, followed by tensorflowjs (i.e., TensorFlow in modern browsers), and some examples of Angular applications combined with deep learning. The files with code and color figures are on the companion disc with the book or available from the publisher.

FEATURES:

- Introduces the basic deep learning concepts and Angular applications
- Includes companion files with code samples and 4-color figures

Oswald Campesato (San Francisco, CA) specializes in Deep Learning, Data Cleaning, Java, Android, and TensorFlow. He is the author/co-author of over twenty-five books including *TensorFlow Pocket Primer*, *Artificial Intelligence*, *Machine Learning*, and *Deep Learning*; *Android Pocket Primer*, *Angular4 Pocket Primer*, and the *Python Pocket Primer* (Mercury Learning).

New!

Angular and Machine Learning

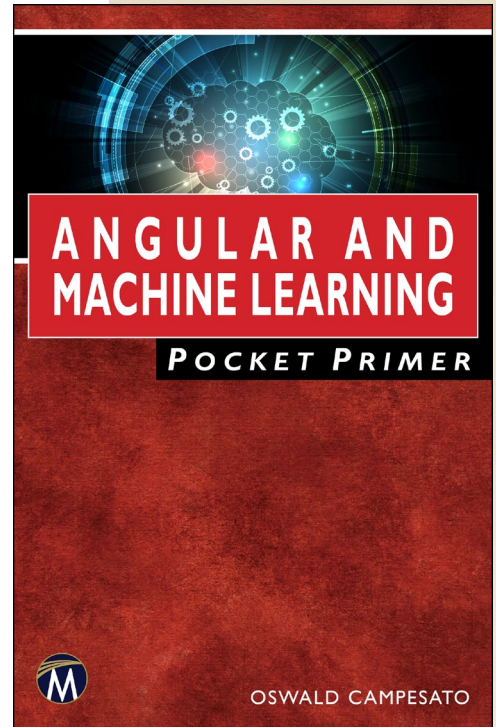
*Pocket Primer***Oswald Campesato**

As part of the best-selling Pocket Primer series, this book is designed to introduce the reader to basic machine learning concepts and incorporate that knowledge into Angular applications. The book is intended to be a fast-paced introduction to some basic features of machine learning and an overview of several popular machine learning classifiers. It includes code samples and numerous figures and covers topics such as Angular functionality, basic machine learning concepts, classification algorithms, TensorFlow and Keras. The files with code and color figures are on the companion disc with the book or available from the publisher.

FEATURES:

- Introduces the basic machine learning concepts and Angular applications
- Includes source code and full color figures (Also available from the publisher for downloading by writing to info@merclearning.com)

Oswald Campesato (San Francisco, CA) specializes in Deep Learning, Data Cleaning, Java, Android, and TensorFlow. He is the author/co-author of over twenty-five books including *TensorFlow Pocket Primer*; *Artificial Intelligence*, *Machine Learning*, and *Deep Learning*; *Android Pocket Primer*, *Angular4 Pocket Primer*, and the *Python Pocket Primer* (Mercury Learning).

**APRIL 2020**

6 x 9, 262 pages

Paperback + CD, US \$39.95

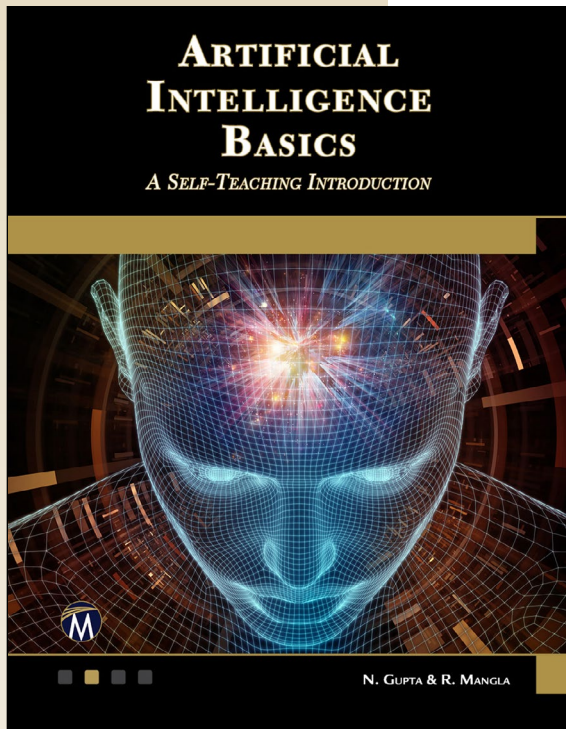
978-1-683924-70-8

E-book, US \$34.95

978-1-683924-69-2

Library E-book, US \$179.95

978-1-683924-68-5*Pocket Primer series*

**MARCH 2020**

7 x 9, 203 pages

Paperback, US \$41.95

978-1-683925-16-3

E-book, US \$34.95

978-1683925-15-6

Library E-book, \$129.95

978-1-683925-14-9***New!*****Artificial Intelligence Basics***A Self-Teaching Introduction***N. Gupta and R. Mangla**

Designed as a self-teaching introduction to the fundamental concepts of artificial intelligence, the book begins with its history, the Turing test, and early applications. Later chapters cover the basics of searching, game playing, and knowledge representation. Expert systems and machine learning are covered in detail, followed by separate programming chapters on Prolog and Python. The concluding chapter on artificial intelligence machines and robotics is comprehensive with numerous modern applications.

FEATURES:

- Covers an introduction to concepts related to AI, including searching processes, knowledge representation, machine learning, expert systems, programming, and robotics
- Includes separate chapters on Prolog and Python to introduce basic programming techniques in Artificial Intelligence

N. Gupta, PhD, teaches courses in artificial intelligence and specializes in expert systems.

R. Mangla is the proprietor of a large manufacturing company using AI machines.

New!

Artificial Intelligence and Expert Systems

I. Gupta and G. Nagpal

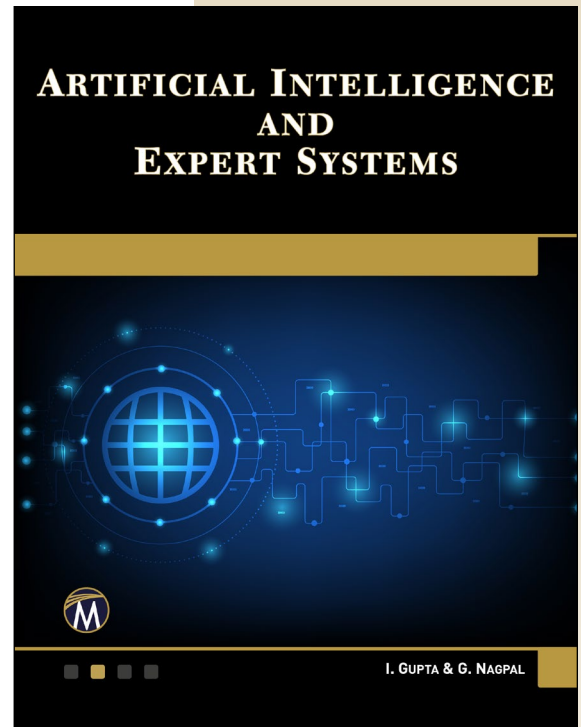
This book is designed to identify some of the current applications and techniques of artificial intelligence as an aid to solving problems and accomplishing tasks. It provides a general introduction to the various branches of AI which include formal logic, reasoning, knowledge engineering, expert systems, neural networks, and fuzzy logic, etc. The book has been structured into five parts with an emphasis on expert systems: problems and state space search, knowledge engineering, neural networks, fuzzy logic, and Prolog.

FEATURES:

- Introduces the various branches of AI which include formal logic, reasoning, knowledge engineering, expert systems, neural networks, and fuzzy logic, etc.
- Includes a separate chapter on Prolog to introduce basic programming techniques in AI

I. Gupta teaches courses in Artificial Intelligence and specializes in expert system research.

G. Nagpal teaches courses in Artificial Intelligence and specializes in expert system research.



APRIL 2020

7 x 9, 412 pages

Paperback, US \$49.95

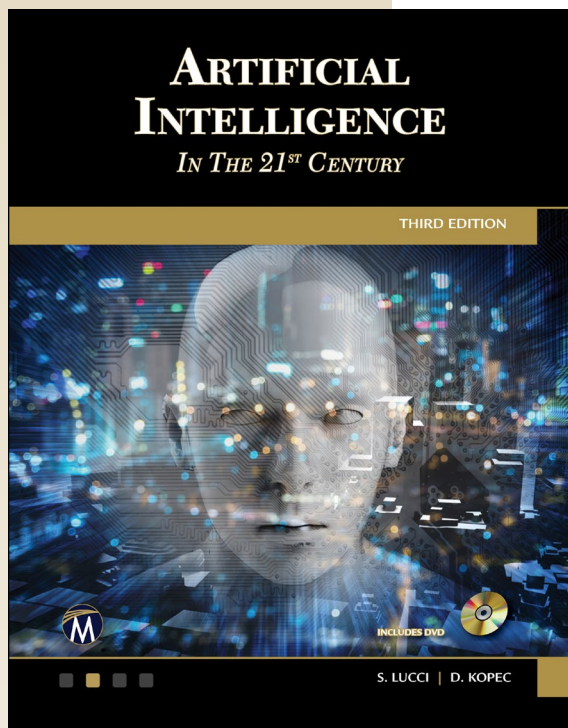
978-1-683925-07-1

E-book, US \$41.95

978-1683925-06-4

Library E-book, US \$149.95

978-1-683925-05-7

**DECEMBER 2020**

8 x 10, 850 pages

Hardback + CD, US \$99.95

978-1-683922-23-0

E-book, US \$49.95

978-1683922-24-7

Library E-book, US \$179.95

978-1-683922-52-0**Coming Soon!****Artificial Intelligence in the 21st Century 3/e**
Stephen Lucci, Sarhan M. Musa, and Danny Kopec

This third edition provides a comprehensive, colorful, up-to-date, and accessible presentation of AI without sacrificing theoretical foundations. It includes numerous examples, applications, full color images, and human interest boxes to enhance student interest. New chapters on deep learning, AI security, and AI programming are included. Advanced topics cover neural nets, genetic algorithms, natural language processing, planning, and complex board games. A companion disc is provided with resources, applications, and figures from the book. Numerous instructors' resources are available upon adoption.

FEATURES:

- Includes new chapters on deep learning, AI security, and AI programming
- Provides a comprehensive, colorful, up to date, and accessible presentation of AI without sacrificing theoretical foundations
- Uses numerous examples, applications, full color images, and human interest boxes to enhance student interest
- Introduces important AI concepts, e.g., robotics, use in video games, neural nets, machine learning, and more thorough practical applications
- Features over 300 figures and color images with worked problems detailing AI methods and solutions to selected exercises
- Includes companion files with resources, simulations, and figures from the book
- Provides numerous instructors' resources, including: solutions to exercises, Microsoft PP slides, etc.

Stephen Lucci holds a Ph.D. from the CUNY Graduate School and currently teaches computer science at The City College of New York. Dr. Lucci has published in the areas of high performance computing and has been co-PI on education grants from NASA MU-SPIN.

Sarhan M. Musa, PhD, teaches numerous courses at Texas A&M Prairie View and is the author of several books including *Computational Nanophotonics* (CRC Press) and *Finite Element Analysis* (MLI).

Danny Kopec taught at Brooklyn College and the CUNY Graduate Center. He authored several books, conference and journal articles, and was an International Chess Master.

New!

Artificial Intelligence, Machine Learning, and Deep Learning

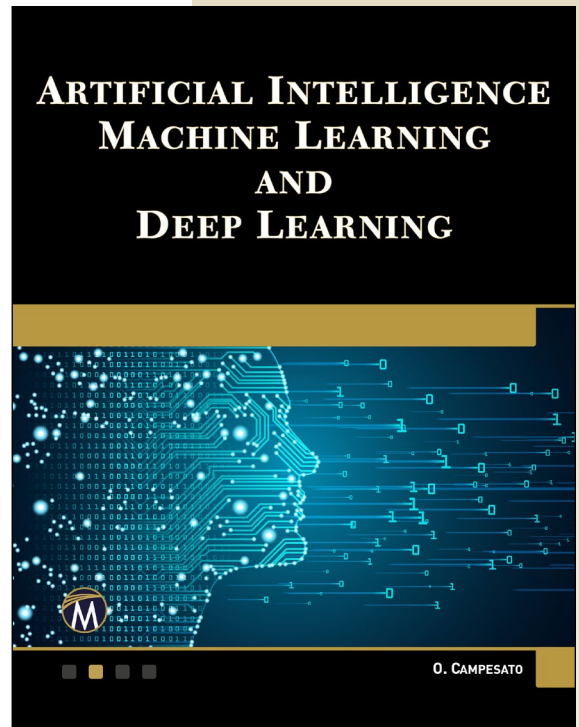
Oswald Camesato

This book begins with an introduction to AI, followed by machine learning, deep learning, NLP, and reinforcement learning. Readers will learn about machine learning classifiers such as logistic regression, k-NN, decision trees, random forests, and SVMs. Next, the book covers deep learning architectures such as CNNs, RNNs, LSTMs, and auto encoders. Keras-based code samples are included to supplement the theoretical discussion. In addition, this book contains appendices for Keras, TensorFlow 2, and Pandas.

FEATURES:

- Covers an introduction to programming concepts related to AI, machine learning, and deep learning
- Includes material on Keras, TensorFlow2, and Pandas

Oswald Camesato (San Francisco, CA) specializes in Deep Learning, Data Cleaning, Java, Android, and TensorFlow. He is the author/co-author of over twenty-five books including *TensorFlow Pocket Primer*; *Artificial Intelligence, Machine Learning, and Deep Learning*; *Android Pocket Primer*, *Angular4 Pocket Primer*, and the *Python Pocket Primer* (Mercury Learning).



FEBRUARY 2020

7 x 9, 300 pages

Paperback, US \$59.95

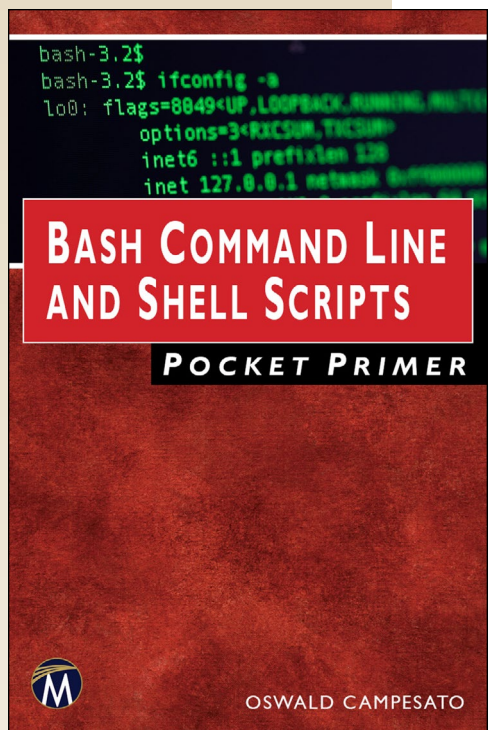
978-1-683924-67-8

E-book, US \$41.95

978-1-683924-66-1

Library E-book, US \$179.95

978-1-683924-65-4

**MAY 2020**

6 x9, 266 pages

Paperback, US \$35.95

978-1-683925-04-0

E-book, US \$41.95

978-1-683925-03-3

Library E-book, US \$149.95

978-1-683925-02-6*Pocket Primer series***New!**

Bash Command Line and Shell Scripts

*Pocket Primer***Oswald Campesato**

As part of the best-selling Pocket Primer series, this book is designed to introduce readers to an assortment of useful command-line utilities that can be combined to create simple, yet powerful shell scripts. While all examples and scripts use the “bash” command set, many of the concepts translate into other command shells (such as sh, ksh, zsh, and csh), including the concept of piping data between commands and the highly versatile sed and awk commands. Aimed at a reader relatively new to working in a bash environment, the book is comprehensive enough to be a good reference and teach a few new techniques to those who already have some experience with creating shell scripts. It contains a variety of code fragments and shell scripts for data scientists, data analysts, and other people who want shell-based solutions to “clean” various types of text files. In addition, the concepts and code samples in this book are useful for people who want to simplify routine tasks.

FEATURES:

- Takes introductory concepts and commands in bash, and then demonstrates their uses in simple, yet powerful shell scripts
- Contains an assortment of shell scripts for data scientists, data analysts, and other people who want shell-based solutions to “clean” various types of text files
- Includes companion files with all of the source code examples (available for download from the publisher)

Oswald Campesato (San Francisco, CA) specializes in Deep Learning, Data Cleaning, Java, Android, and TensorFlow. He is the author/co-author of over twenty-five books including *TensorFlow Pocket Primer*, *Artificial Intelligence*, *Machine Learning*, and *Deep Learning*; *Android Pocket Primer*, *Angular4 Pocket Primer*, and the *Python Pocket Primer* (Mercury Learning).

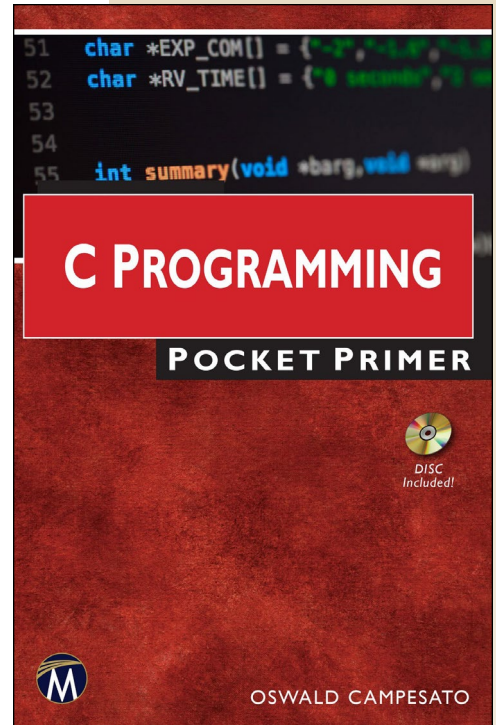
Recently Published!**C Programming***Pocket Primer***Oswald Campesato**

As part of the Pocket Primer series, this book provides an overview of the major concepts to program in the language of C. Topics include: Introduction to C, Conditional Logic and Simple Tasks, Loops and Arrays, Functions in C, Working with Pointers in C, Working with cPointers, Miscellaneous Topics, and the make Utility.

FEATURES:

- Provides an overview of the most important C programming techniques
- Covers up-to-date information regarding the C11 standard
- Includes two chapters on pointers
- Contains companion files with source code from the book

Oswald Campesato (San Francisco, CA) specializes in Deep Learning, Data Cleaning, Java, Android, and TensorFlow. He is the author/co-author of over twenty-five books including *TensorFlow Pocket Primer*; *Artificial Intelligence, Machine Learning, and Deep Learning*; *Android Pocket Primer*, *Angular4 Pocket Primer*, and the *Python Pocket Primer* (Mercury Learning).

**JANUARY 2019**

6 x 9, 220 pages

Paperback + CD, US \$39.95

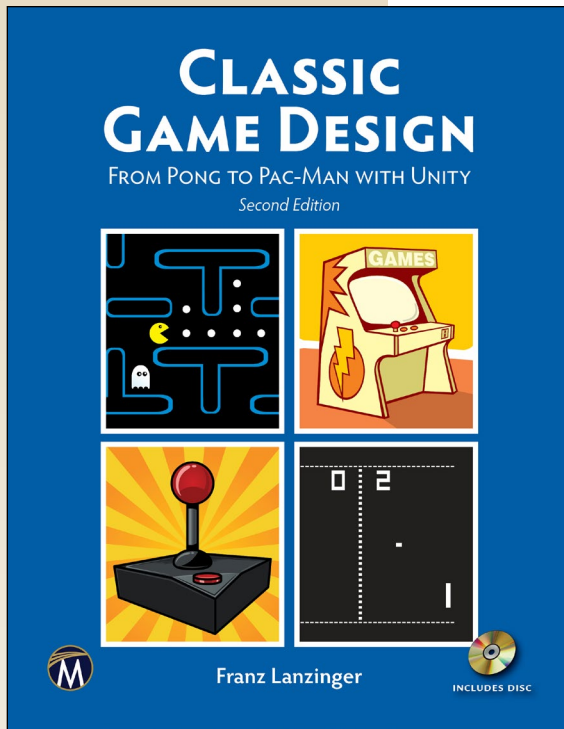
978-1-683923-88-6

E-book, US \$24.95

978-1-683923-89-3

Library E-book, US \$124.95

978-1-683923-90-9*Pocket Primer series*

**JUNE 2019**

7 x 9, 296 pages

Paperback + CD, US \$59.95

978-1-683923-85-5

E-book, US \$35.95

978-1-683923-86-2

Library E-book, US \$124.95

978-1-683923-87-9**Recently Published!****Classic Game Design 2/e***From Pong to Pac-Man with Unity***Franz Lanzinger**

You too can learn to design and develop classic arcade video games like *Pong*, *Pac-Man*, *Space Invaders*, and *Scramble*. Collision detection, extra lives, power ups, and countless other essential design elements were invented by the mostly anonymous designers at the early pioneering companies that produced these great games. In this book you'll go step by step, using modern, free software tools such as Unity to create five games in the classic style, inspired by retro favorites like: *Pong*, *Breakout*, *Space Invaders*, *Scramble*, and *Pac-Man*. All the source code, art, and sound sources for the projects are available on the companion files. You'll discover the fun of making your own games, putting in your own color graphics, adjusting the scoring, coding the AI, and creating the sound effects. You'll gain a deep understanding of the roots of modern video game design: the classics of the '70s and '80s.

FEATURES:

- Uses Unity, C#, Blender, GIMP, and Audacity to make five fun classic games
- 4-color throughout with companion files that include source code, art, and full projects (also available for downloading from the publisher by emailing proof of purchase to info@merclearning.com)
- Includes historical anecdotes direct from one of the fabled Atari coin-op programmers
- Detailed step-by-step instructions, dozens of exercises, and rules of classic game design
- Contains unique insights on applying classic game design concepts to modern games.

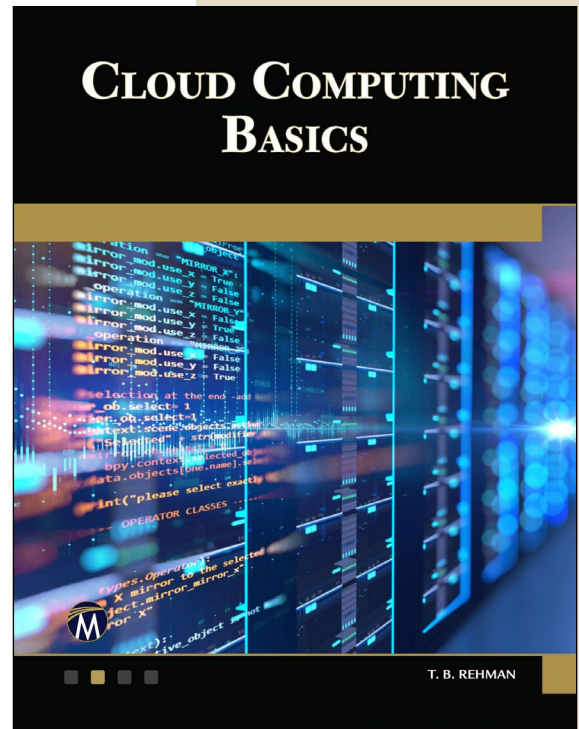
Franz Lanzinger is best known as the pioneering programmer and chief designer of *Atari's Crystal Castles*. Mr. Lanzinger is owner of Lanzinger Studio, publisher and developer of the *Gubble* series.

Recently Published!**Cloud Computing Basics****T. B. Rehman**

This book is designed for use as a primary textbook for a course in cloud computing or as a resource for professionals in industry seeking to explore cloud services. The book highlights the recent developments in distributed computing and details the architecture, virtualization concepts, and security concerns of cloud computing. It also provides a detailed understanding of the benefits of cloud computing that can encourage enterprises to switch to the cloud.

FEATURES:

- Provides a basic understanding of the computing paradigm of cloud computing
- Gives a brief introduction to cloud computing, its architecture, and the Hadoop distributed file system
- Deals with cloud management concepts like scalable, fault tolerance, resiliency, provisioning, asset management, cloud governance, high availability, disaster recovery, and multi-tenancy
- Includes case studies on MS Azure, Google, Amazon Web Services, Aneka, etc.

**DECEMBER 2018**

7 x 9, 200 pages

Paperback + CD, US \$49.95

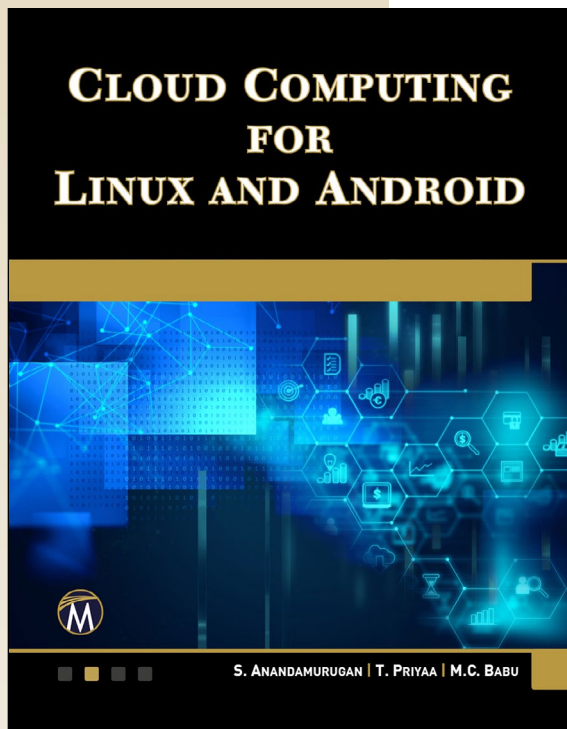
978-1-683923-50-3

E-book, US \$21.95

978-1-683923-49-7

Library E-book, US \$124.95

978-1-683923-51-0



SEPTEMBER 2020

7 x 9, 450 pages

Paperback, US \$54.95

978-1-683925-10-1

E-book, US \$41.95

978-1-683925-09-5

Library E-book, US \$169.95

978-1-68935-08-8

Coming Soon!

Cloud Computing for Linux and Android

S. Anandamurugan, T. Priyaa, and M. C. Babu

This book is designed to introduce the reader to cloud computing concepts as they relate to the Linux and Android operating systems. The book has fourteen chapters with each chapter presenting both basics to advanced concepts. It contains ten chapters on cloud technology and the Linux platform, then three chapters on Android technology using the cloud platform, and the final chapter contains five case studies, which include the real-time executed projects. Throughout the book many cloud-based tools and software are discussed.

FEATURES:

- Introduces the reader to cloud computing concepts as they relate to the Linux and Android operating systems
- Includes five case studies with real-time executed projects
- Covers concepts such as classifications, services, Ubuntu, Google-Cloud Messaging, mobile cloud computing, and more

New!

Computer Concepts and Management Information Systems

C. P. Gupta and K. K. Goyal

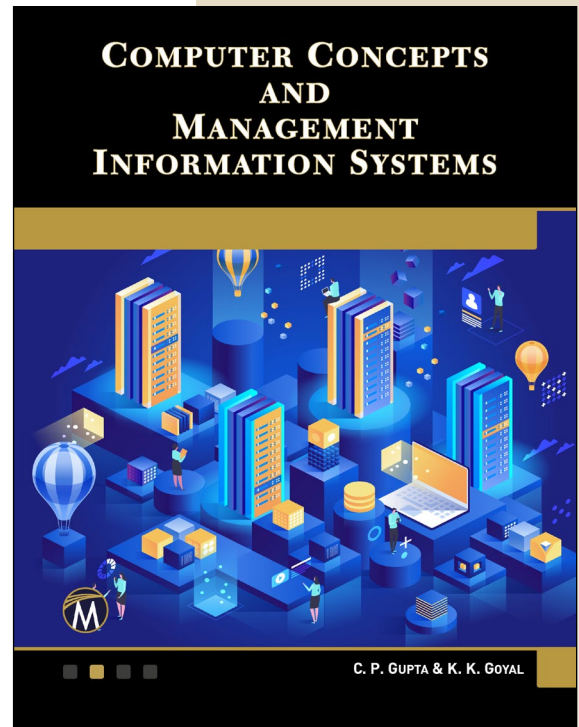
This book is designed to provide the reader with the fundamentals of computers and MIS in an easy to understand, “self-teaching” format. It introduces the major subjects such as hardware components, software applications, detailed information on Microsoft Office, information systems, ERP, CRM, security, business ethics, and cybercrime.

FEATURES:

- Covers the major components of MS Office: Excel, Word, PowerPoint, and Access
- Provides an overview of the workings of a computer, software applications, and MIS
- Includes discussion of information systems, ERP, security, business ethics, and cybercrime

C.P. Gupta, PhD, is a university instructor who teaches courses in cybersecurity and cybercrime. Dr. Gupta is a member of IEEE and has published research articles for international journals.

K. K. Goyal, PhD, is a university instructor, who teaches courses in cybersecurity and cybercrime. Dr. Goyal is a member of IEEE and has published research articles for international journals.

**MAY 2020**

7 x 9, 232 pages

Paperback, US \$59.95

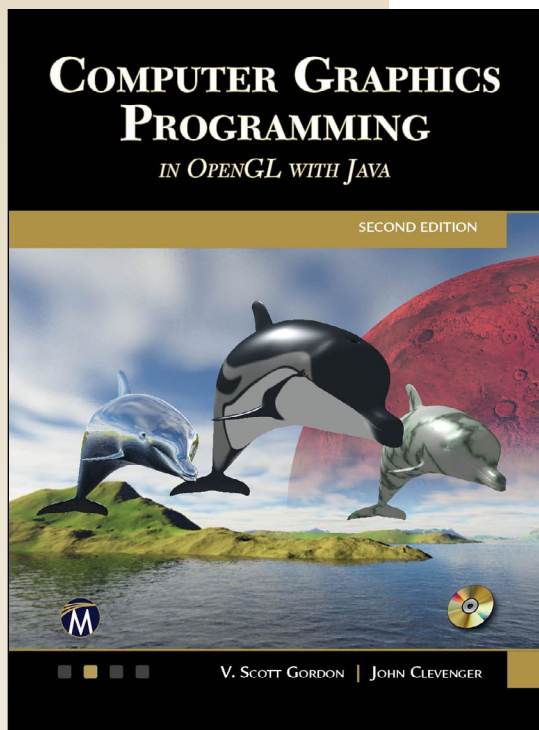
978-1-683925-86-6

E-book, US \$41.95

978-1-683925-85-9

Library E-book, US \$159.95

978-1-683925-84-2

**OCTOBER 2018**

7 x 9, 406 pages

Hardback + CD, US \$69.95

978-1-683922-19-3

E-book, US \$35.95

978-1-683922-20-9

Library E-book, US \$124.95

978-1-683922-65-0**Recently Published!****Computer Graphics Programming in OpenGL with JAVA 2/e****V. Scott Gordon and John L. Clevenger**

This new edition provides step-by-step instruction on modern 3D graphics shader programming in OpenGL, along with its theoretical foundations. It is appropriate both for computer science undergraduate graphics programming courses in degree programs that emphasize Java, and for professionals interested in mastering 3D graphics skills who prefer Java. It has been designed in a 4-color, “teach-yourself” format with numerous examples that the reader can run just as presented. New sections have been added covering soft shadows, performance optimization, Nsight debugging, as well as updated industry-standard libraries and steps for running the examples on a Macintosh.

FEATURES:

- Includes new sections on implementing soft shadows, performance optimization, and updated tools such as the JOML math library and the NVIDIA® Nsight™ debugger.
- Covers modern OpenGL 4.0+ shader programming in Java/JOGL, with instructions for both PC/Windows and Macintosh.
- Illustrates every technique with complete running code examples. Everything needed to install the libraries and run every example is provided and fully explained.
- Includes step-by-step instruction for every GLSL programmable pipeline stage (vertex, tessellation, geometry, and fragment).
- Includes companion files with code, object models, figures, and more.

V. Scott Gordon, PhD, and **John L. Clevenger, PhD**, are professors of computer science at California State University, Sacramento.

Recently published!

Computer Graphics Programming in OpenGL with C++

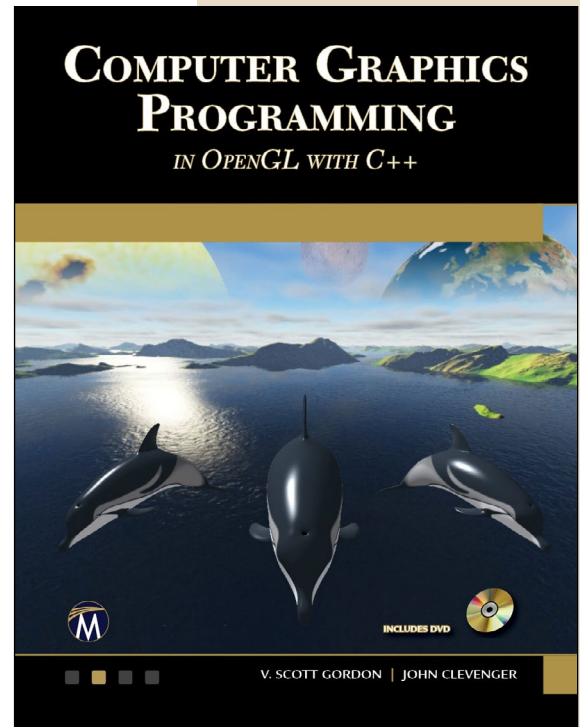
V. Scott Gordon and John L. Clevenger

This book provides step-by-step instruction on modern 3D graphics shader programming in OpenGL with C++, along with its theoretical foundations. It is appropriate both for computer science graphics courses and for professionals interested in mastering 3D graphics skills. It has been designed in a 4-color, “teach-yourself” format with numerous examples and detailed explanations. Every shader stage is explored, starting with the basics of modeling, lighting, textures, etc., up through advanced techniques such as tessellation, soft shadows, and generating realistic materials and environments. The book includes companion files with all of the source code, models, textures, skyboxes and normal maps used in the book.

FEATURES:

- Covers modern OpenGL 4.0+ shader programming in C++, with instructions for both PC/Windows and Macintosh.
- Illustrates every technique with running code examples. Everything needed to install the libraries, and complete source code for each example is provided and fully explained.
- Includes step-by-step instruction for using each GLSL programmable pipeline stage (vertex, tessellation, geometry, and fragment).
- Explores practical examples for modeling, lighting and shadows (including soft shadows), terrain, and 3D materials such as wood and marble.
- Explains how to optimize code for performance, and use modern development tools such as the NVIDIA® Nsight™ debugger.
- Includes companion files with all of the code, object models, figures, textures, skyboxes and skydomes, height and normal maps used throughout the book.

V. Scott Gordon and **John L. Clevenger** are professors of computer science at California State University, Sacramento.

**DECEMBER 2018**

7 x 9, 384 pages

Hardback + CD, US \$69.95

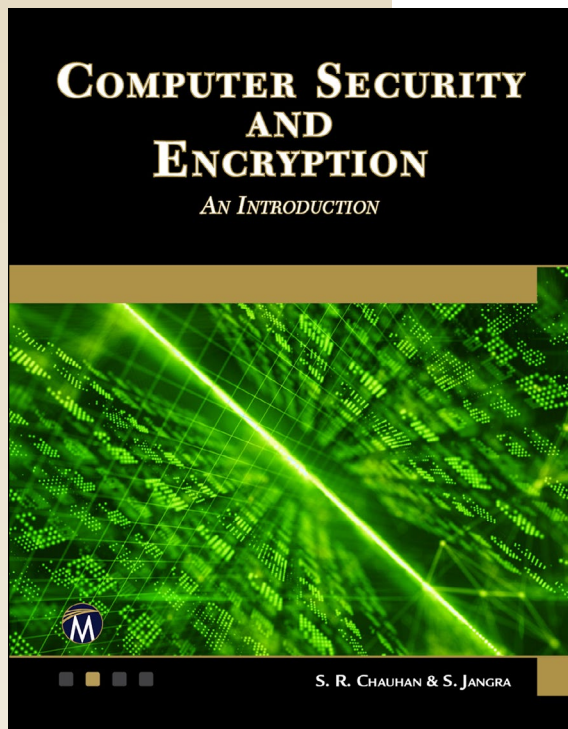
978-1-683922-21-6

E-book, US \$35.95

978-1-683922-22-3

Library E-book, US \$124.95

978-1-683922-66-7

**New!**

Computer Security and Encryption

An Introduction

S. R. Chauhan and S. Jangra

Because of the rapid growth of cybercrime, cryptography and system security may be the fastest growing technologies in our culture today. This book describes various aspects of cryptography and system security, with a particular emphasis on the use of rigorous security models and practices in the design of networks and systems. The first portion of the book presents the overall system security concepts and provides a general overview of its features, such as object model and inter-object communications. The objective is to provide an understanding of the cryptography underpinnings on which the rest of the book is based. The book is designed to meet the needs of beginners as well as more advanced readers.

MARCH 2020

7 x 9, 350 pages

Paperback, US \$54.95

978-1-683925-31-6

E-book, US \$41.95

978-1-683925-30-9

Library E-book, US \$169.95

978-1-683925-29-3

FEATURES:

- Covers the major components of cryptography and system security, with a particular emphasis on the use of rigorous security models and practices used in the design of networks and systems
- Includes a discussion of emerging technologies such as Big Data Analytics, cloud computing, Internet of Things (IoT), Smart Grid, SCADA, control systems, and Wireless Sensor Networks (WSN)

S. R. Chauhan and **S. Jangra** are university instructors with over 20 years of experience teaching courses in cybersecurity and cybercrime.

New!

Cybersecurity

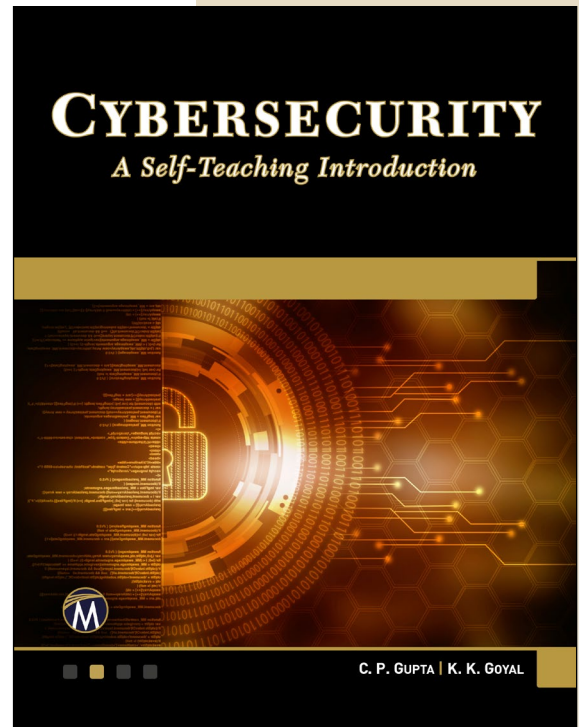
*A Self-Teaching Introduction***C. P. Gupta and K. K. Goyal**

This book is designed to provide the reader with the fundamental concepts of cybersecurity and cybercrime in an easy to understand, “self-teaching” format. It introduces all of the major subjects related to cybersecurity, including data security, threats and viruses, malicious software, firewalls and VPNs, security architecture and design, security policies, cyberlaw, cloud security, and more.

FEATURES:

- Provides an overview of cybersecurity and cybercrime subjects in an easy to understand, “self-teaching” format
- Covers security related to emerging technologies such as cloud security, IoT, AES, and grid challenges
- Includes discussion of information systems, cryptography, data and network security, threats and viruses, electronic payment systems, malicious software, firewalls and VPNs, security architecture and design, security policies, cyberlaw, and more.

C.P. Gupta, PhD, and **K. K. Goyal** are university instructors who teach courses in cybersecurity and cybercrime. They are members of IEEE and have published research articles for international journals.

**MARCH 2020**

7 x 9, 384 pages

Paperback + CD, US \$41.95

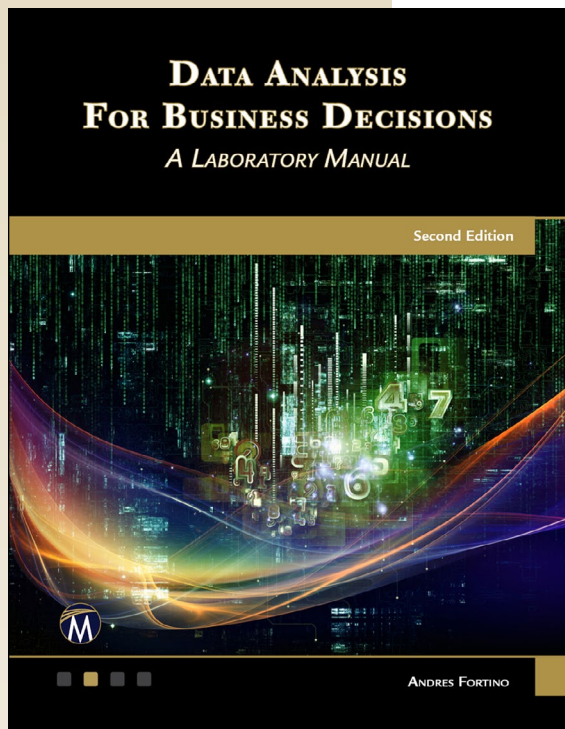
978-1-683924-98-2

E-book, US \$34.95

978-1-683924-97-5

Library E-book, US \$139.95

978-1-683924-96-8

**AUGUST 2020**

7 x 9, 200 pages

Paperback, US \$49.95

978-1-683925-92-7

E-book, US \$34.95

978-1-683925-91-0

Library E-book, US \$129.95

978-1-683925-90-3**New!****Data Analysis for Business Decisions 2/e***A Laboratory Notebook***Andres Fortino**

This laboratory manual is intended for business analysts who wish to increase their skills in the use of statistical analysis to support business decisions. Most of the case studies use Excel, today's most common analysis tool. They range from the most basic descriptive analytical techniques to more advanced techniques such as linear regression and forecasting. Advanced projects cover inferential statistics for continuous variables (t-Test) and categorical variables (chi-square), as well as A/B testing. The manual ends with techniques to deal with the analysis of text data and tools to manage the analysis of large data sets (Big Data) using Excel.

FEATURES:

- Teaches the statistical analysis skills needed to support business decisions
- Provides projects ranging from the most basic descriptive analytical techniques to more advanced techniques such as linear regression, forecasting, inferential statistics, and analyzing big data sets
- Includes companion files with solution spreadsheets, sample files, data sets, etc. used in the book's case studies

Andres Fortino, PhD, leads his own company, Fortino Global Education, and is an adjunct faculty member at the NYU School of Professional Studies, where he teaches courses in Business Analytics, Data Mining, and Data Visualization. Dr. Fortino has received many honors, including IBM's *First Invention Level Award* for his work in semiconductor research. He holds three US patents and ten invention disclosures.

New!

Data Science Tools

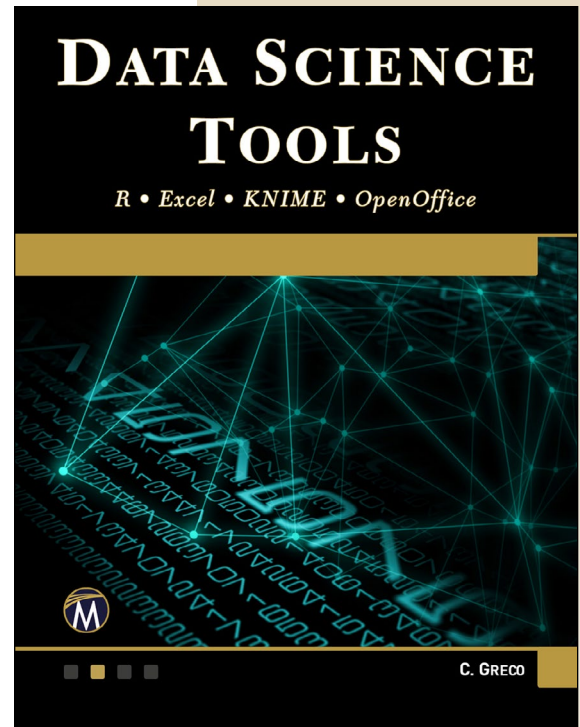
*R • Excel • KNIME • OpenOffice***Christopher Greco**

In the world of data science there are myriad tools available to analyze data. This book describes some of the popular software application tools along with the processes for downloading and using them in the most optimum fashion. The content includes data analysis using Microsoft Excel, KNIME, R, and OpenOffice (Spreadsheet). Each of these tools will be used to apply statistical concepts including confidence intervals, normal distribution, T-Tests, linear regression, histograms, and geographic analysis using real data from Federal Government sources.

FEATURES:

- Analyzes data using popular applications such as Excel, R, KNIME, and OpenOffice
- Covers statistical concepts including confidence intervals, normal distribution, T-Tests, linear regression, histograms, and geographic analysis
- Capstone exercises analyze data using the different software packages

Christopher Greco is a COMPTIA Certified Technical Trainer and Microsoft Certified Systems Engineer with numerous years of industry experience in the areas of data analysis, cybersecurity, and IT instruction and training. He currently teaches data analytics as an independent contractor for a major training company located near Washington, DC.

**MAY 2020**

7 x 9, 206 pages

Paperback, US \$49.95

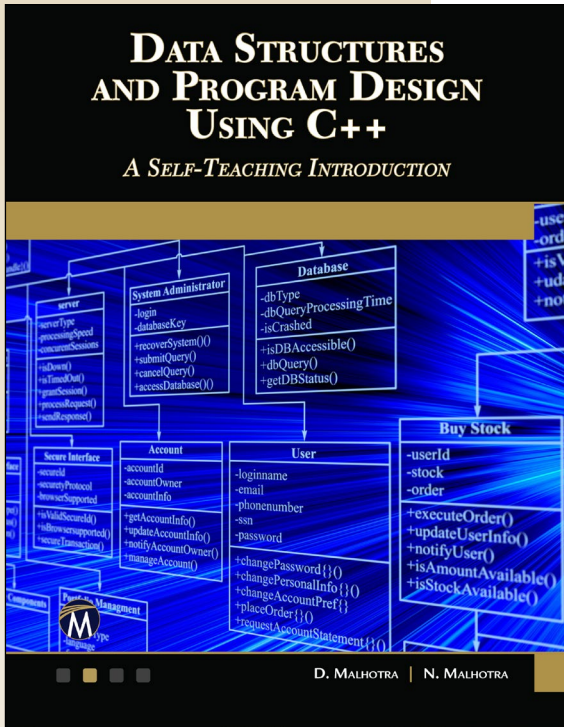
978-1-683925-83-5

E-book, US \$39.95

978-1-683925-82-8

Library E-book, US \$149.95

978-1-683925-81-1



JANUARY 2019

7 x 9, 546 pages

Paperback, US \$79.95

978-1-683923-70-1

E-book, US \$39.95

978-1-683923-71-8

Library E-book, US \$179.95

978-1-683923-72-5

Recently Published!

Data Structures and Program Design Using C++

D. Malhotra, PhD, and N. Malhotra, PhD

Data structures provide a means to managing large amounts of information such as large databases, using SEO effectively, and creating Internet/Web indexing services. This book is designed to present fundamentals of data structures for beginners using the C++ programming language in a friendly, self-teaching, format. Practical analogies using real world applications are integrated throughout the text to explain technical concepts. The book includes a variety of end-of-chapter practice exercises, e.g., programming, theoretical, and multiple-choice.

FEATURES:

- Covers data structure fundamentals using C++
- Numerous tips, analogies, and practical applications enhance understanding of subjects under discussion
- “Frequently Asked Questions” integrated throughout the text clarify and explain concepts
- Includes a variety of end-of-chapter exercises, e.g., programming, theoretical, and multiple choice

D. Malhotra, PhD, is a professor in information technology and has published numerous research articles with reputed international publishers such as ACM, Springer, Elsevier, and IEEE.

N. Malhotra, PhD, has research publications with numerous international publishers. Her teaching and research interests include data structures, big data analytics, business intelligence, Java, and distributed programming.

New!

Data Structures and Program Design Using Java

A Self-Teaching Introduction

D. Malhotra, PhD, and N. Malhotra, PhD

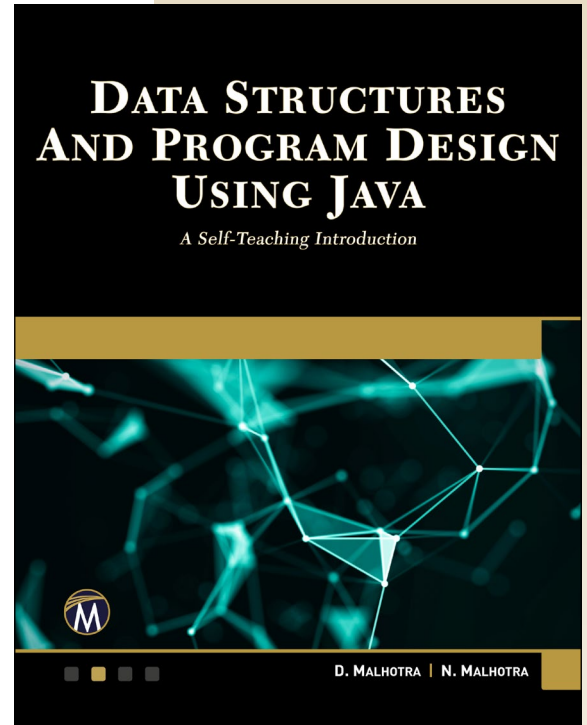
Data structures provide a means to managing large amounts of information such as large databases, using SEO effectively, and creating Internet/Web indexing services. This book is designed to present fundamentals of data structures for beginners using the Java programming language in a friendly, self-teaching format. Practical analogies using real world applications are integrated throughout the text to explain technical concepts. The book includes a variety of end-of-chapter practice exercises, e.g., programming, theoretical, and multiple-choice.

FEATURES:

- Covers data structure fundamentals using Java
- Numerous tips, analogies, and practical applications enhance understanding of subjects under discussion
- “Frequently Asked Questions” integrated throughout the text clarify and explain concepts
- Includes a variety of end-of-chapter exercises, e.g., programming, theoretical, and multiple choice

D. Malhotra, PhD, is a professor in information technology and has published numerous research articles with reputed international publishers such as ACM, Springer, Elsevier, and IEEE.

N. Malhotra, PhD, has research publications with numerous international publishers. Her teaching and research interests include data structures, big data analytics, business intelligence, Java, and distributed programming.



MARCH 2020

7 x 9, 430 pages

Paperback, US \$79.95

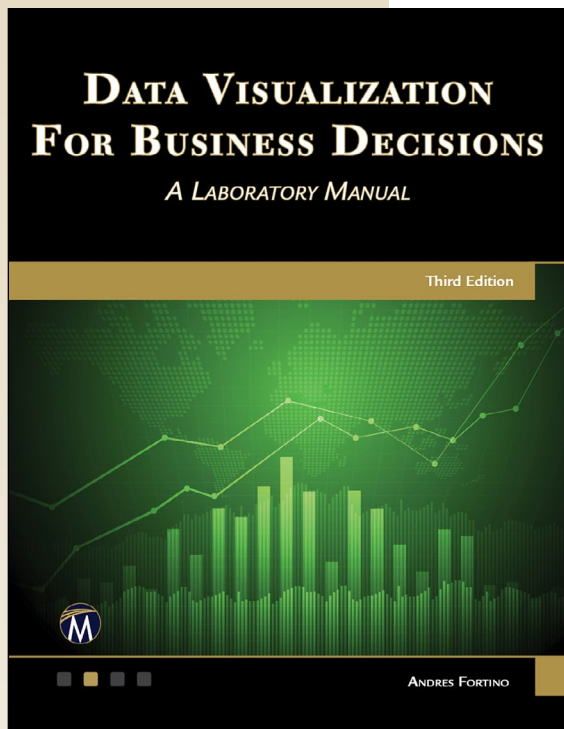
978-1-683924-64-7

E-book, US \$59.95

978-1-683924-63-0

Library E-book, US \$179.95

978-1-683924-62-3

**AUGUST 2020**

7 x 9, 160 pages

Paperback, US \$49.95

978-1-683925-95-8

E-book, US \$34.95

978-1-683925-94-1

Library E-book, US \$129.95

978-1-683925-93-4**New!****Data Visualization for Business Decisions 3/e***A Laboratory Notebook***Andres Fortino**

This workbook is intended for business analysts who wish to improve their skills in creating data visuals, presentations, and report illustrations used to support business decisions. It is a qualitative lab to develop the power of visualization and discrimination. It does not require the reader to modify charts, but to analyze and describe what would improve charts. In a set of controlled exercises, the reader is taken through the eighteen elements of six dimensions of analyzing and improving charts, visuals and reports used to communicate business concepts.

FEATURES:

- Includes eighteen labs, three for each of the six major dimensions of data visuals: Story, Signs, Purpose, Perception, Method, and Charts
- Uses a comprehensive RAIKS (Rapid Assessment of Individual Knowledge and Skills) survey to judge readers' progress before and after using the text
- Provides a capstone exercise to review the aggregate analysis and final results for the two analyzed charts
- Companion files that include video tutorials and all of the sample files and templates used in the book's examples

Andres Fortino, PhD, leads his own company, Fortino Global Education, and is an adjunct faculty member at the NYU School of Professional Studies, where he teaches courses in Business Analytics, Data Mining, and Data Visualization. Dr. Fortino has received many honors, including IBM's *First Invention Level Award* for his work in semiconductor research. He holds three US patents and ten invention disclosures.

New!

Flowchart and Algorithm Basics

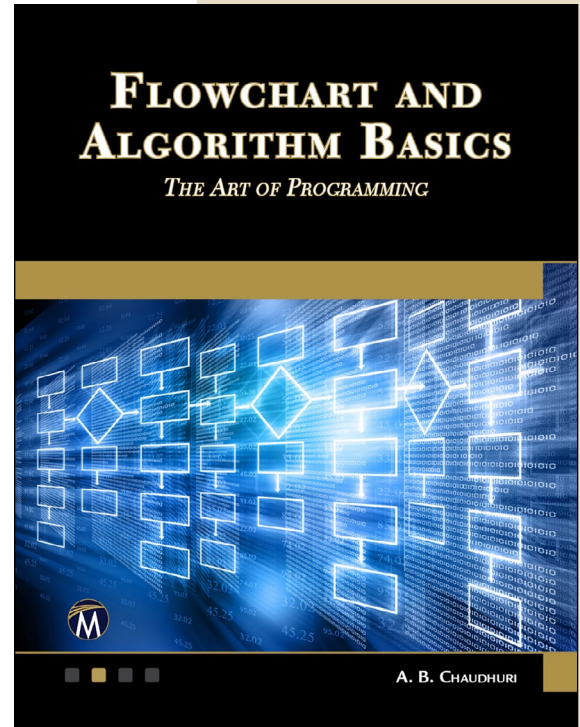
*The Art of Programming***A. B. Chaudhuri**

This book is designed to equip the reader with all of the best followed, efficient, well-structured program logics in the form of flowcharts and algorithms. The basic purpose of flowcharting is to create the sequence of steps for showing the solution to problems through arithmetic and/or logical manipulations used to instruct computers. The applied and illustrative examples from different subject areas will definitely encourage readers to learn the logic leading to solid programming basics.

FEATURES:

- Uses flowcharts and algorithms to solve problems from everyday applications, teaching the logic needed for the creation of computer instructions
- Covers arrays, looping, file processing, etc.

A. B. Chaudhuri teaches courses in computer science and specializes in data structures.

**AUGUST 2020**

7 x 9, 188 pages

Paperback, US \$49.95

978-1-683925-37-8

E-book, US \$34.95

978-1-683925-36-1

Library E-book, US \$149.95

978-1-683925-35-4



JANUARY 2019

7 x 9, 500 pages

Paperback + CD, US \$54.95

978-1-683921-80-6

E-book, US \$29.95

978-1-683921-81-3

Library E-book, US \$124.95

978-1-683921-84-1

Recently Published!

Game Development Using Python

James R. Parker

This book will guide you through the basic game development process using Python, covering game topics including graphics, sound, artificial intelligence, animation, game engines, etc. Real games are created as you work through the text and significant parts of a game engine are built and made available for download. The companion disc contains all of the resources described in the book, e.g., example code, game assets, video/sound editing software, and color figures. Instructor resources are available for use as a textbook.

FEATURES:

- Teaches basic game development concepts using Python including graphics, sound, artificial intelligence, animation, game engines, collision detection, Web-based games, and more
- Includes a companion disc with example code, games assets, and color figures
- Companion files are available for downloading with order number/proof of purchase by writing to the publisher at info@merclearning.com.

James R. Parker, PhD, is a professor of Art and Digital Media at the University of Calgary. His areas of research include computer games and media art, computer simulation, and educational technology. Dr. Parker is the author of several texts, including: *Introduction to Game Development* (Mercury Learning), *The Guide to Simulations and Games* (Wiley) and *Algorithms for Image Processing and Computer Vision, 2/E* (Wiley).

Coming Soon!

LaTeX Basics

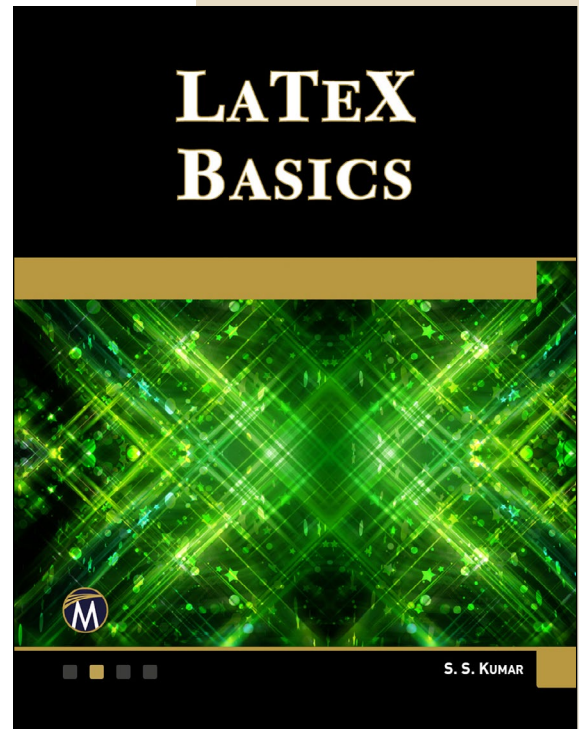
S. S. Kumar

Professional documentation is considered to be an integral component of the academic world. One advantage of LaTeX over other documentation systems is that it can generate a high quality typographical document. This is particularly true for documents that are heavy on mathematical formulae, figures, tables, etc. This comprehensive guide for using LaTeX is designed in such a way that no prior knowledge of LaTeX or any other computing language is needed. The chapters include in-depth material on using LaTeX, such as installation, system commands, compilers, layout and formatting, using LaTeX for mathematics, journal creation, citations, Beamer presentation, thesis creation, and much more.

FEATURES:

- Assumes no prior knowledge of LaTeX or any other computer language or application
- Covers installation, system commands, compilers, layout formatting, using LaTeX for mathematics, creating figures and tables, journal creation, citations, Beamer presentation, thesis creation, and much more

S. S. Kumar, PhD, is a university instructor who has authored several books including the topics of wireless networks and MATLAB.

**AUGUST 2020**

7 x 9, 500 pages

Paperback, US \$54.95

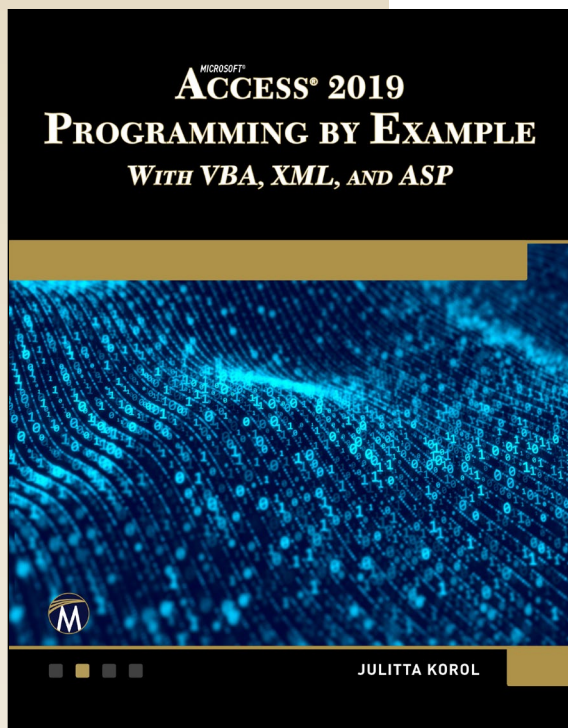
978-1-683925-13-2

E-book, US \$41.95

978-1-683925-12-5

Library E-book, US \$169.95

978-1-683925-11-6



Recently Published!

Microsoft Access 2019 Programming by Example with VBA, XML, and ASP

Julitta Korol

Updated for Access 2019 and based on the bestselling editions from previous versions, *Microsoft Access 2019 Programming by Example with VBA, XML, and ASP* is a practical, how-to book on Access programming, suitable for readers already proficient with the Access user interface (UI). If you are looking to automate Access routine tasks, this book will progressively introduce you to programming concepts via numerous illustrated hands-on exercises. More advanced topics are demonstrated via custom projects. With concise and straightforward explanations, you learn how to write and test your programming code with the built-in Visual Basic Editor; understand and use common VBA programming structures such as conditions, loops, arrays, and collections; code a “message box”; reprogram characteristics of a database; and use various techniques to query and manipulate your Access .mdb and .accdb databases. The book shows you how you can build database solutions with Data Access

Objects (DAO) and ActiveX Data Objects (ADO); define database objects and manage database security with SQL; enhance and alter the way users interact with database applications with Ribbon customizations and event programming in forms and reports. You also learn how to program Microsoft Access databases for Internet access with Active Server Pages (Classic ASP), HTML, and XML.

FEATURES:

- Contains over thirty chapters loaded with illustrated “Hands-On” exercises and projects that guide you through the VBA programming language. Each example tells you exactly where to enter code and how to test it and then run it.
- Includes a companion disc with source code, supplemental files, and color screen captures (also available from the publisher for download)
- Explains how to store data for further manipulation in variables, arrays, and collections while teaching you to write both simple and complex VBA programming routines and functions.
- Teaches you how to programmatically create and access database tables and fields.
- Shows you how to insert, update, and delete data via programming code using various data access techniques.
- Gets you proficient creating and running simple and parameterized queries against your Access databases.
- Gets you comfortable using external data sources with Access (Excel, Word, flat files, XML, and SQL Server).
- Teaches you how to take control of your forms and reports by writing programming code known as event procedures.
- Shows you how to use various types of macros and templates.
- Takes your programming skills to the Web by introducing you to dynamic XML and Classic ASP pages.

JULY 2019

7 x 9, 1106 pages

Paperback + CD, US \$64.95

978-1-683924-03-6

E-book, US \$39.95

978-1-683924-04-3

Library E-book, US \$149.95

978-1-683924-05-0

Julitta Korol (Long Island, NY) has published over two dozen computer books on using and programming Microsoft Excel and Microsoft Access. Ms. Korol has completed professional certifications by Microsoft Corporation and the Computing Technology Industry Association (CompTIA).

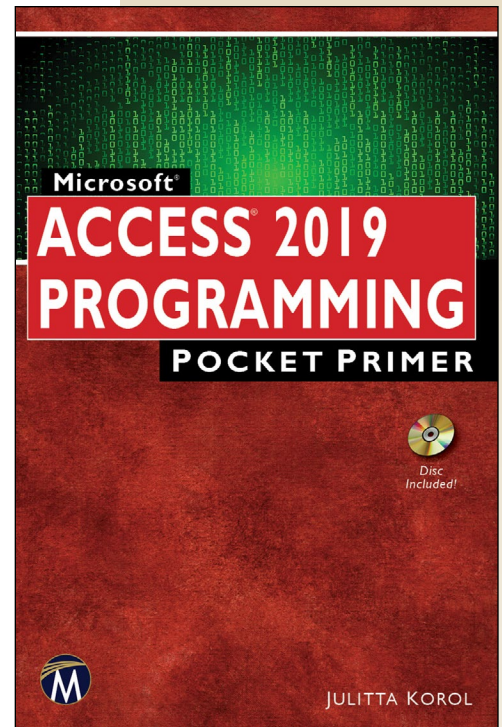
Recently Published!**Microsoft Access 2019 Programming***Pocket Primer***Julitta Korol**

As part of the successful Pocket Primer series, this book was designed for someone like you who needs to master Access programming fundamentals without spending too much time. All you need is a short book to get you started. It will show you only the things you need to know to feel at home with VBA. What you learn in this book on Access programming will also apply to, say, Excel programming. The book is divided into nine chapters that progressively introduce you to programming Microsoft Access 2019.

FEATURES:

- Includes a companion disc with all of the “Hands-On” files needed to complete the chapter projects and all the images from the text (also available from the publisher by emailing info@merclearning.com)
- Introduces you to programming Microsoft Access 2019

Julitta Korol (Long Island, NY) has published over two dozen computer books on using and programming Microsoft Excel and Microsoft Access. Ms. Korol has completed professional certifications by Microsoft Corporation and the Computing Technology Industry Association (CompTIA).

**JULY 2019**

6 x 9, 238 pages

Paperback + CD, US \$35.95

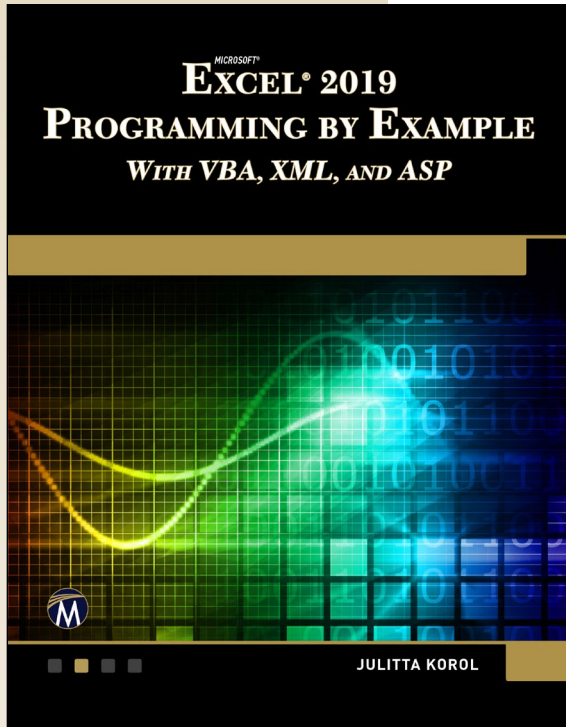
978-1-683924-09-8

E-book, US \$24.95

978-1-683924-10-4

Library E-book, US \$149.95

978-1-683924-11-1*Pocket Primer series*

**JULY 2019**

7 x 9, 1038 pages

Paperback + CD, US \$64.95

978-1-683924-00-5

E-book, US \$39.95

978-1-683924-01-2

Library E-book, US \$149.95

978-1-683924-02-9

Julitta Korol (Long Island, NY) has published over two dozen computer books on using and programming Microsoft Excel and Microsoft Access. Ms. Korol has completed professional certifications by Microsoft Corporation and the Computing Technology Industry Association (CompTIA).

Recently Published!

Microsoft Excel 2019 Programming by Example with VBA, XML, and ASP

Julitta Korol

Updated for Excel 2019 and based on the bestselling editions from previous versions, *Microsoft Excel 2019 Programming by Example with VBA, XML, and ASP* is a practical, how-to book on Excel programming, suitable for readers already proficient with the Excel user interface (UI). If you are looking to automate Excel routine tasks, this book will progressively introduce you to programming concepts via numerous illustrated hands-on exercises. More advanced topics are demonstrated via custom projects. From recording and editing a macro and writing VBA code to working with XML documents and using Classic ASP pages to access and display data on the Web, this book takes you on a programming journey that will change the way you work with Excel. The book provides information on performing automatic operations on files, folders, and other Microsoft Office applications. It also covers proper use of event procedures, testing and debugging, and guides you through programming advanced Excel features such as PivotTables, PivotCharts, and the Ribbon interface.

FEATURES:

- Contains 28 chapters loaded with illustrated “Hands-On” exercises and projects that guide you through the VBA programming language. Each example tells you exactly where to enter code, how to test it, and then run it.
- Takes you from introductory topics--including recording and editing macros, using variables, and constants, writing subroutines/functions, conditional statements, and various methods of coding loops to repeat actions--to intermediate and advanced topics that include working with collections, class modules, arrays, file and database access, custom forms, error handling and debugging.
- Includes comprehensive coverage of native file handling in VBA, Windows Scripting Host (WSH), and low-level File Access.
- Demonstrates how to interact with Microsoft Access databases using both ADO and DAO Object Libraries to access and manipulate data.
- Includes chapters on programming charts, PivotTables, dialog boxes, custom forms, the Ribbon, Backstage View, context/shortcut menu customizations, as well as proper use of event procedures and callbacks.
- Provides a quick, “Hands-On” introduction to the data analysis and transformation processes using the Power Query feature and the “M” language formulas.
- Provides a practical coverage of using Web queries, HTML, XML, and VBScript in Classic ASP to retrieve and publish Excel data to the Web.

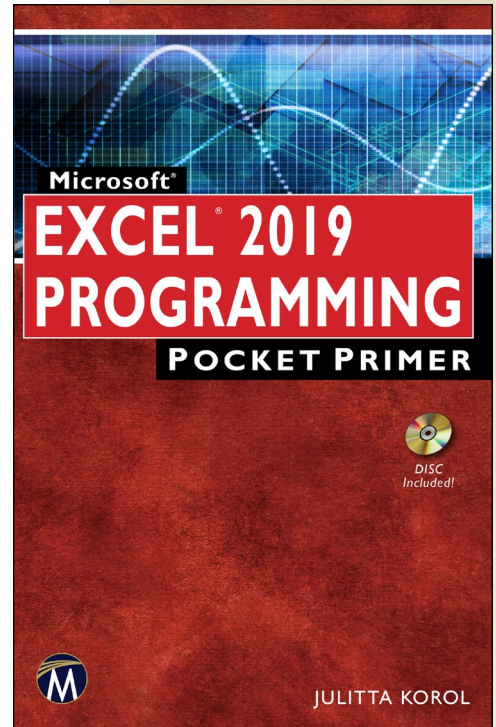
Recently Published!**Microsoft Excel 2019 Programming***Pocket Primer***Julitta Korol**

As part of the best-selling Pocket Primer series, this book was designed for someone like you who needs to master Excel programming fundamentals without spending too much time. All you need is a short book to get you started. It will show you only the things you need to know to feel at home with VBA. What you learn in this book on Excel programming will also apply to, say, Access programming. The book is divided into nine chapters that progressively introduce you to programming Microsoft Excel 2019.

FEATURES:

- Includes a companion disc with all of the “Hands-On” files needed to complete the chapter projects and all the images from the text
- Introduces you to programming Microsoft Excel 2019

Julitta Korol (Long Island, NY) has published over two dozen computer books on using and programming Microsoft Excel and Microsoft Access. Ms. Korol has completed professional certifications by Microsoft Corporation and the Computing Technology Industry Association (CompTIA).

**JULY 2019**

6 x 9, 260 pages

Paperback + CD, US \$35.95

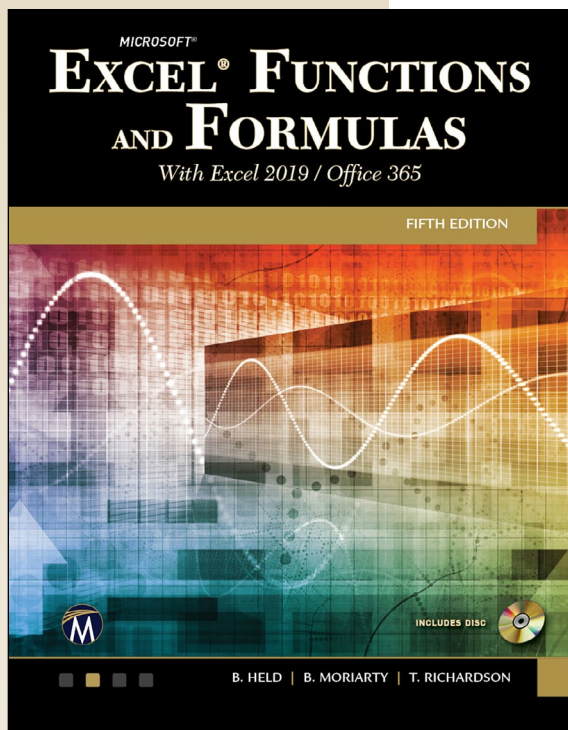
978-1-683924-12-8

E-book, US \$34.95

978-1-683924-13-5

Library E-book, US \$149.95

978-1-683924-14-2*Pocket Primer series*



MARCH 2019

7 x 9, 474 pages

Paperback + CD, US \$59.95

978-1-683923-73-2

E-book, US \$39.95

978-1-683923-74-9

Library E-book, US \$124.95

978-1-683923-75-6

Recently Published!

Microsoft Excel Functions and Formulas with Excel 2019/Office 365 5/e

Bernd Held, Brian Moriarty, and Theodor Richardson

In this completely updated edition covering Excel 2019, previous versions, and Office 365, *Microsoft Excel Functions & Formulas 5/E* demonstrates the secrets of Excel through the use of practical and useful examples in a quick reference format. Easy to use and equipped with a variety of functions, Microsoft Excel is the tool of choice when it comes to crunching numbers, building charts, and analyzing tables. The book's extensive examples and added video tutorials make it an excellent resource for all Excel users who want to understand, create, and apply formulas. Experienced users will also find it to be an excellent reference for many of the program's advanced formulas and functions. The text is easy to understand with numerous step-by-step instructions and the actual, ready to use, Excel screenshots of the input and output from the formulas. The

book includes companion files with video tutorials, over 250 worksheet files of examples for numerous functions, formulas, and all the figures from the text.

FEATURES:

- Includes companion files with video tutorials, over 250 Excel worksheet examples, and all of the figures from the text (including 4-color)
- Completely updated to cover Microsoft Excel 2019, previous versions, and Office 365
- Saves hundreds of hours with the latest Excel tips, worksheets, and shortcuts

Bernd Held is the author of more than 40 books and 800 articles and reviews for various publications. For the past eight years, Microsoft has recognized him as an MVP (Most Valuable Professional).

Brian Moriarty is a Microsoft Office Specialist Master who has been automating Office products for more than 20 years, developing solutions for individuals, businesses and government agencies. He also teaches employee groups at the corporate level.

Theodor Richardson is the Assistant Dean for the College of Business, Online at a private university.

Recently published!

Photoshop Elements 2018

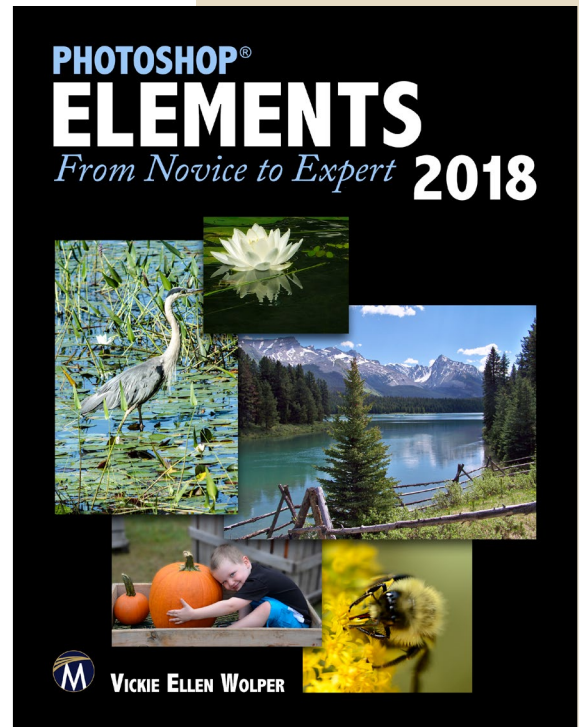
*From Novice to Expert***Vickie Ellen Wolper**

Designed for all photographers from enthusiasts to professionals, this book provides readers with easy to follow, building-block style learning of Photoshop Elements 2018 through hands on projects working in both its Organizer and Photo Editor workspaces. Companion files with practice projects and all of the color figures from the text are included (also available by contacting the publisher by writing to: info@merclearning.com). Divided into two parts, using the files supplied or your own, Part One will teach you to easily import, sort and find your photographs working in the Elements Organizer. When working with the Elements Photo Editor in Part Two, topics include understanding resolution, using Camera Raw, multiple techniques for color and image correction, precision selection, using layers, accurate color printing, removing unwanted content, correcting red eye and closed eyes, creating a panorama and much more, plus numerous tricks of the trade and ways to share your precious photographs in print and online. Through projects using each of its modes: Quick, Guided, and Expert, you will gain a comprehensive knowledge of the Photo Editor, allowing you later to choose the mode best suited to your working style and project requirements.

FEATURES:

- Divided into two parts each exclusively dedicated to one of the Photoshop Elements 2018 workspaces, this book offers readers the opportunity to focus their learning on one workspace or both depending on their needs and interests
- Companion files with practice projects and all of the color figures from the text (also available by contacting the publisher by writing to: info@merclearning.com)
- Project photographs are supplied for each chapter to guide readers through the learning process
- Additional supplementary projects and images are provided with each chapter to further reinforce learning
- Helpful tips and notes are included in each chapter to maximize and streamline learning and efficiency

Vickie Ellen Wolper has been an Adobe software trainer for over three decades. Currently a higher education instructor and a Photoshop master featured in *Yankee Magazine* and on the television series *NH Chronicle*, she has built a reputation for teaching complex computer graphic programs.

**OCTOBER 2019**

7 x 9, 474 pages

Paperback + CD, US \$54.95

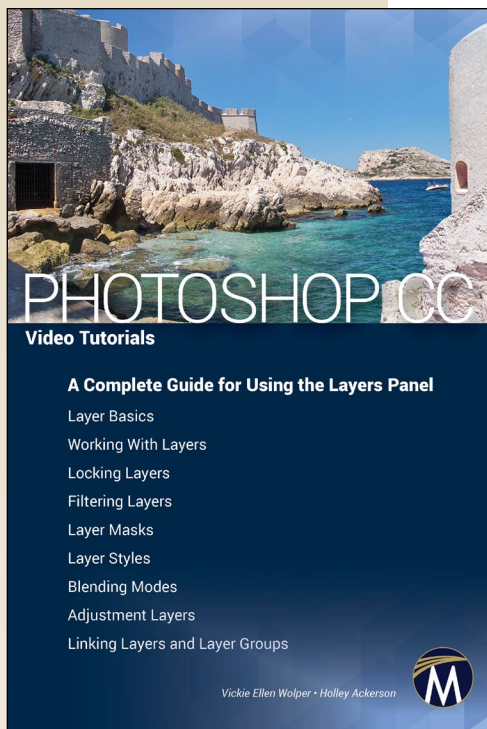
978-1-683922-33-9

E-book, US \$31.95

978-1-683922-34-6

Library E-book, US \$124.95

978-1-683923-02-2



APRIL 2020

Video, US \$99.95

978-1-683925-60-6

New!

Photoshop CC Video Tutorials

A Complete Guide for Using the Layers Panel

Vickie Ellen Wolper and Holley Ackerson

This video series will provide the viewer with complete training in all of the elements of the Layers panel of Photoshop CC from its basics to advance features such as Adjustment Layers, Blending Modes, and Layer Groups. As you are guided through the use of a particular Layers panel topic, multiple methods and tips are provided to offer flexible learning based on your unique learning style and future application, whether you use Photoshop for work or home projects. Each video employs a customized Photoshop file specifically designed to guide you through a typical application of the topic being demonstrated.

FEATURES:

- Provides complete training in all of the elements of the Layers panel of Photoshop CC from its basics to advance features
- Includes multiple methods and tips to offer flexible learning based on your unique learning style and future application, whether you use Photoshop for work or home

Vickie Ellen Wolper has been an Adobe software trainer for over three decades. Currently a higher education instructor and a Photoshop master featured in *Yankee Magazine* and on the television series *NH Chronicle*, she has built a reputation for teaching complex computer graphic programs.

New!

Programming Fundamentals Using MATLAB

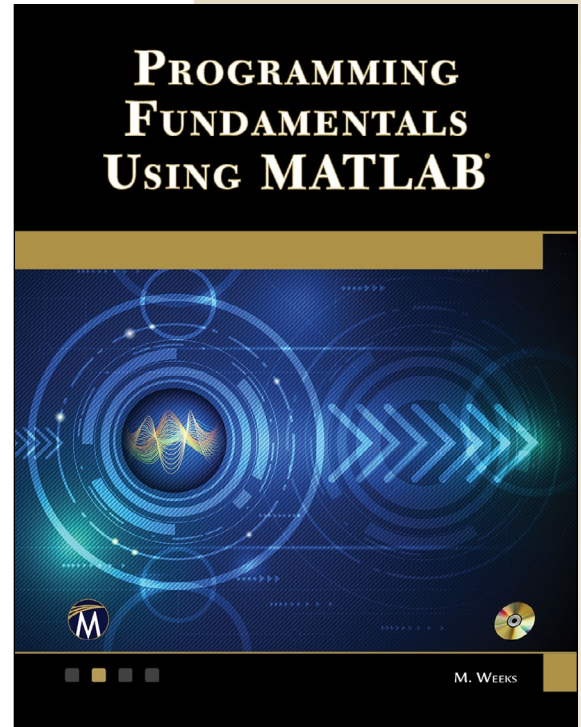
Michael Weeks

This book covers the MATLAB syntax and the environment suitable for someone with no programming background. The first four chapters present information on basic MATLAB programming including computing terminology, MATLAB specific syntax and control structures, operators, arrays and matrices. The next cluster covers grouping data, working with files, making images, creating graphical user interfaces, experimenting with sound, and the debugging environment. The final three chapters contain case studies on using MATLAB and other tools and devices (e.g., Arduino, Linux, Git, Mex, etc.) important for basic programming knowledge.

FEATURES:

- Covers the MATLAB syntax and the environment, suitable for someone with no programming background
- Numerous examples, projects, and practical applications enhance understanding of subjects under discussion with over 100 MATLAB scripts and functions
- Includes companion files with code and 4 color figures from the text (on the disc or available from the publisher)

Michael Weeks, PhD, is a professor in information technology at Georgia State University and has published numerous research articles with reputed international publishers such as the ACM, Springer, Elsevier, and IEEE.

**JULY 2020**

7 x 9, 550 pages

Hardcover + CD, US \$59.95

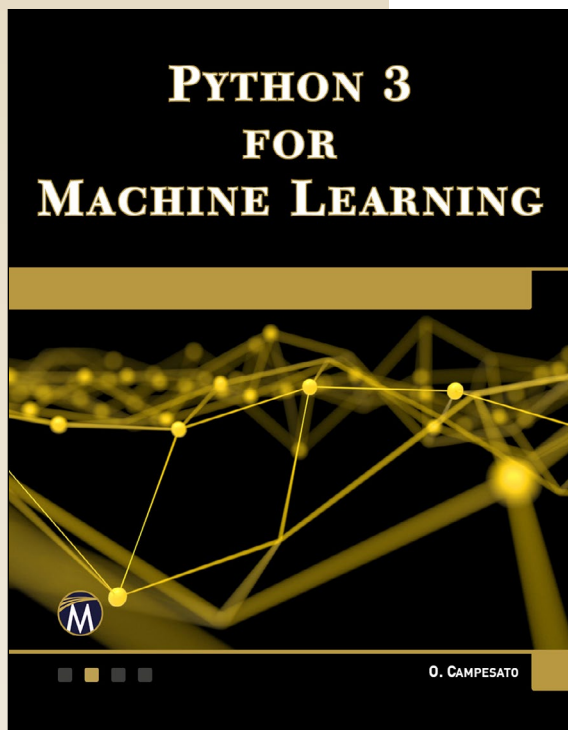
978-1-683925-55-2

E-book, US \$45.95

978-1-683925-54-5

Library E-book, US \$159.95

978-1-683925-53-8

**MARCH 2020**

7 x 9, 364 pages

Paperback + CD, US \$51.95

978-1-683924-95-1

E-book, US \$41.95

978-1-683924-94-4

Library E-book, US \$149.95

978-1-683924-93-7**New!****Python 3 for Machine Learning****Oswald Campesato**

This book is designed to provide the reader with basic Python 3 programming concepts related to machine learning. The first four chapters provide a fast-paced introduction to Python 3, NumPy, and Pandas. The fifth chapter introduces the fundamental concepts of machine learning. The sixth chapter is devoted to machine learning classifiers, such as logistic regression, k-NN, decision trees, random forests, and SVMs. The final chapter includes material on NLP and RL. Keras-based code samples are included to supplement the theoretical discussion. The book also contains separate appendices for regular expressions, Keras, and TensorFlow 2.

FEATURES:

- Provides the reader with basic Python 3 programming concepts related to machine learning
- Includes separate appendices for regular expressions, Keras, and TensorFlow 2

Oswald Campesato (San Francisco, CA) specializes in Deep Learning, Data Cleaning, Java, Android, and TensorFlow. He is the author/co-author of over twenty-five books including *TensorFlow Pocket Primer*; *Artificial Intelligence, Machine Learning, and Deep Learning*; *Android Pocket Primer*, *Angular4 Pocket Primer*, and the *Python Pocket Primer* (Mercury Learning).

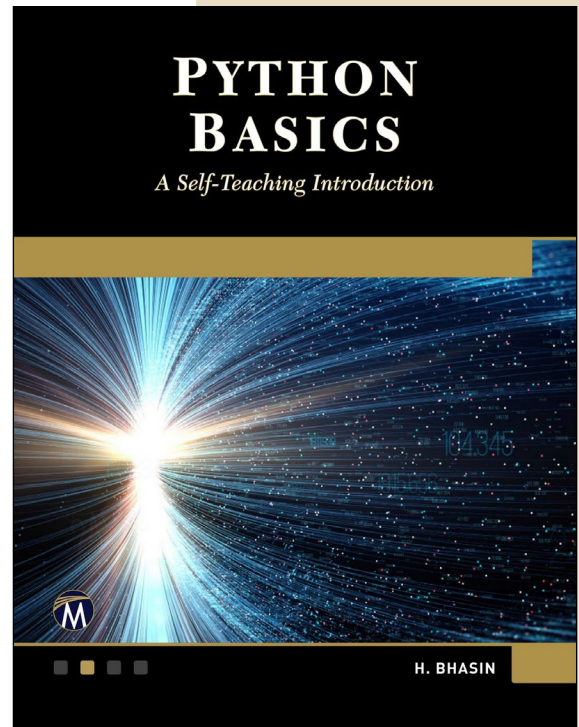
Recently Published!**Python Basics***A Self-Teaching Introduction***H. Bhasin**

This book is designed for use as a primary introduction to Python and can be used as an introductory text or as a resource for professionals in industry. The book has been divided into four sections. The first section deals with the language fundamentals, primarily the procedural part of the language, the second introduces the object-oriented paradigms, the third section deals with data structures, and the last is devoted to advanced topics like handling multi-dimensional arrays using NumPy and visualization using Matplotlib. Regular expressions and multi-threading have been introduced in the appendices.

FEATURES:

- Includes sections dedicated to data structures
- Offers in-depth treatment of topics such as classes, inheritance, BST, and NumPy
- Introduces topics like Matplotlib and PIL
- Contains exercises for practice and a review of essential programming concepts

H. Bhasin is a professional programmer, researcher, and the author of several books including: *Programming in C#, Algorithm Analysis and Design*, and *Theory of Computation*.

**DECEMBER 2018**

7 x 9, 450 pages

Paperback + CD, US \$49.95

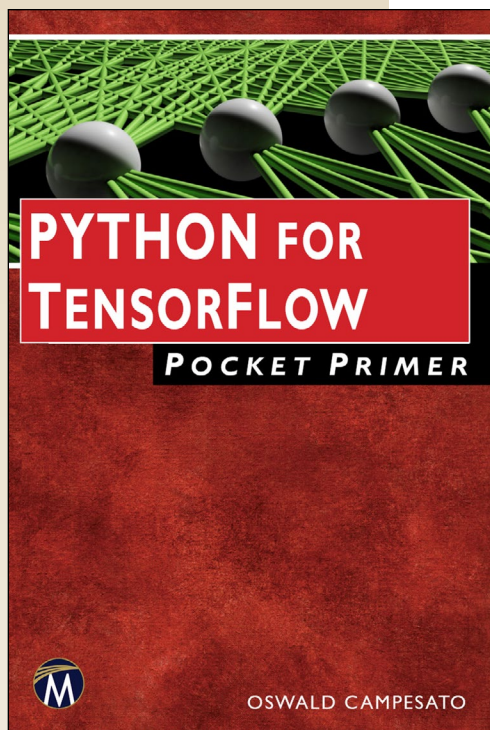
978-1-683923-53-4

E-book, US \$24.95

978-1-683923-52-7

Library E-book, US \$124.95

978-1-683923-54-1



JUNE 2019

6 x 9, 218 pages

Paperback + CD, US \$34.95

978-1-683923-61-9

E-book, US \$21.95

978-1-683923-62-6

Library E-book, US \$99.95

978-1-683923-63-3

Pocket Primer series

Recently Published!

Python for TensorFlow

Pocket Primer

Oswald Campesato

As part of the best-selling Pocket Primer series, this book is designed to prepare programmers for machine learning and deep learning/ TensorFlow topics. It begins with a quick introduction to Python, followed by chapters that discuss NumPy, Pandas, Matplotlib, and scikit-learn. The final two chapters contain an assortment of TensorFlow 1.x code samples, including detailed code samples for TensorFlow Dataset (which is used heavily in TensorFlow 2 as well). A TensorFlow Dataset refers to the classes in the `tf.data.Dataset` namespace that enables programmers to construct a pipeline of data by means of method chaining so-called lazy operators, e.g., `map()`, `filter()`, `batch()`, and so forth, based on data from one or more data sources.

FEATURES:

- A practical introduction to Python, NumPy, Pandas, Matplotlib, and introductory aspects of TensorFlow 1.x
- Contains relevant NumPy/Pandas code samples that are typical in machine learning topics, and also useful TensorFlow 1.x code samples for deep learning/ TensorFlow topics
- Includes many examples of TensorFlow Dataset APIs with lazy operators, e.g., `map()`, `filter()`, `batch()`, `take()` and also method chaining such operators
- Assumes the reader has very limited experience
- Companion files with all of the source code examples (download from the publisher)

Oswald Campesato (San Francisco, CA) specializes in Deep Learning, Data Cleaning, Java, Android, and TensorFlow. He is the author/co-author of over twenty-five books including *TensorFlow Pocket Primer*; *Artificial Intelligence, Machine Learning, and Deep Learning*; *Android Pocket Primer*, *Angular4 Pocket Primer*, and the *Python Pocket Primer* (Mercury Learning).

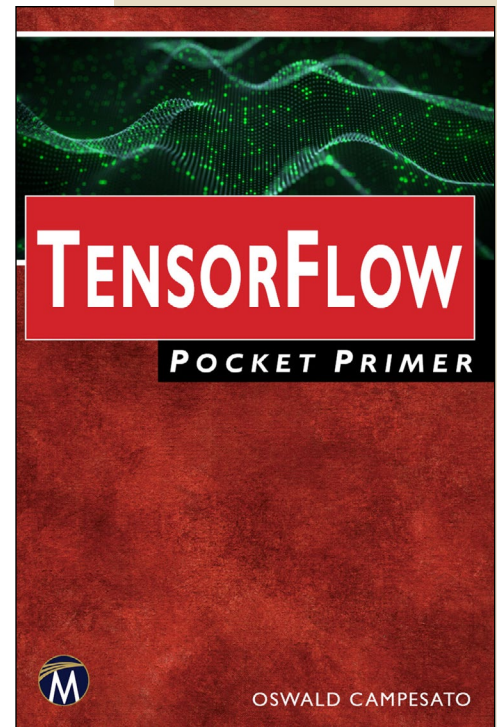
Recently Published!**TensorFlow***Pocket Primer***Oswald Campesato**

As part of the best-selling Pocket Primer series, this book is designed to introduce beginners to TensorFlow 1.x fundamentals for basic machine learning algorithms in TensorFlow. It is intended to be a fast-paced introduction to various “core” features of TensorFlow, with code samples that cover deep learning and TensorFlow basics. The material in the chapters illustrates how to solve a variety of tasks after which you can do further reading to deepen your knowledge. Companion files with all of the code samples are available for downloading from the publisher by writing to info@merclearning.com.

FEATURES:

- Uses Python for code samples
- Covers TensorFlow APIs and Datasets
- Assumes the reader has very limited experience

Oswald Campesato (San Francisco, CA) specializes in Deep Learning, Data Cleaning, Java, Android, and TensorFlow. He is the author/co-author of over twenty-five books including *TensorFlow Pocket Primer*; *Artificial Intelligence*, *Machine Learning*, and *Deep Learning*; *Android Pocket Primer*, *Angular4 Pocket Primer*, and the *Python Pocket Primer* (Mercury Learning).

**JUNE 2019**

6 x 9, 152 pages

Paperback + CD, US \$34.95

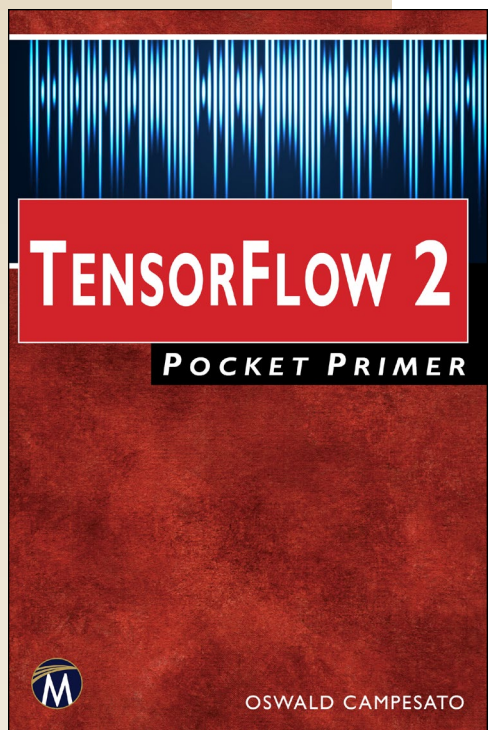
978-1-683923-64-0

E-book, US \$21.95

978-1-683923-65-7

Library E-book, US \$99.95

978-1-683923-66-4*Pocket Primer series*



SEPTEMBER 2019

6 x 9, 252 pages

Paperback + CD, US \$35.95

978-1-683924-60-9

E-book, US \$27.95

978-1-683924-59-3

Library E-book, US \$99.95

978-1-683924-61-6

Pocket Primer series

Recently Published!

TensorFlow 2

Pocket Primer

Oswald Campesato

As part of the best-selling Pocket Primer series, this book is designed to introduce beginners to basic machine learning algorithms using TensorFlow 2. It is intended to be a fast-paced introduction to various “core” features of TensorFlow, with code samples that cover machine learning and TensorFlow basics. A comprehensive appendix contains some Keras-based code samples and the underpinnings of MLPs, CNNs, RNNs, and LSTMs. The material in the chapters illustrates how to solve a variety of tasks after which you can do further reading to deepen your knowledge.

FEATURES:

- Uses Python for code samples
- Covers TensorFlow 2 APIs and Datasets
- Includes a comprehensive appendix that covers Keras and advanced topics such as NLPs, MLPs, RNNs, LSTMs
- Features the companion files with all of the source code examples and figures (download from the publisher)

Oswald Campesato (San Francisco, CA) specializes in Deep Learning, Data Cleaning, Java, Android, and TensorFlow. He is the author/co-author of over twenty-five books including *TensorFlow Pocket Primer*; *Artificial Intelligence, Machine Learning, and Deep Learning*; *Android Pocket Primer*, *Angular4 Pocket Primer*, and the *Python Pocket Primer* (Mercury Learning).

3D Character Development Workshop

Character Rigging for Animators and 3D Artists
Erik Van Horn

Paperback, US \$54.95
978-1-68392-170-7
E-book, US \$29.95
978-1-68392-171-4
Library e-book, US \$124.95
978-1-68392-244-5

Android

Pocket Primer
Oswald Campesato

Paperback & CD, US \$32.95
978-168392-88-5
E-Book, US \$21.95
978-1-968392-089-2
Library E-Book, US \$124.95
978-1-68392-50-6

Angular4

Pocket Primer
Oswald Campesato

Paperback & DVD, US \$39.95
978-1-68392-035-9
E-Book, US \$19.95
978-1-68392-036-6
Library E-Book, US \$124.95
978-1-68392-251-3

Artificial Intelligence and Problem Solving

D. Kopec, C. Pileggi et al

Paperback & CD, US \$49.95
978-1-944534-58-5
E-Book, US \$24.95
978-1-944534-68-4
Library E-Book, US \$124.95
978-1-68392-241-4

Artificial Intelligence in the 21st Century

Second Edition
Hardback & DVD, US \$99.95

978-1-942270-00-3
E-Book, US \$49.95
978-1-68392-224-7
Library E-Book, US \$124.95
978-1-68392-241-4

Business Intelligence & Data Warehousing Simplified

500 Questions, Answers, & Tips
Arshad Khan

Paperback, US \$35.95
978-1-936420-32-2
E-Book, US \$35.95
978-1-936420-86-5
Library E-Book, US \$74.95
978-1-936420-87-2

C Programming

An Introduction
R. Chopra

Paperback, US \$44.95
978-1-68392-090-8
E-Book, US \$24.95
978-1-68392-091-5
Library E-Book, US \$124.95
978-1-68392-262-9

Camtasia Studio and Beyond

The Complete Guide
Stephanie Torta & Stacey Dunbar

Paperback & DVD, US \$49.95
978-1-936420-33-9
E-Book, US \$39.95
978-1-937585-14-3
Library E-Book, US \$124.95
978-1-937585-13-6

Cloud Computing Basics

T. B. Rehman

Paperback, US \$49.95
978-1-68392-350-3
E-book, US \$21.95
978-1-68392-349-7
Library e-book, US \$124.95
978-1-68392-351-0

Cluster Analysis and Data Mining

An Introduction
Ronald S. King

Paperback & DVD, US \$59.95
978-1-938549-38-0
E-Book, May 2015., US \$51.95
978-1-942270-13-3
Library E-Book, US \$124.95
978-1-938549-39-7

Computer Graphics Programming in OpenGL with C++

V. Scott Gordon and John L. Clevenger

Hardback & DVD, US \$69.95
978-1-68392-221-6
E-Book, US \$35.95
978-1-68392-222-3
Library E-Book, US \$124.95
978-1-68392-266-7

Computer Graphics Programming in OpenGL with JAVA

Second Edition
V. Scott Gordon and John L. Clevenger

Hardback & DVD, US \$69.95
978-1-68392-219-3
E-Book, US \$35.95
978-1-68392-220-9
Library E-Book, US \$124.95
978-1-68392-265-0

CSS

Pocket Primer
Oswald Campesato

Paperback & CD, US \$27.95
978-1-938549-68-7
E-Book, US \$19.95
978-1-68392-056-4
Library E-Book, US \$74.95
978-1-68392-272-8

D3 Data Driven Documents

Pocket Primer
Oswald Campesato

Paperback & CD, US \$27.95
978-1-938549-65-6
E-Book, US \$19.95
978-1-942270-69-0
Library E-Book, US \$74.95
978-1-68392-274-2

Data Cleaning

Pocket Primer
Oswald Campesato

Paperback, US \$39.95
978-1-68392-217-9
E-Book, US \$14.95
978-1-68392-218-6
Library E-Book, US \$124.95
978-1-68392-275-9

Data Structures and Algorithms in C++

Pocket Primer
Lee Wittenberg

Paperback & CD, US \$44.95
978-1-68392-084-7
E-Book, US \$21.95
978-1-68392-085-4
Library E-Book
978-1-68392-277-3

Data Structures and Program Design Using C

A Self-Teaching Introduction
D. Malhotra and N. Malhotra

Paperback, US \$59.95
978-1-68392-207-0
E-book, US \$35.95
978-1-68392-208-7
Library e-book, US \$124.95
978-1-68392-276-6

Digital Filmmaking

An Introduction
Peter Shaner

Paperback & DVD, US \$49.95
978-1-936420-11-7
Library E-Book
978-1-936420-83-4

Film Editing

Theory and Practice
Christopher Llewellyn Reed

Paperback & DVD, US \$41.95
978-1-936420-10-0
Library E-Book, US \$74.95
978-1-937585-79-2

Game Development Using Python

James R. Parker

Paper, US \$54.95
978-1-68392-180-6
E-book, US \$29.95
978-1-68392-181-3
Library e-book, US \$124.95
978-1-68392-284-1

Game Testing 3/e

All in One
Charles P. Schultz & Robert Denton Bryant

Paperback & DVD, US \$49.95
978-1-942270-76-8
E-Book, US \$29.95
978-1-944534-42-4
Library E-Book, US \$124.95
978-1-68392-285-8

Hollywood Studio Production Techniques

Theory and Practice
Winnie Wong

Paperback & CD, US \$41.95
978-1-936420-17-9
E-book, US \$41.95
978-1-938549-74-8
Library E-Book, US \$124.95
978-1-938549-73-1

HTML 5

Pocket Primer
Oswald Campesato

Paperback & DVD, US \$27.95
978-1-938549-10-6
E-Book, US \$21.95
978-1-938549-13-7
Library E-Book, US \$74.95
978-1-938549-12-0

HTML5 Canvas and CSS3 Graphics Primer

Oswald Campesato

Paperback & DVD, US \$39.95
978-1-936420-34-6
E-Book, US \$39.95
978-1-936420-61-2
Library E-Book, US \$124.95
978-1-936420-62-9

HTML5 Mobile

Pocket Primer
Oswald Campesato

Paperback & DVD, US \$27.95
978-1-938549-66-3
E-Book, US \$14.95
978-1-938549-27-4
Library E-Book, US \$74.95
978-1-938549-29-8

Introduction to 3D Game Programming with DirectX 11

Frank Luna

Paperback & CD, US \$49.95
978-1-936420-22-3
E-Book, US \$39.95
978-1-937585-96-9
Library E-Book, US \$124.95
978-1-937585-95-2

Introduction to 3D Game Programming with DirectX 12

Frank Luna

Paperback & DVD, US \$59.95
978-1-94227-006-5
E-Book, US \$34.95
978-1-944534-55-4
Library E-Book, US \$124.95
978-1-683922-90-2

Introduction to Game Development Using Processing

James R. Parker

Paperback & DVD, US \$49.95
978-1-937585-40-2
E-Book, US \$29.95
978-1-942270-65-2
Library E-Book, US \$124.95
978-1-942270-64-5

iOS for Game Programmers

Allen Sherrod

Paperback & CD, US \$44.95
978-1-938549-87-8
E-Book, US \$29.95
978-1-942270-22-5
Library E-Book, US \$124.95
978-1-942270-21-8

jQuery

Pocket Primer
Oswald Campesato

Paperback & DVD, US \$27.95
978-1-938549-14-4
E-Book, US \$21.95
978-1-938549-17-5
Library E-Book, US \$74.95
978-1-938549-16-8

jQuery, CSS3, and HTML5 for Mobile and Desktop Devices

A Primer
Oswald Campesato

Paperback & DVD, US \$51.95
978-1-938549-03-8
E-Book, \$39.95
978-1-938549-06-9
Library E-Book, US \$124.95
978-1-938549-05-2

Microsoft® Access® 2010 Programming By Example with VBA, XML, and ASP

Julitta Korol

Paperback & CD, US \$49.95
978-1-936420-02-5
E-Book, US \$39.95
978-1-938549-02-1

Microsoft Access 2013 Programming by Example with VBA, XML, and ASP

Julitta Korol

Paperback & CD, US \$49.95
978-1-938549-80-9
E-Book, US \$39.95
978-1-938549-49-6
Library E-Book, US \$124.95
978-1-938549-48-9

Microsoft Access Programming

Pocket Primer
Julitta Korol

Paperback & CD, US \$29.95
978-1-942270-02-7
E-Book, US \$19.95
978-1-942270-59-1
Library E-Book, US \$74.95
978-1-942270-58-4

Microsoft Access 2016 Programming by Example with VBA, XML, and ASP
Julitta Korol

Paperback & CD, US \$54.95
978-1-942270-84-3
E-Book, US \$29.95
978-1-944534-50-9
Library E-Book, US \$124.95
978-1-942270

Microsoft Access Programming
Pocket Primer
Julitta Korol

Paperback & CD, US \$29.95
978-1-942270-81-2
E-Book, US \$19.95
978-1-944534-47-9
Library E-Book, US \$74.95

Microsoft Excel Programming
Pocket Primer
Julitta Korol

Paperback & CD, US \$29.95
978-1-942270-55-3
E-Book, US \$19.95
978-1-942270-56-0
Library E-Book, US \$74.95
978-1-942270-55-3

Microsoft® Excel 2010 Programming By Example with VBA, XML, and ASP
Julitta Korol

Paperback & CD, US \$49.95
978-1-936420-03-2
E-Book, US \$49.95
978-1-936420-72-8

Microsoft Excel 2013 Programming by Example with VBA, XML, and ASP
Julitta Korol

Paperback & CD, US \$49.95
978-1-938549-91-5
E-Book, US \$31.95
978-1-938549-45-8

Microsoft Excel 2016 Programming
Pocket Primer
Julitta Korol

Paperback & CD, US \$29.95
978-1-942270-82-9
E-Book, US \$19.95
978-1-944534-48-6
Library E-Book, US \$74.95
978-1-942270

Microsoft Office and Beyond Computer Concepts and Applications
Theodor Richardson & Charles Thies

Paperback & DVD, US \$79.95
978-1-936420-29-2
E-Book, US \$79.95
978-1-936420-96-4

Microsoft Office 2010 and Beyond, Video
Computer Concepts and Applications

Theodor Richardson & Charles Thies
Paperback & DVD, US \$89.95
978-1-938549-71-7

Microsoft Office 2013/365 and Beyond

Computer Concepts and Applications
Theodor Richardson & Charles Thies
Paperback & DVD, US \$79.95
978-1-938549-84-7
E-Book, US \$39.95
978-1-942270-12-6

Microsoft PowerPoint 2013/365

Pocket Primer
Theodor Richardson
Paperback & DVD, US \$29.95
978-1-938549-90-8
E-Book, US \$19.95
978-1-942270-11-9

Microsoft Word and Excel 2013/365

Pocket Primer
Theodor Richardson
Paperback & DVD, US \$29.95
978-1-938549-89-2
E-Book, US \$19.95
978-1-942270-10-2

Multimedia Web Design and Development

Using Languages to Build Dynamic Web Pages
Theodor Richardson & Charles Thies
Paperback & DVD, US \$54.95
978-1-936420-38-4
E-Book, US \$34.95
978-1-937585-02-0
Library E-Book, US \$124.95
978-1-937585-00-6

Network Security and Cryptography
Sarhan Musa

Paperback, US \$54.95
978-1-942270-83-6
E-Book, US \$29.95
978-1-944534-49-3
Library E-Book, US \$124.95
978-1-68392-293-3

Object-Oriented Programming Languages and Event-Driven Programming

Dorian P. Yeager
Hardback & CD, US \$79.95
978-1-936420-37-7
E-Book, US \$49.95
978-1-937585-20-4
Library E-Book, US \$179.95
978-1-937585-19-8

Photograph Restoration and Enhancement 2/e
Using Adobe Photoshop CC 17 Version

Vickie Ellen Wolper
Paperback & CD, US \$54.95
978-1-68392-150-9
E-Book, US \$34.95
978-1-68392-151-6
Library E-Book, US \$124.95
978-1-68392-301-5

Programming Essentials Using Java

A Game Application Approach
William McAllister & S. Jane Fritz
Paperback & CD, US \$79.95
978-1-68392-037-3
E-Book, US \$39.95
Library E-Book, US \$179.95
978-1-68392-304-6

Programming Fundamentals Using Java

A Game Application Approach
Paperback & DVD, US \$89.95
978-1-938549-76-2
E-Book, US \$59.95
978-1-938549-79-3
Library E-Book, US \$179.95
978-1-938549-78-6

Python

Pocket Primer
Oswald Campesato
Paperback & DVD, US \$29.95
978-1-938549-85-4
E-Book, US \$21.95
978-1-937585-49-5
Library E-Book, US \$74.95
978-1-68392-307-7

Python 3

Pocket Primer
James Parker
Paperback & CD, US \$32.95
978-1-68392-086-1
E-Book, US \$21.95
978-1-68392-087-8
Library E-Book, US \$74.95
978-1-68392-305-3

Python

An Introduction to Programming
Paperback & CD, US \$64.95
978-1-944534-65-3
E-Book, US \$39.95
978-1-944534-75-2
Library E-Book, US \$149.95
978-1-68392-306-0

Python Basics

A Self-Teaching Introduction
H. Bhasin
Paperback, US \$49.95
978-1-68392-353-4
E-Book, US \$24.95
978-1-68392-352-7
Library e-book, US \$124.95
978-1-68392-354-1

Regular Expressions

Pocket Primer
Oswald Campesato
Paperback & CD, US \$34.95
978-1-68392-227-8
E-Book, US \$19.95
978-1-68392-228-5
Library e-book, US \$124.95
978-1-68392-311-4

Research Methods for Information Systems

Ronald S. King
E-Book, US \$89.95
978-1-938549-59-5
Library E-Book, US \$179.95
978-1-938549-58-8

SAP CO

Controlling
V. Narayanan
Paperback, US \$49.95
978-1-937585-68-6
Library E-Book, US \$124.95
978-1-937585-70-9

SAP ERP Financials, 2/e
Quick Reference Guide

V. Narayanan
Paperback & CD, US \$51.95
978-1-68392-096-0
E-Book, US \$29.95
978-1-68392-097-7
Library E-Book, US \$124.95
978-1-68392-344-2

SAP FI

Financial Accounting
V. Narayanan
Paperback, US \$49.95
Library E-Book, US \$124.95
978-1-937585-66-2

SAP Transaction Codes

Arshad Khan
Paperback, US \$39.95
978-1-944534-56-1
E-Book, US \$19.95
978-1-944534-66-0
Library E-Book, US \$124.95
978-1-68392-314-5

Short Film Distribution

Film Festivals, the Internet, and Self-Promotion
Jason Moore
Paperback & DVD, US \$41.95
978-1-936420-14-8
E-Book, US \$41.95
978-1-936420-75-9
Library E-Book, US \$124.95
978-1-936420-74-2

Software Quality Assurance

R. Chopra
Paperback, US \$49.95
978-1-68392-168-4
E-Book, US \$24.95
978-1-68392-169-1
Library e-book, US \$124.95
978-1-68392315-2

Software Testing

Principles and Practices
R. Chopra
Paperback, US \$54.95
978-1-68392-166-0
E-Book, US \$29.95
978-1-68392-167-7
Library e-book, US \$124.95
978-1-68392-316-9

Storyboarding, 2/e

Turning Script into Motion
Stephanie Torta & Vladimir Minuty
Paperback & DVD, US \$49.95
978-1-68392-039-7
E-Book, US \$29.95
978-1-68392-040-3
Library E-Book, US \$149.95
978-1-68392-320-6

SVG

Pocket Primer
Oswald Campesato
Paperback & CD, US \$29.95
978-1-944534-59-2
E-Book, US \$19.95
978-1-944534-69-1
Library E-Book, US \$74.95
978-1-68392-321-3

Tensor Flow

Pocket Primer
Oswald Campesato
Paperback and CD, US \$34.95
978-1-68392-364-0
E-Book, US \$21.95
978-1-68392-365-7
Library e-book, US \$99.95
978-1-68392-366-4

Video Game Writing, 2/e

From Macro to Micro
Maurice Suckling & Marek Walton
Paperback, US \$44.95
978-1-68392-029-8
E-Book, US \$21.95
978-1-68392-030-4
Library E-Book, US \$124.95
978-1-68392-324-4

Wireless Sensor Networks

An Introduction
S. R. Vijayalakshmi and S. Muruganand
Paperback & CD, US \$59.95
978-1-68392-225-4
E-Book, US \$37.95
978-1-68392-226-1
Library E-Book, US \$124.95
978-1-68392-327-5

New!

AutoCAD 2021 Beginning and Intermediate

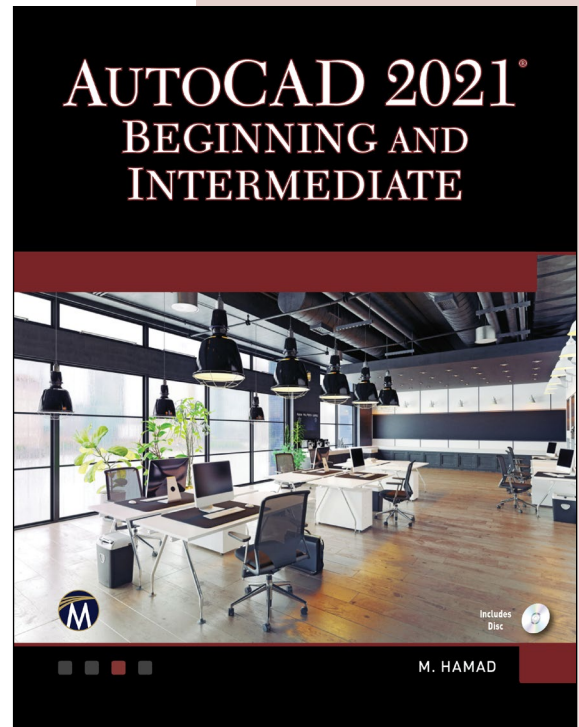
Munir Hamad

This book is the most comprehensive book you will find on AutoCAD 2021 – 2D Drafting. Covering all of the 2D concepts, it uses both metric and imperial units to illustrate the myriad drawing and editing tools for this popular application. Use the companion disc to set up drawing exercises and projects and see all of the book’s figures in color. *AutoCAD 2021 Beginning and Intermediate* includes over 100 exercises or “mini-workshops,” that complete small projects from concept through actual plotting. Solving all of the workshops will simulate the creation of three projects (architectural and mechanical) from beginning to end, without overlooking any of the basic commands and functions in AutoCAD 2021.

FEATURES:

- Covers only the basics and uses both metric and imperial units to illustrate the myriad tools for this popular application
- CD can be used to set up in-text drawing exercises and projects and to see the book’s figures in color
- Helps you to prepare for the AutoCAD Certified Professional exam

Munir Hamad is an Autodesk® Approved Instructor and certified AutoDesk AutoCAD Master, who has authored several AutoCAD titles and taught various levels of AutoCAD training.

**APRIL 2020**

7 x 9, 850 pages

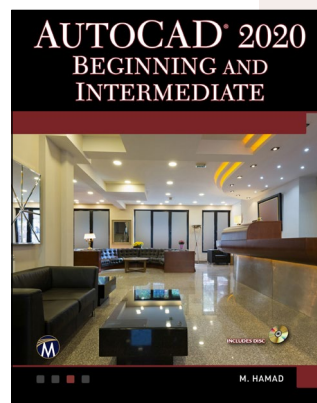
Paperback + CD, US \$69.95

978-1-683925-22-4

E-book, US \$44.95

978-1-683925-21-7

Library E-book, US \$179.95

978-1-683925-20-0**Recently Published!**

AutoCAD 2020 Beginning and Intermediate

Paperback + CD, US \$79.95

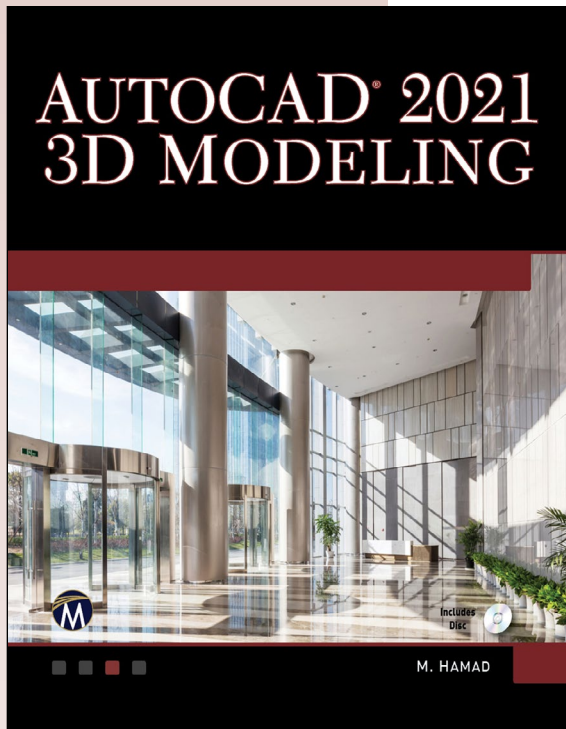
978-1-683923-91-6

E-book, US \$39.95

978-1-683923-92-3

Library E-book, US \$179.95

978-1-683923-93-0



APRIL 2020

7 x 9, 382 pages

Paperback + CD, US \$59.95

978-1-683925-25-5

E-book, US \$41.95

978-1-683925-24-8

Library E-book, US \$149.95

978-1-683925-23-1

New!

AutoCAD 2021 3D Modelling

Munir Hamad

This book provides new and seasoned users with step-by-step procedures on creating and modifying 3D models, working with cameras and lights, assigning materials to objects, rendering, and printing. Unlike many AutoCAD competitors, it uses both metric and imperial units to illustrate the myriad tools for this popular application. Use the companion CD to set up drawing exercises and projects and see all of the book's figures including color.

AutoCAD 2021 3D Modeling includes 50 "mini-workshops," that complete small projects from concept through actual plotting. Solving all of the workshops will simulate the creation of full projects (architectural and mechanical) from beginning to end, without overlooking any of the basic commands and functions in AutoCAD 2021.

FEATURES:

- Provides new and seasoned users with step-by-step procedures on creating and modifying 3D models in both metric and imperial units
- CD can be used to set up in-text drawing exercises and projects and to see the book's figures in color

Munir Hamad is an Autodesk® Approved Instructor and certified Autodesk AutoCAD Master, who has authored several AutoCAD titles and taught various levels of AutoCAD training.

**Recently
Published!**

AutoCAD 2020 3D Modeling

Paperback + CD, US \$59.95

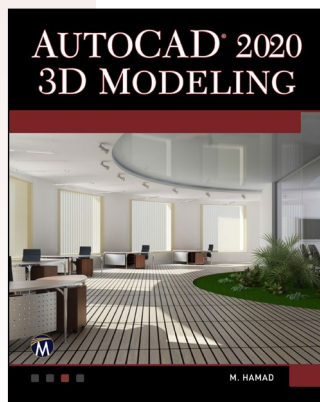
978-1-683923-79-4

E-book, US \$34.95

978-1-683923-80-0

Library E-book, US \$124.95

978-1-683923-81-7



New!

AutoDesk Revit 2021 Architecture

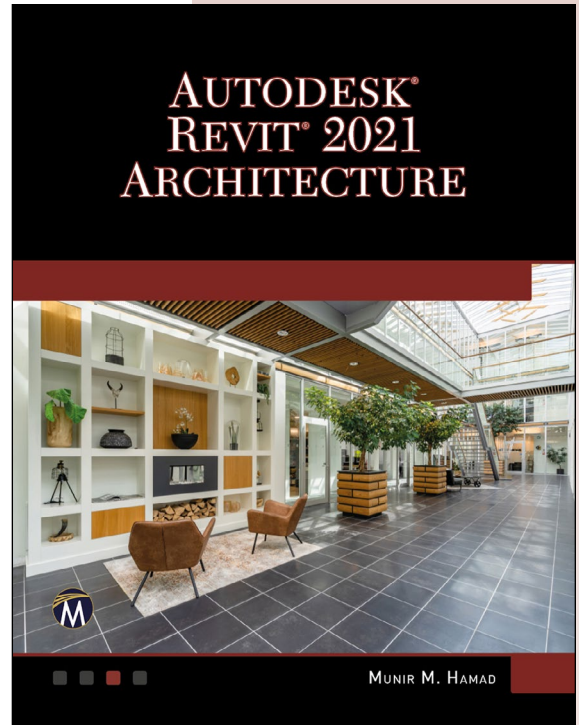
Munir Hamad

This is the most comprehensive book you will find on *Autodesk Revit 2021 Architecture*. Covering all of the 2D concepts, it uses *both metric and imperial units* to illustrate the myriad drawing and editing tools for this popular application. Use the companion files to set up drawing exercises and projects and see all of the book's figures in color. *Revit 2021 Architecture* includes over 50 exercises or "mini-workshops," that complete small projects from concept through actual plotting. Solving all of the workshops will simulate the creation of three projects (architectural and mechanical) from beginning to end, without overlooking any of the basic commands and functions in Autodesk Revit 2021.

FEATURES:

- Covers Autodesk Revit 2021 updates and new features
- Designed for novice users of Revit 2021 Architecture. Most useful for "teach yourself" or instructor-led Revit training. No previous CAD experience is required
- Uses *both English and metric* units in examples, exercises, projects, and descriptions
- Accompanied by companion files that feature drawings, practice and finished plots, figures, etc.
- Includes over 50 "mini-workshops" and hundreds of figures that complete small projects
- Helps you to prepare for the *Revit Architecture Certified Professional* exam
- Exercises and projects included for use as a textbook

Munir Hamad is an AutoDesk® Approved Instructor and certified AutoDesk AutoCAD Master, who has authored several AutoCAD titles and taught various levels of AutoCAD training.

**JUNE 2020**

7 x 9, 542 pages

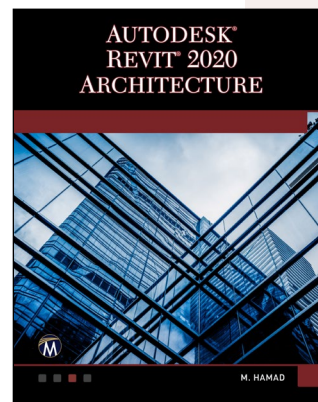
Paperback + CD, US \$59.95

978-1-683925-19-4

E-book, US \$41.95

978-1-683925-18-7

Library E-book, US \$149.95

978-1-683925-17-0**Recently Published!****Autodesk Revit 2020 Architecture**

Paperback + CD, US \$59.95

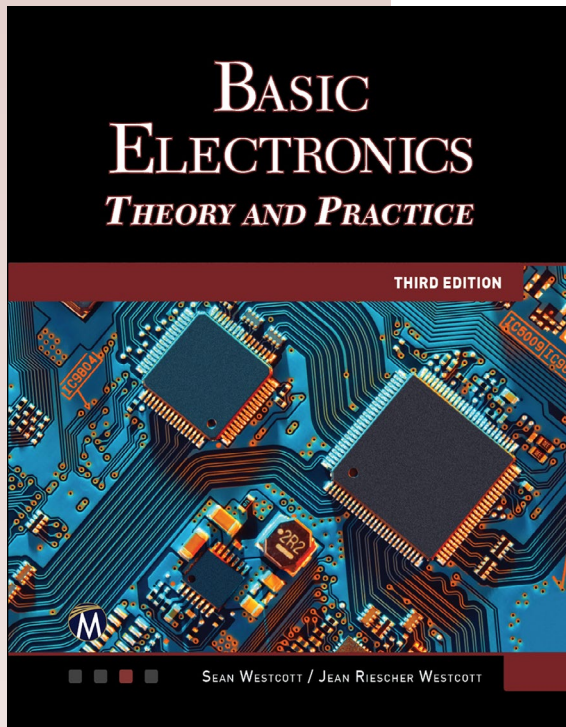
978-1-683923-94-7

E-book, US \$32.95

978-1-683923-95-4

Library E-book, US \$124.95

978-1-683923-96-1



JUNE 2020

7 x 9, 378 pages

Paperback + CD, US \$54.95

978-1-683925-28-6

E-book, US \$41.95

978-1-683925-27-9

Library E-book, US \$169.95

978-1-683925-26-2

New!

Basic Electronics 3/e

Theory and Practice

Sean Westcott and Jean Riescher Westcott

Designed for both the student and hobbyist, this updated revision is an introduction to the theory and practice of electronics including advances in microcontrollers, sensors, and wireless communication. Each chapter contains a brief lab to demonstrate the topic under discussion, then moves on to use all of the knowledge mastered to build a programmable robot (Arduino and Netduino). New material on using Raspberry Pi and Python has been included. The companion files include short videos of the labs, soldering skills, and code samples for programming of the robot. Covering both the theory and also its practical applications, this text leads the reader through the basic scientific concepts underlying electronics, building basic circuits, learning the roles of the components, the application of digital theory, and the possibilities for innovation by combining sensors, motors, and microcontrollers. It includes appendices on mathematics for electronics, a timeline of electronics innovation, careers in electronics, and a glossary.

FEATURES:

- Includes companion files with over twenty video tutorials on currents, soldering, power supply, resistors, decoder circuits, Raspberry Pi, animations of featured circuits and more (files also available from the publisher for downloading)
- Features a chapter on using Raspberry Pi and Python in electronic projects and a new chapter on Cybersecurity and the Internet of Things (IoT)
- Leads the reader through an introductory understanding of electronics with simple labs and then progressing to the construction of a microcontroller-driven robot using open source software and hardware (Netduino and Arduino versions)
- Presents theoretical concepts in a conversational tone, followed by hands-on labs to engage readers by presenting practical applications.

Sean Westcott works in IT and cybersecurity in Washington, DC. **Jean Riescher Westcott** is the co-author of *Industrial Automation and Robotics* and *Video Game Addiction*. Together Sean and Jean Westcott have written *Digitally Daunted: The Consumer's Guide to the Technology in Your Life* and *The Complete Idiot's Guide to Electronics 101*.

New!

COMSOL Heat Transfer Models

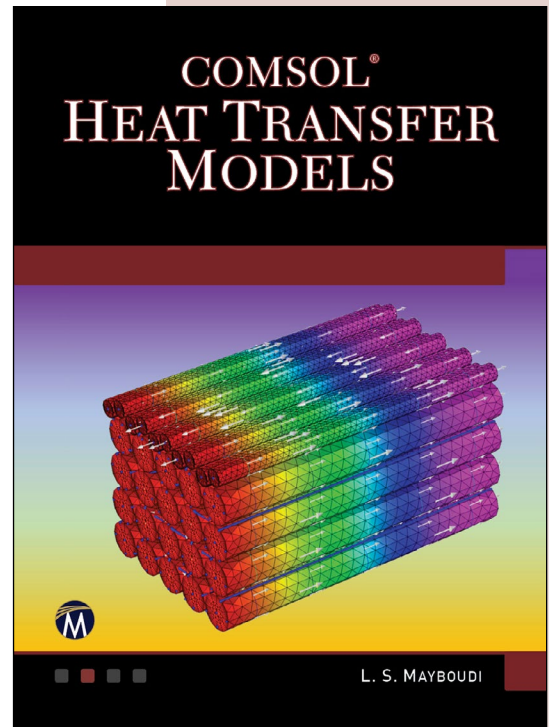
Layla S. Mayboudi

This book guides the reader through the process of model creation for heat transfer analysis with the finite element method. The book describes thermal imaging experiments that demonstrate how such models can be validated. It presents application examples, such as heating water in a kettle, to basement insulation, a heated seat, molten rock, pipe flow, and an innovative extended surface. A companion disc provides the files so models can be run (using COMSOL or other software) in order to observe real-world behavior of the applications. Historical background information is provided to show the progression of heat transfer science and mathematical modeling from the earliest developments to the most recent advances in technology.

FEATURES:

- Includes example models that enable the reader to implement conceptual material in practical scenarios with broad industrial applications
- Includes companion files with models and geometry files created with COMSOL Multiphysics® or imported from a third-party CAD tool.

Layla S. Mayboudi holds a Ph.D. from Queen's University (Canada) in mechanical engineering. Her research areas include heat transfer modelling and validation, thermal management, thermal imaging, and flow optimization. She also has industrial experience and training in operations research, process improvement (Black Belt Lean Six Sigma certified), and mechanical test management. Dr. Mayboudi has published books, journal articles, and conference papers, and has several years of experience in education, aerospace, and rail transportation industries where she initiated and completed numerous projects resulting in improved capabilities (efficiency and effectiveness). Dr. Mayboudi has a strong aviation background and has accumulated over 300 solo and duo flight hours (mostly in the Cessna 172).

**JANUARY 2020**

7 x 9, 400 pages

Hardback, US \$54.95

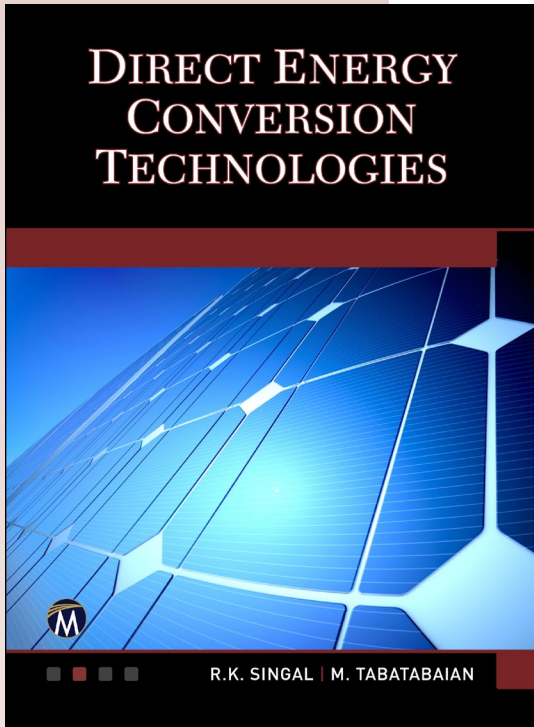
978-1-683922-11-7

E-book, US \$31.95

978-1-683922-12-4

Library E-book, US \$124.95

978-1-683922-69-8

**NOVEMBER 2019**

7 x 9, 232 pages

Paperback, US \$59.95

978-1-683924-53-1

E-book, US \$39.95

978-1-683924-55-5

Library E-book, US \$124.95

978-1-6839224-54-8**Recently Published!****Direct Energy Conversion Technologies****R. K. Singal and Mehrzad Tabatabaian**

This book is designed for students and professionals who specialize in energy technologies and power plant engineering. It covers the mathematics and physics of both current conversion, such as solar cells, fuel cells, MHD, thermoelectric, and thermionic power generation, but also discusses emerging conversion technologies such as solar thermal, nuclear fusion, and hydrogen energy.

FEATURES:

- Covers both current conversion technologies as well as emerging technologies, such as solar thermal, nuclear fusion, and hydrogen energy
- Written in simple language, illustrated by diagrams, mathematical analysis, and numerical examples

R. K. Singal, PhD, is a university instructor with a specialty in wind and solar power.

Mehrzad Tabatabaian, PhD, is currently a senior faculty member in the Mechanical Engineering Department, School of Energy at the British Columbia Institute of Technology (BCIT) with several years of teaching, research, and industry experiences. He has authored several textbooks and published papers in various scientific journals and conferences. He holds several registered patents in the clean energy field.

Recently Published!**Electrical Engineering Exam Prep***Problems and Solutions***R. R. Gupta and J. R. Claycomb**

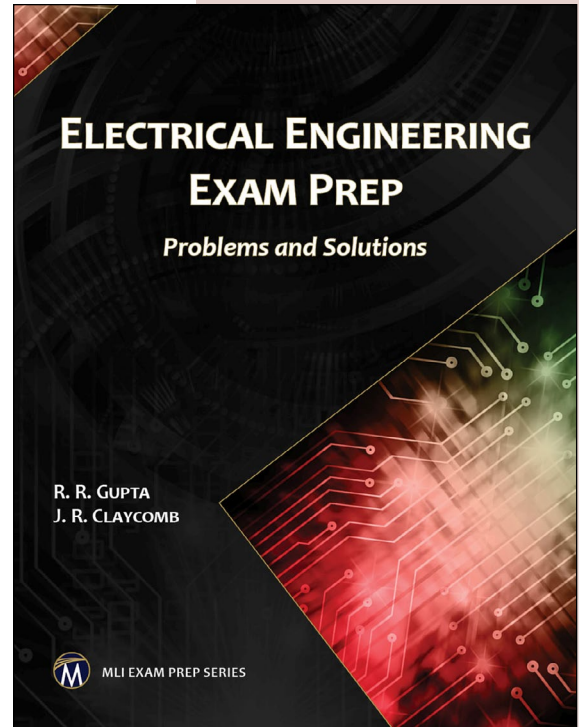
This book provides over 2,500 questions and answers for various types of electrical engineering exams or as a general review of key concepts. It covers all of the aspects of electrical engineering topics including electrical circuits, electromagnetic theory, measurements, control systems, computers, electronics, material science, machines, power systems, blockchain, and more.

FEATURES:

- Uses multiple choice questions and their answers in a “self-study format” to review key concepts in electrical engineering and related topics
- Provides over 2500 questions for reviewing a variety of topics including circuits, measurement, information and blockchain technology, power systems, electronics, and more

R. R. Gupta, PhD, has written several texts in the area of electrical engineering.

J. R. Claycomb, PhD, is Associate Professor of Physics at Houston Baptist University.

**FEBRUARY 2019**

7 x 9, 440 pages

Paperback, US \$49.95

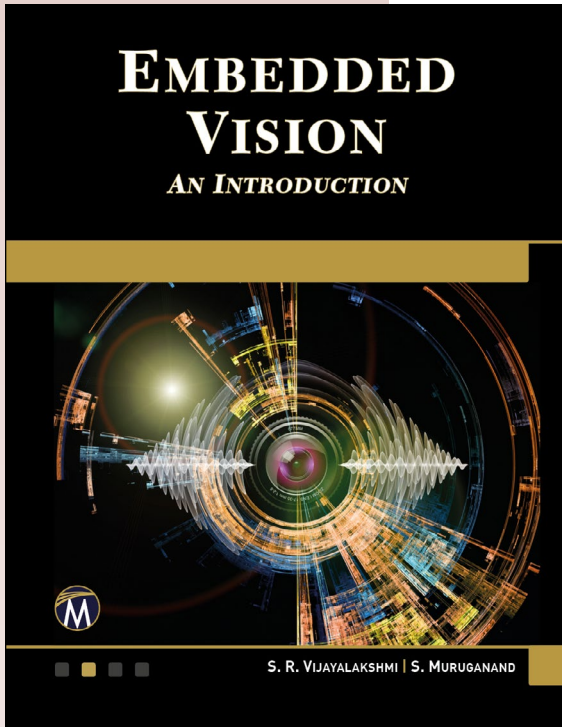
978-1-683921-12-7

E-book, US \$29.95

978-1-683921-13-4

Library E-book, US \$124.95

978-1-683922-78-0



OCTOBER 2019

7 x 9, 580 pages

Paperback, US \$69.95

978-1-683924-57-9

E-book, US \$41.95

978-1-683924-56-2

Library E-book, US \$124.95

978-1-683924-58-6

Recently Published!

Embedded Vision

An Introduction

S. R. Vijayalakshmi and S. Muruganand

Embedded vision is the integration of “computer vision” into machines that use algorithms to decode meaning from observed images or video. It has a wide range of applications to machine learning, artificial intelligence, industrial, medical, driverless cars, drones, smart phones, aerospace, defense, agriculture, consumer, surveillance, robotics and security. This book is an introductory guide for anyone who is interested in designing machines that have vision-enabled, embedded products. It covers a large number of topics encountered in hardware architecture, software algorithms, applications, advancements in camera, processors, and sensors in the field of embedded vision.

FEATURES:

- Includes a wide range of applications to artificial intelligence, machine learning, industry, science, medicine, transportation, civil infrastructure, and security
- Covers a large number of topics encountered in hardware architecture, software algorithms, applications, advancements in processors and sensors.

S. R. Vijayalakshmi is a university professor and researcher who teaches courses in wireless communication and engineering.

S. Muruganand is a university professor and researcher who teaches courses in wireless communication and engineering. Vijayalakshmi and Muruganand are the authors of *Wireless Sensor Networks; Ocean Instrumentation, Electronics, and Energy*; and *Embedded Vision: An Introduction* (published by Mercury Learning and Information).

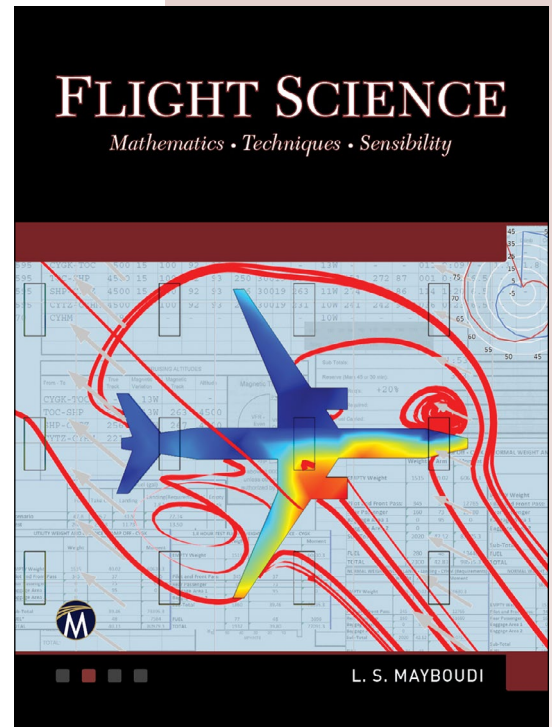
Recently Published!**Flight Science***Mathematics • Techniques • Sensibility***Layla S. Mayboudi**

This book introduces certain aspects of mathematics and sciences in general, as they relate to the subject of aviation, from the wheels-up to the wheels-down, and the time in between. The topics include meteorology, thermodynamics, combustion, drones, mechanics, dynamics, navigation, flight plans, and general aviation-related guidance. The book also presents the use of statistical analysis in describing the aircraft characteristics based on performance charts. The book may be used as a reference and includes examples and case studies with step-by-step solutions. Readers new to the field who are working towards their recreational, private, or commercial licenses or one already flying a single piston or multi-engine aircraft will benefit from the content.

FEATURES:

- Includes aviation-related case studies, where the reader can see how the conceptual material is applied to practical scenarios.
- Derives equations, displays the relations in diagrams, and shows the applications of statistical methods to analyses of aircraft performance charts, providing powerful tools for aviation-related research. Mechanical modelling of flying objects and weight-and-balance calculation methodologies are discussed as well.
- Provides pertinent historical background to aviation-related topics such as meteorology, navigation, and mapping, enabling the reader to put in context the current state of are in these areas.
- Presents in detail all essential elements of a real-world flight plan, enabling the reader to use the methodology and example when creating their own flight plans.

Layla S. Mayboudi holds a Ph.D. from Queen's University (Canada) in mechanical engineering. Her research areas include heat transfer modelling and validation, thermal management, thermal imaging, and flow optimization. She also has industrial experience and training in operations research, process improvement (Black Belt Lean Six Sigma certified), and mechanical test management. Dr. Mayboudi has published books, journal articles, and conference papers, and has several years of experience in education, aerospace, and rail transportation industries where she initiated and completed numerous projects resulting in improved capabilities (efficiency and effectiveness). Dr. Mayboudi has a strong aviation background and has accumulated over 300 solo and duo flight hours (mostly in the Cessna 172).

**MARCH 2019**

7 x 9, 500 pages

Hardback, US \$59.95

978-1-683922-15-5

E-book, US \$35.95

978-1-683922-16-2

Library E-book, US \$124.95

978-1-6839223-31-2



Recently Published!

Geometry Creation and Import With COMSOL Multiphysics

Layla S. Mayboudi

This book focuses on the geometry creation techniques for use in finite element analysis. Examples are provided as a sequence of fin designs with progressively increasing complexity. A fin was selected as it is a feature widely employed for thermal management. As the content progresses, the reader learns to create or import a geometry into a FEM tool using COMSOL Multiphysics®. The fundamentals may also be applied to other commercial packages such as ANSYS® or Abaqus™. The content can be utilized in a variety of engineering disciplines including mechanical, aerospace, biomedical, chemical, civil, and electrical. The book provides an overview of the tools available to create and interact with the geometry. It also takes a broader look on the world of geometry, showing how geometry is a fundamental part of nature and how it is interconnected with the world around us.

OCTOBER 2019

7 x 9, 260 pages

Hardback, US \$54.95

978-1-683922-13-1

E-book, US \$31.95

978-1-683922-14-8

Library E-book, US \$124.95

978-1-683922-70-4

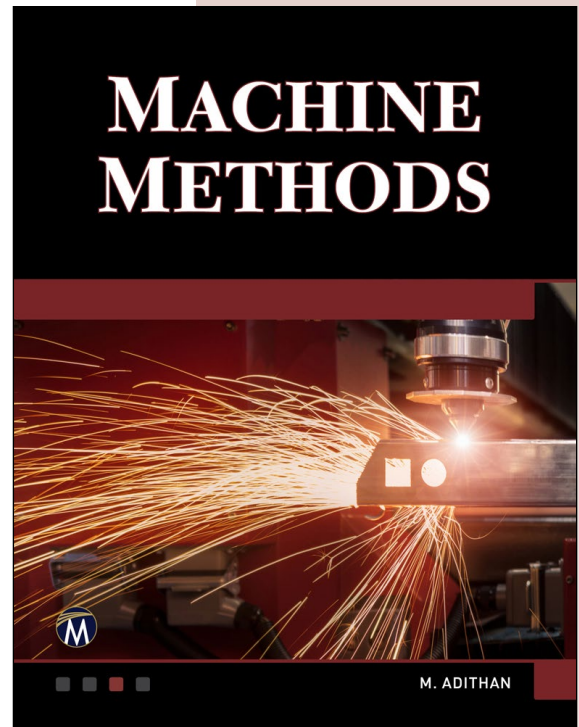
FEATURES:

- Includes example models that enable the reader to implement conceptual material in practical scenarios with broad industrial applications
- Provides geometry modeling examples created with built in features of COMSOL Multiphysics® v. 5.4 or imported from other dedicated CAD tools
- Presents meshing examples and provides practical advice on mesh generation
- Includes companion files with models and custom applications created with COMSOL Multiphysics® Application Builder.

Layla S. Mayboudi holds a Ph.D. from Queen's University (Canada) in mechanical engineering. Her research areas include heat transfer modelling and validation, thermal management, thermal imaging, and flow optimization. She also has industrial experience and training in operations research, process improvement (Black Belt Lean Six Sigma certified), and mechanical test management. Dr. Mayboudi has published books, journal articles, and conference papers, and has several years of experience in education, aerospace, and rail transportation industries where she initiated and completed numerous projects resulting in improved capabilities (efficiency and effectiveness). Dr. Mayboudi has a strong aviation background and has accumulated over 300 solo and duo flight hours (mostly in the Cessna 172).

Recently Published!**Machine Methods***A Self-Teaching Introduction***M. Adithan**

This book, using an easy-to-follow, question and answer format provides readers with a brief introduction to the methods used in machine design. With over 1000 questions and answers on a variety of topics, it is an ideal resource for exam prep and for reviewing all of the key concepts in machine methods. Selected topics include: engineering drawing, soldering, welding, cutting tools, grinding, numerically controlled methods, turning and lathe work, measuring instruments, applied mechanics, automobile engines, refrigeration, and more.

**JULY 2018**

7 x 9, 268 pages

Hardback, US \$49.95

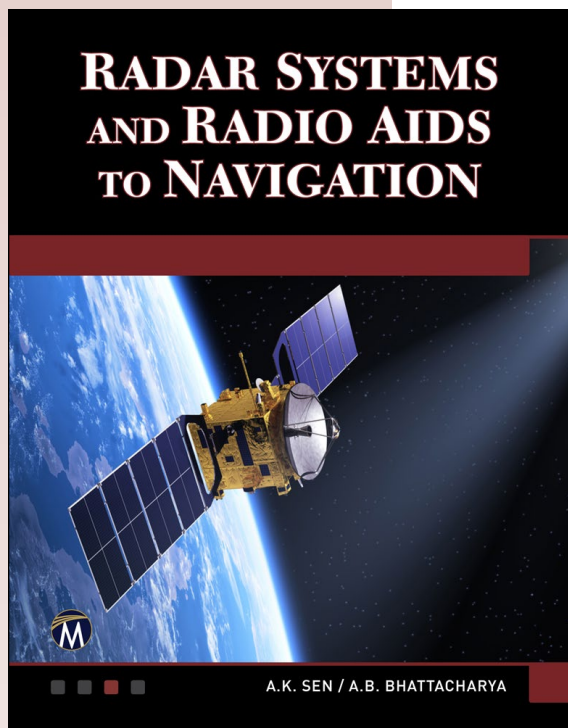
978-1-683921-32-5

E-book, US \$29.95

978-1-683921-33-2

Library E-book, US \$124.95

978-1-6839223-40-4

**NOVEMBER 2018**

7 x 9, 790 pages

Hardback, US \$79.95

978-1-683921-18-9

E-book, US \$39.95

978-1-683921-19-6

Library E-book, US \$179.95

978-1-6839223-09-1***Recently Published!*****Radar Systems and Radio Aids to Navigation****A. K. Sen and A. B. Bhattacharya**

This comprehensive reference explains the many processes needed for creating radar systems and navigation aids. Selected topics include antennas, radar targets, Doppler radar, atmospheric probing, mathematical preliminaries, hyperbolic navigation, aircraft homing systems, navigation measuring techniques, satellite navigation, and more.

FEATURES:

- Explains the many processes needed for creating radar systems and navigation aids
- Topics include antennas, radar targets, Doppler radar, atmospheric probing, and more

New!

Structural Steel Design 3/e

Abi O. Aghayere and Jason Vigil

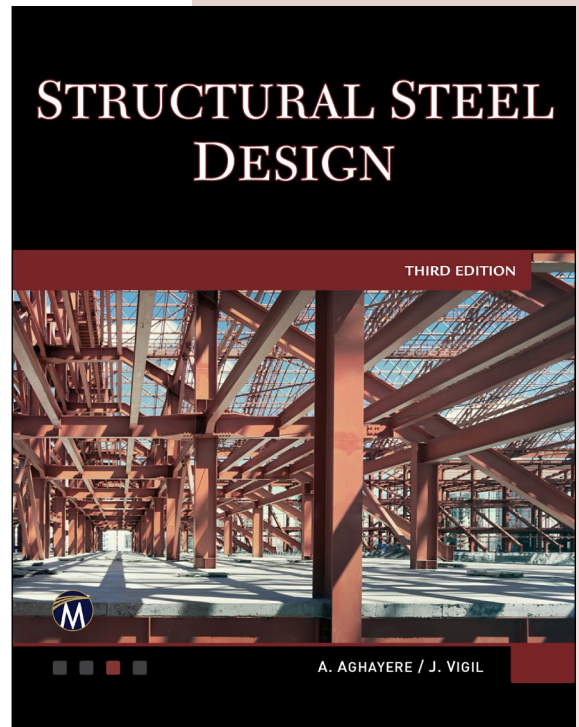
Structural Steel Design, Third Edition is a simple, practical, and concise guide to structural steel design—using the Load and Resistance Factor Design (LRFD) and the Allowable Strength Design (ASD) methods—that equips the reader with the necessary skills for designing real-world structures. Civil, structural, and architectural engineering students intending to pursue careers in structural design and consulting engineering, and practicing structural engineers will find the text useful because of the holistic, project-based learning approach that bridges the gap between engineering education and professional practice. The design of each building component is presented in a way such that the reader can see how each element fits into the entire building design and construction process. Structural details and practical example exercises that realistically mirror what obtains in professional design practice are presented.

FEATURES:

- Includes updated content/example exercises that conform to the current codes (ASCE 7, ANSI/AISC 360-16, and IBC)
- Adds coverage to ASD and examples with ASD to parallel those that are done LRFD
- Follows a holistic approach to structural steel design that considers the design of individual steel framing members in the context of a complete structure.

Abi O. Aghayere, PhD, is a licensed professional engineer and a professor of structural engineering at Drexel University.

Jason Vigil is a consultant in Rochester, New York, and is an adjunct professor at the Rochester Institute of Technology.



FEBRUARY 2020

7 x 9, 900 pages

Hardback, US \$99.95

978-1-683923-67-1

E-book, US \$49.95

978-1-683923-68-8

Library E-book, US \$179.95

978-1-683923-69-5

3D Printing

An Introduction

Stephanie Torta and John Torta

Paperback & CD, US \$49.95

978-1-68392-209-4

E-Book, US \$29.95

978-1-68392-245-2

Library E-Book, US \$124.95

978-1-68392-245-2

AutoCAD 2012 3D Modeling

Munir Hamad

Paperback & DVD, US \$41.95

978-1-936420-21-6

E-Book, US \$41.95

978-1-936420-48-3

AutoCAD 2012 Beginning and Intermediate

Munir Hamad

Paperback & DVD, US \$39.95

978-1-936420-20-9

E-Book, US \$39.95

978-1-936420-51-3

AutoCAD 2013 3D Modeling

Munir Hamad

E-Book, US \$41.95

978-1-937585-11-2

AutoCAD 2013 Beginning and Intermediate

Munir Hamad

E-Book, US \$39.95

978-1-936420-51-3

AutoCAD 2014 3D Modeling

Munir Hamad

E-Book, Jan 2014, US \$39.95

978-1-938549-94-6

AutoCAD 2014 Beginning and Intermediate

Munir Hamad

Paperback & DVD, US \$54.95

978-1-938549-62-5

E-Book, US \$44.95

978-1-938549-95-3

AutoCAD 2015 3D Modeling

Munir Hamad

Paperback & DVD, US \$49.95

978-1-937585-37-2

E-Book, US \$29.95

978-1-942270-34-8

AutoCAD 2015 Beginning and Intermediate

Munir Hamad

Paperback & DVD, US \$59.95

978-1-937585-36-5

E-Book, US \$39.95

978-1-942270-31-7

AutoCAD 2016 3D Modeling

Munir Hamad

Paperback & CD, US \$49.95

978-1-942270-50-8

E-Book, US \$29.95

978-1-942270-53-9

AutoCAD 2016 Beginning and Intermediate

Munir Hamad

Paperback & CD, US \$59.95

978-1-942270-46-1

E-Book, US \$39.95

978-1-942270-49-2

AutoCAD 2017 Beginning and Intermediate

Munir Hamad

E-Book, US \$39.95

978-1-944534-71-4

AutoCAD 2017 3D Modeling

Munir Hamad

Paperback & CD, US \$49.95

978-1-944534-62-2

E-Book, US \$29.95

978-1-944534-72-1

AutoCAD 2018 3D Modeling

Munir Hamad

Paperback & CD, US \$49.95

978-1-68392-043-4

E-Book, US \$29.95

978-1-68392-044-1

Library E-Book, US \$124.95

978-1-68392-256-8

AutoCAD 2018 Beginning and Intermediate

Munir Hamad

Paperback & CD, US \$59.95

978-1-68392-041-0

E-Book, US \$34.95

978-1-68392-042-7

Library E-Book, US \$124.95

978-1-68392-257-5

AutoCAD 2019 3D Modeling

Munir Hamad

Paperback & CD, US \$49.95

978-1-68392-178-3

E-Book, US \$29.95

978-1-68392-179-0

Library E-Book, US \$124.95

978-1-68392-258-2

AutoCAD 2019 Beginning and Intermediate

Munir Hamad

Paperback & CD, US \$59.95

978-1-68392-176-9

E-Book, US \$34.95

978-1-68392-177-6

Library E-Book, US \$124.95

978-1-68392-259-9

AutoCAD 2020 3D Modeling

Munir Hamad

Paperback & CD, US \$49.95

978-1-68392-379-4

E-Book, US \$29.95

978-1-68392-380-0

Library E-Book, US \$124.95

978-1-68392-381-7

AutoCAD 2020 Beginning and Intermediate

Munir Hamad

Paperback & CD, US \$59.95

978-1-68392-391-6

E-Book, US \$34.95

978-1-68392-392-3

Library E-Book, US \$124.95

978-1-68392-393-0

Autodesk Revit

2019 Architecture

Munir Hamad

550-pages,-7-x-9

Hardback, US \$59.95

978-1-68392-174-5

E-Book, US \$29.95

978-1-68392-175-2

Library e-book, US \$124.95

978-1-68392-312-1

Autodesk Revit 2020 Architecture

A Self-Teaching Introduction

Munir Hamad

Paperback and CD, US \$59.95

978-1-68392-394-7

E-Book, US \$32.95

978-1-68392-395-4

Library e-book, US \$124.95

978-1-68392-396-1

CFD Module

Multiphysics Modeling

Mehrzad Tabatabaian

Hardback & DVD, US \$49.95

978-1-937585-43-3

E-Book, US \$29.95

978-1-942270-62-1

Library E-Book, US \$124.95

978-1-94227-061-4

COMSOL5 for Engineers

Multiphysics Modeling

Mehrzad Tabatabaian

Hardback & DVD, US \$79.95

978-1-942270-42-3

E-Book, US \$39.95

978-1-942270-45-4

Library E-Book, US \$179.95

978-1-942270-44-7

COMSOL for Engineers

Multiphysics Modeling

Mehrzad Tabatabaian

Hardback & DVD, US \$99.95

978-1-938549-53-3

E-Book, US \$49.95

978-1-938549-56-4

Library E-Book, US \$179.95

978-1-938549-55-7

COMSOL Heat Transfer Models

Layla Mayboudi

Hardback, US \$54.95

978-1-68392-211-7

E-book, US \$31.95

978-1-68392-212-4

Library e-book, US \$124.95

978-1-68392-269-8

Control System Design

B. S. Manke

Hardback, US \$54.95

978-1-68392-108-0

E-Book, US \$34.95

978-1-68392-109-7

Library E-Book, US \$124.95

978-1-68392-109-7

Dimensional Analysis for Unit

Conversions Using MATLAB

Roger W. Pryor

Paperback & CD, US \$79.95

978-1-68392-242-1

E-Book, US \$59.95

978-1-68392-243-8

Library e-book, US \$179.95

978-1-68392-329-9

Electrical Engineering Experiments

G. P. Chhalotra

Paperback, US \$49.95

978-1-68392-114-1

E-Book, US \$29.95

978-1-68392-115-8

Library E-Book, US \$124.95

978-1-68392-279-7

Environmental Audits

Cliff VanGuilder

Hardback & DVD, US \$49.95

978-1-938549-60-1

E-Book, US \$29.95

978-1-937585-17-4

Library E-Book, US \$124.95

978-1-937585-16-7

Autodesk Revit

2019 Architecture

Munir Hamad

550-pages,-7-x-9

Hardback, US \$59.95

978-1-68392-174-5

E-Book, US \$29.95

978-1-68392-175-2

Library e-book, US \$124.95

978-1-68392-312-1

Autodesk Revit 2020 Architecture

A Self-Teaching Introduction

Munir Hamad

Paperback and CD, US \$59.95

978-1-68392-394-7

E-Book, US \$32.95

978-1-68392-395-4

Library e-book, US \$124.95

978-1-68392-396-1

HDL with Digital Design

Nazeih Botros

Hardback, US \$79.95

978-1-938549-81-6

E-Book, US \$39.95

978-1-942270-28-7

Library E-Book, US \$179.95

978-1-942270-27-0**Industrial Automation and Robotics**

Gupta, Arora & Westcott

Hardback & DVD, US \$59.95

978-1-938549-30-4

E-Book, US \$39.95

978-1-938549-33-5

Library E-Book, US \$124.95

978-1-68392-289-6**Industrial Engineering Foundations***Bridging the Gap between
Engineering and Management*

Farrokh Sassani

Hardback, US \$49.95

978-1-942270-86-7

E-Book, US \$29.95

978-1-944534-52-3

Library E-Book, US \$124.95

978-1-68392-334-3**Multiphysics Modeling Using****COMSOL4**

Roger W. Pryor

Hardback & DVD, US \$99.95

978-1-936420-09-4

E-Book, US \$79.95

978-1-937585-74-7

Library E-Book, US \$179.95

978-1-937585-73-0**Multiphysics Modeling Using****COMSOL5 and MATLAB**

Roger W. Pryor

Hardback & DVD, US \$99.95

978-1-938549-98-4

E-Book, US \$59.95

978-1-942270-71-3

Library E-Book, US \$124.95

978-1-68392-292-6**Ocean Instrumentation, Electronics,
and Energy**

s. R. Vijayalakshmi & S. Muruganand

Hardback, US \$59.95

978-1-944534-57-8

E-Book, US \$39.95

978-1-944534-67-7

Library E-Book, US \$124.95

978-1-68392-296-4**Real-Time Embedded Components
and Systems with Linux and RTOS,
2/e**

Sam Siewert & John Pratt

Hardback & CD, US \$79.95

978-1-942270-04-1

E-Book, US \$39.95

978-1-944534-54-7

Library E-Book, US \$179.95

978-1-68392-310-7**Revit 2017 Architecture**

Munir Hamad

Paperback & CD, US \$49.95

978-1-68392-148-6

E-Book, US \$29.95

978-1-944534-74-5**Revit 2018 Architecture**

Munir Hamad

Paperback & CD, US \$51.95

978-1-68392-148-6

E-Book, US \$29.95

978-1-68392-149-3**RF Module***The Three Stub Tuner*

Roger W. Pryor

Hardback & DVD, US \$49.95

978-1-938549-69-4

E-Book, US \$39.95

978-1-938549-97-7

Library E-Book, US \$124.95

978-1-68392-313-8**Tensor Analysis for Engineers**

Mehrzad Tabatabaian

Hardback & CD, US \$59.95

978-1-68392-237-7

E-Book, US \$39.95

978-1-68392-238-4

Library e-book, US \$124.95

978-1-68392-322-0**Topics in Systems**

Howard Eisner

Paperback, US \$41.95

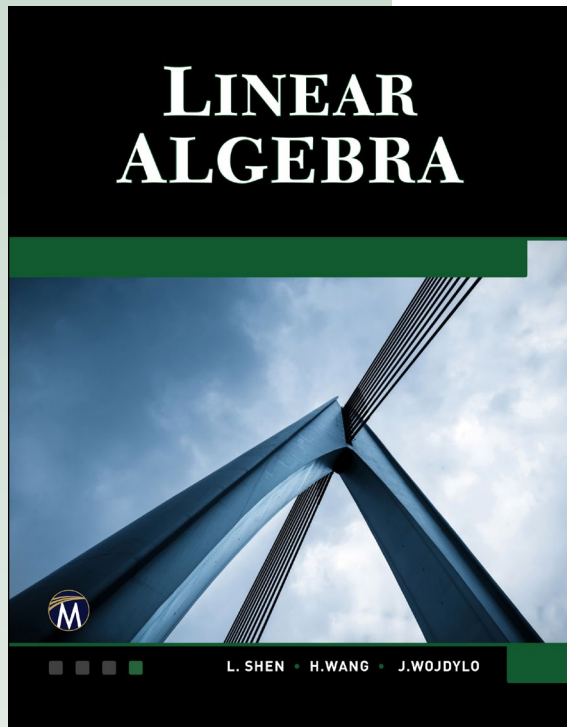
978-1-936420-24-7

E-Book, US \$37.95

978-1-938549-52-6

Library E-Book, US \$124.95

978-1-938549-51-9

**JANUARY 2019**

7 x 9, 172 pages

Hardback, US \$89.95

978-1-683923-76-3

E-book, US \$44.95

978-1-683923-77-0

Library E-book, US \$179.95

978-1-683923-78-7***New!*****Linear Algebra****L. Shen, Haohao Wang, and J. Wojdylo**

The aim of this book is two-fold: to introduce the fundamental concepts of linear algebra and to apply the theorems in computation-oriented applications. The book is suitable for a one semester course in linear algebra that can be used in a variety of contexts. The presentation of the material combines definitions and proofs with an emphasis on computational applications, providing examples that illustrate the use of software packages such as Mathematica®, Maple®, and Sage.

FEATURES:

- Introduces the fundamental concepts of linear algebra and applies the theorems in computation-oriented applications
- Presents a brief introduction of some aspects of abstract algebra that relate directly to linear algebra, such as groups, rings, modules, fields and polynomials over fields.

L. Shen is a professor of Mathematics at the University of the Chinese Academy of Science.

Haohao Wang is a professor of Mathematics at Southeast Missouri State University.

J. Wojdylo is a professor of Mathematics at the Southeast Missouri State University.

New!

Essentials of Modern Algebra 2/e

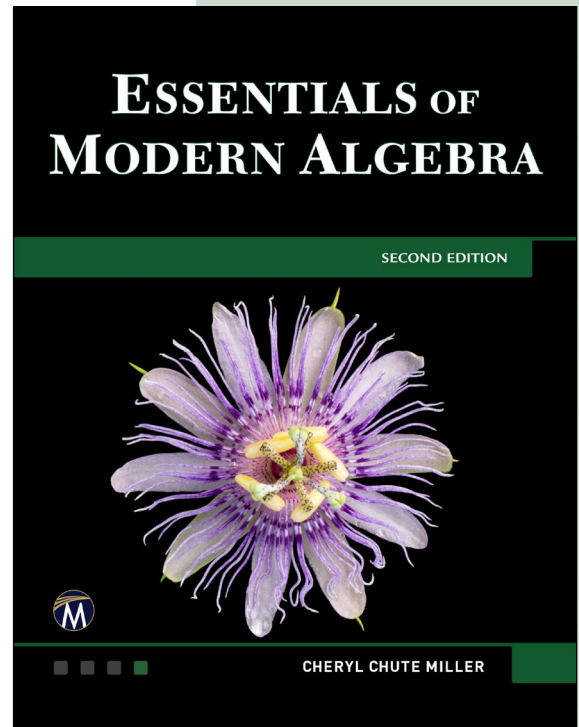
Cheryl Chute Miller

This new edition is intended for the undergraduate one or two semester course in modern algebra, also called abstract algebra. It follows a logical path, using the axioms or rules to understand structures such as groups, rings, and fields, and giving the reader examples to help, but leaving many theorems and examples for them to try. The unique feature of the text is the list of “projects” at the end of each chapter that can be used in the classroom (with students solving them), alone, or in groups with the aid of an instructor. Because of their interactive nature, the projects are designed to reinforce previous concepts.

FEATURES:

- A logic-based presentation, with the structures of groups, rings, and fields presented in similar ways through objects, sub-objects, mappings between objects, and quotients of objects
- Follows a fairly straight path without many of the side areas, such as modules, in order to introduce Galois Theory and solvability of polynomials
- Provides numerous examples, exercises, and the inclusion of “projects” in each chapter
- Adds more, varied examples to use when illustrating ideas such as order of elements, direct products, and subgroups
- Includes new material on the history of mathematics with vignettes of mathematicians
- Provides instructor’s resources with solutions and PowerPoint slides for use as a textbook

Cheryl Chute Miller holds a PhD in mathematics from Wesleyan University and is currently a professor of mathematics at SUNY Potsdam. She has over 20 years of teaching experience, has written numerous articles, and has received several awards and grants during her career.



JANUARY 2019

7 x 9, 356 pages

Hardback, US \$64.95

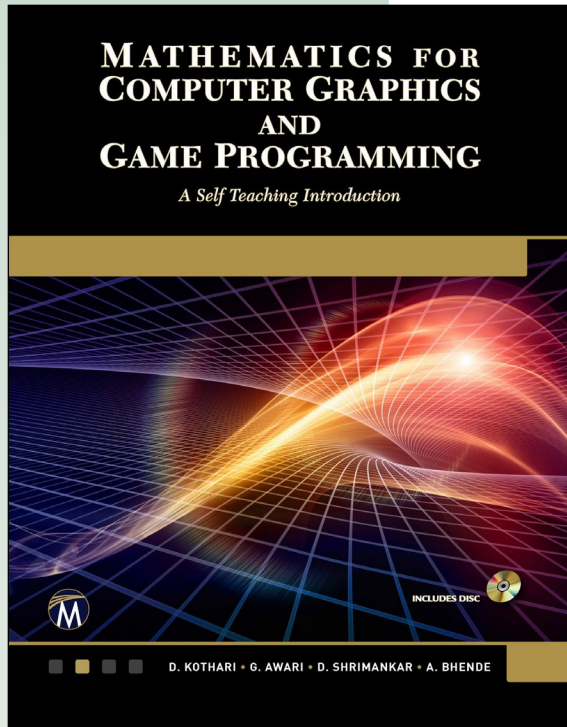
978-1-683922-35-3

E-book, US \$39.95

978-1-683922-36-0

Library E-book, US \$149.95

978-1-683922-81-0



JANUARY 2019

7 x 9, 400 pages

Paperback, US \$69.95

978-1-683923-56-5

E-book, US \$35.95

978-1-683923-55-8

Library E-book, US \$149.95

978-1-683923-57-2

New!

Mathematics for Computer Graphics and Game Programming

A Self-Teaching Introduction

**D. P. Kothari, G. Awari, D. Shrimankar,
and A. Bhende**

Designed to explain the mathematical concepts involved in computer graphics and its entities, this book is ideal for courses in computer graphics, engineering, game development, as well as for professionals in industry. It begins with simple concepts such as how an image is generated on the screen and then moves to cover the different algorithms for the generation of simple geometry on the screen. The following chapters include two-dimensional and three-dimensional transformations, parametric representation of planar curves and parametric representation of space curves such as cubic splines, Bezier curves, etc. In addition to programming in C, OpenGL, and several other topics, it includes a final chapter on the methods of generating 3D models.

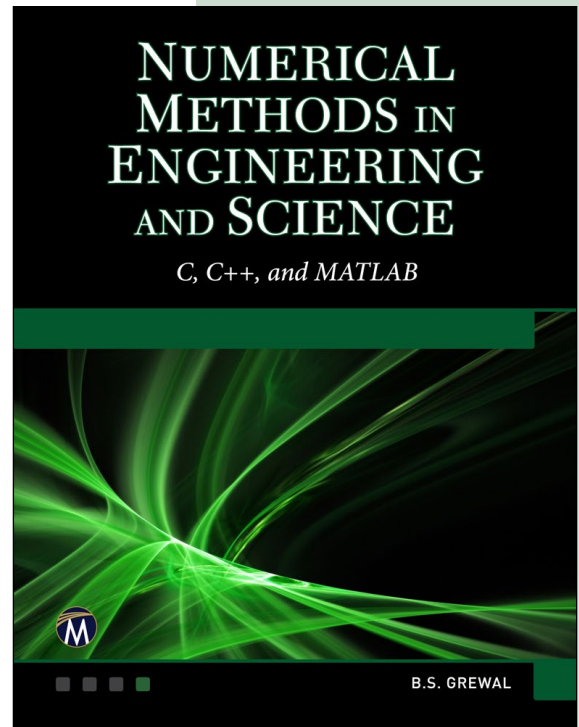
Recently Published!**Numerical Methods in Engineering and Science***(C, C++, and MATLAB)***B. S. Grewal**

This book is intended as an introduction to numerical methods for scientists and engineers. Providing an excellent balance of theoretical and applied topics, it shows the numerical methods used with C, C++, and MATLAB.

FEATURES:

- Provides a balance of theoretical and applied topics
- Shows the numerical methods used with C, C++, and MATLAB

B. S. Grewal (late) had written numerous articles and books about mathematics and had received several awards and grants during his career.

**SEPTEMBER 2018**

Hardback, US \$79.95

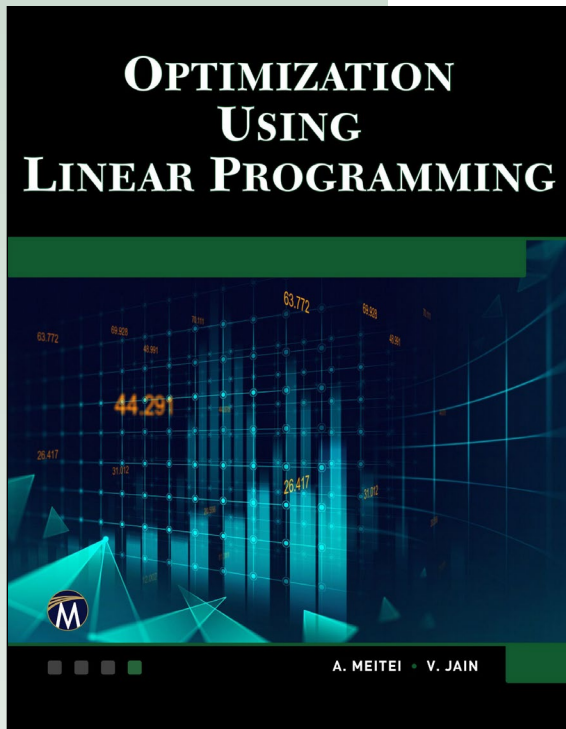
978-1-683921-28-8

E-book, US \$49.95

978-1-683921-29-5

Library E-book, US \$179.95

978-1-683922-95-7



APRIL 2019

7 x 9, 350 pages

Paperback, US \$89.95

978-1-683923-47-3

E-book, US \$29.95

978-1-683923-46-6

Library E-book, US \$179.95

978-1-683923-48-0

Recently Published!

Optimization Using Linear Programming
A. J. Metei, PhD, and Veena Jain, PhD

Designed for engineers, mathematicians, computer scientists, financial analysts, and anyone interested in using numerical linear algebra, matrix theory, and game theory concepts to maximize efficiency in solving applied problems. The book emphasizes the solution of various types of linear programming problems by using different types of software, but includes the necessary definitions and theorems to master theoretical aspects of the topics presented.

FEATURES:

- Emphasizes the solution of various types of linear programming problems by using different kinds of software, e.g., MS-Excel, solutions of LPPs by Mathematica, MATLAB, WinQSB, and LINDO
- Provides definitions, theorems, and procedures for solving problems and all cases related to various linear programming topics
- Includes numerous application examples and exercises, e.g., transportation, assignment, and maximization
- Presents numerous topics that can be used to solve problems involving systems of linear equations, matrices, vectors, game theory, simplex method, and more.

A. J. Metei, PhD, is a university instructor specializing in linear algebra and linear programming.

Veena Jain, PhD, is a university instructor specializing in linear algebra and linear programming.

Algebra Essentials

David A. Santos & Olgha Davis

MyMath Essentials

Paperback & CD, US \$39.95

978-1-937585-22-8

E-Book, US \$39.95

978-1-937585-34-1

Library E-Book, US \$124.95

978-1-937585-33-4**Applied Linear Algebra and Optimization
Using MATLAB**

Rizwan Butt

Hardback & CD, US \$69.95

978-1-936420-04-9

E-Book, US \$79.95

978-1-936420-78-0

Library E-Book, US \$149.95

978-1-936420-76-6**Commutative Algebra***An Introduction*

Hoffman, Xiaohong & Haohao

300 pages, 7" x 9"

Hardback, US \$59.95

978-1-944534-60-8

E-Book, US \$39.95

978-1-944534-70-7

Library E-Book, US \$124.95

978-1-68392-264-3**Finite Element Analysis**

Sarhan M. Musa, A.V. Kulkarni & V.K. Havanur

Hardback & DVD, US \$69.95

978-1-938549-34-2

E-Book, US \$61.95

978-1-938549-37-3

Library E-Book, US \$149.95

978-1-938549-36-6**Foundations of Mathematics Algebra, Geometry,
Trigonometry and Calculus**

Philip Brown

Paperback, US \$49.95

978-1-942270-75-1

E-Book, US \$29.95

978-1-944534-41-7

Library E-Book, US \$124.95

978-1-68392-282-7**Multivariable and Vector Calculus***An Introduction*

Sarhan M. Musa & David A. Santos

Hardback, US \$79.95

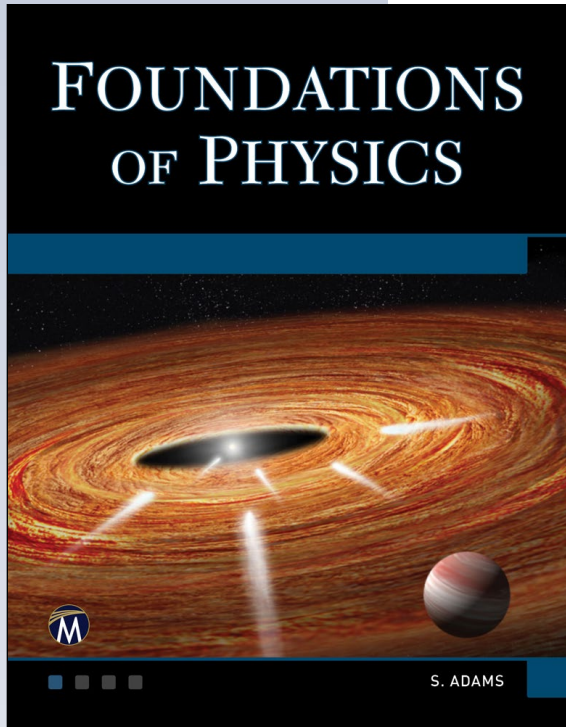
978-1-936420-28-5

E-Book, US \$39.95

978-1-942270-25-6

Library E-Book, US \$179.95

978-1-68392-291-9



APRIL 2019

7 x 9, 600 pages

Paperback, US \$69.95

978-1-683921-44-8

E-book, US \$34.95

978-1-683921-45-5

Library E-book, US \$149.95

978-1-683922-83-4

Recently Published!

Foundations of Physics

Steve Adams

This book is designed as a self-teaching, calculus-based introduction to the concepts of physics. Numerous examples, applications, and figures provide readers with simple explanations. Standard topics include vectors, conservation of energy, Newton’s Laws, momentum, motion, gravity, relativity, waves, fluid mechanics, circuits, nuclear physics, astrophysics, and more.

FEATURES:

- Designed as a calculus-based, introduction to the key concepts of physics
- Includes numerous examples, applications, and figures to provide readers with simple explanations of complex topics

Steve Adams is a physics instructor, teacher trainer, and consultant for the Cambridge International Examinations.

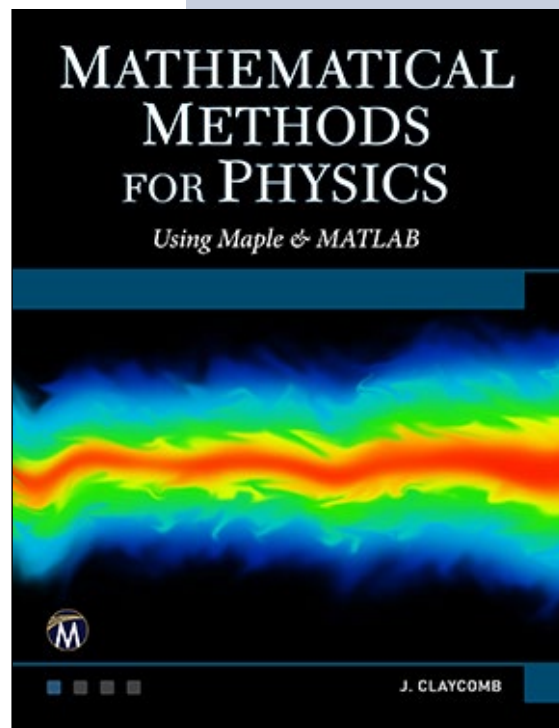
Recently Published!**Mathematical Methods for Physics***Using MATLAB and Maple***J. R. Claycomb**

This book may be used by students and professionals in physics and engineering that have completed first-year calculus and physics. An introductory chapter reviews algebra, trigonometry, units and complex numbers that are frequently used in physics. Examples using MATLAB and Maple for symbolic and numerical calculations in physics with a variety of plotting features are included in all 16 chapters. The book applies many of mathematical concepts covered in Chapters 1-9 to fundamental physics topics in mechanics, electromagnetics; quantum mechanics and relativity in Chapters 10-16. Companion files are included with MATLAB and Maple worksheets and files, and all of the figures from the text.

FEATURES:

- Each chapter includes the mathematical development of the concept with numerous examples
- MATLAB & Maple examples are integrated in each chapter throughout the book
- Applies the mathematical concepts to fundamental physics principles such as relativity, mechanics, electromagnetics, etc.
- Introduces basic MATLAB and Maple commands and programming structures
- Includes companion files with MATLAB and Maple files and worksheets, and all of the figures from the text

J. R. Claycomb, PhD, is Associate Professor of Physics at Houston Baptist University.

**APRIL 2018**

Hardback, US \$89.95

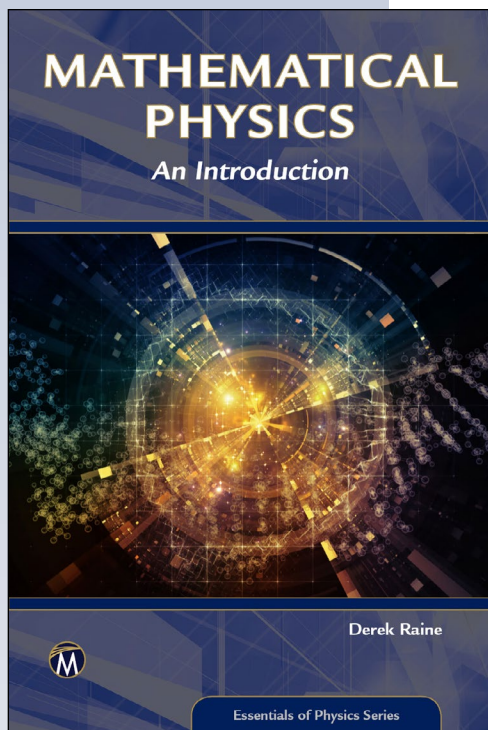
978-1-683920-98-4

E-book, US \$49.95

978-1-683920-99-1

Library E-book, US \$179.95

978-1-683923-35-0

**AUGUST 2018**

7 x 9, 540 pages

Paperback, US \$59.95

978-1-683922-05-6

E-book, US \$35.95

978-1-683922-06-3

Library E-book, US \$124.95

978-1-683923-30-5**Recently Published!****Mathematical Physics***An Introduction***Derek Raine**

This book is designed as an introduction to the mathematical concepts used to describe fundamental physics principles. Numerous examples and applications enable the reader to master complex mathematical concepts needed to define topics such as relativity, mechanics, and electromagnetics.

FEATURES:

- Covers all of the mathematical concepts needed to study physics
- Includes applications in every chapter
- Instructor ancillaries for use as a textbook

Derek Raine is Director of the Centre for Interdisciplinary Science in the Department of Physics and Astronomy at the University of Leicester. His research has ranged over relativity, quantum field theory, astrophysics, and more recently, biophysics and complex systems. Contributing authors include the following: G. A. Wynn, S. Vaughan, M. Roy, R. O. Davies, and E. J. Bunce.

New!

Optics

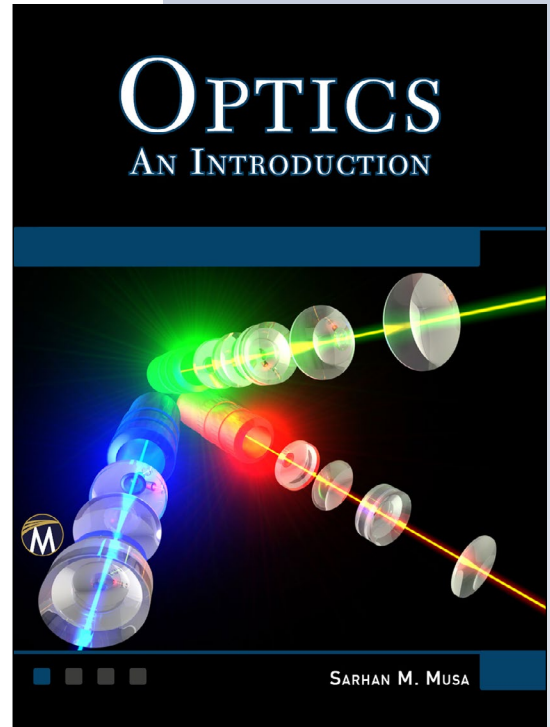
*An Introduction***Sarhan M. Musa**

This book deals with the basic concepts of geometrical and physical optics, including lasers and fiber optics. It contains numerous diagrams, worked-out examples, and related questions-answers to help readers in the comprehension and appreciation of the concepts.

FEATURES:

- Covers basic concepts of geometrical and physical optics, including lasers, fiber optics, and sensors
- Balances theoretical concepts with numerous diagrams, examples, and applications

Sarhan M. Musa, PhD, teaches numerous courses at Texas A&M Prairie View and is the author of several books including *Computational Nanophotonics* (CRC Press) and *Finite Element Analysis* (MLI).

**APRIL 2020**

7 x 9, 516 pages

Hardback, US \$89.95

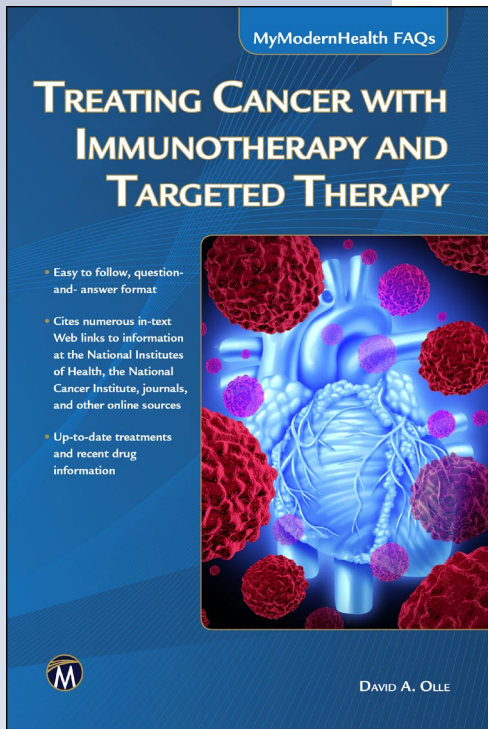
978-1-938549-70-0

E-book, US \$49.95

978-1-688392-147-9

Library E-book, US \$179.95

978-1-68392-297-1



DECEMBER 2019

6 x 9, 120 pages

Paperback, US \$29.95

978-1-683924-50-0

E-book, US \$24.95

978-1-6883924-52-4

Library E-book, US \$74.95

978-1-683924-51-7

Recently Published!

Treating Cancer with Immunotherapy and Targeted Therapy

David A. Olle

Treating cancer has always been a major challenge. Although great strides in treatment have taken place in recent years, all too often current treatments are less than effective, or patients relapse. Newer methods of cancer treatment, namely targeted therapy and immunotherapy, have generated great excitement in the scientific community. These newer methods of cancer treatment hold promise for patients who otherwise may have few options. This book describes the essential features of cancer treatments available to the general public in an engaging and stimulating manner, using the principles of health literacy. A simple, question/answer format and the use of illustrations, tables, charts, and boxes that highlight definitions, facts, and website links provide more detailed information.

FEATURES:

- Provides questions and answers about the characteristics of cancer, diagnosis, classifications, surgery, chemotherapy, radiation therapy, targeted therapy, adoptive cell therapy, new developments, and more
- Cites numerous in-text Web links to information at the National Institutes of Health, the National Cancer Institute, journals, and other online sources
- Uses animations, practical tips, charts and tables, figures, and photos to explain topics under discussion

David Olle is a freelance medical and science writer. His areas of expertise include oncology, biostatistics, biochemical tests, human and animal nutrition, animal production and breeding, veterinary medicine, infectious diseases, and complementary and alternative medicine. He is also the author of *Asthma* (Mercury Learning).

Advanced Thermodynamics**Mehrzad Tabatabaian**

Hardback & DVD, US \$79.95

978-1-936420-27-8

E-Book, US \$49.95

978-1-68392-146-2

Library E-Book, US \$179.95

978-1-68392-248-3**Basic Electromagnetic Theory****James Bagington**

Paperback, US \$49.95

978-1-942270-74-4

E-Book, US \$19.95

978-1-944534-40-0

Library E-Book, US \$124.95

978-1-968392-260-5**Computational Physics****Darren Walker**

Paperback, US \$49.95

978-1-942270-73-7

E-Book, US \$19.95

978-1-944534-39-4

Library E-Book, US \$124.95

978-1-68392-268-1**Mathematical Methods for Physics***Using Maple and MATLAB***J. R. Claycomb**

Hardback & CD, US \$89.95

978-1-68392-098-4

E-Book, US \$49.95

978-1-68392-099-1

Library E-Book, US \$179.95

978-1-68392**Mathematical Physics***An Introduction***Derek Raine**

Paperback, US \$59.95

978-1-68392-205-6

E-Book, US \$35.95

978-1-68392-206-3

Library E-Book, US \$124.95

978-1-68392-330-5**Newtonian Mechanics****Derek Raine**

Paperback, US \$49.95

978-1-942270-78-2

E-Book, US \$19.95

978-1-944534-44-8

Library E-Book, US \$124.95

978-1-68392-294-0**Particle Physics***An Introduction*

Paperback, US \$49.95

978-1-68392-142-4

E-Book, US \$21.95

978-1-68392-143-1

Library E-Book, US \$124.95

978-1-68392-298-8**Physics Lab Experiments****Matthew French**

Paperback, US \$49.95

978-1-942270-80-5

E-Book, US \$19.95

978-1-944534-46-2

Library E-Book, US \$124.95

978-1-68392-303-9**Quantum Mechanics***An Introduction***Dennis Morris**

Paperback, US \$49.95

978-1-942270-79-9

E-Book, US \$19.95

978-1-944534-45-5

Library E-Book, US \$124.95

978-1-68392-308-4**Radio Astronomy***An Introduction***Shubhendu Joardar & J.R. Claycomb**

Hardback & DVD, US \$59.95

978-1-936420-35-3

E-Book, US \$34.95

978-1-937585-62-4

Library E-Book, 124.95

978-1-937585-61-7**Solid State Physics****David Schmool**

Paperback, US \$49.95

978-1-942270-77-5

E-Book, US \$19.95

978-1-944534-43-1

Library E-Book, US \$124.95

978-1-68392-318-3**The Special Theory of Relativity****Dennis Morris**

Paperback, US \$49.95

978-1-942270-72-0

E-Book, US \$19.95

978-1-944534-38-7

Library E-Book, US \$149.95

978-1-68392-319-0**Alzheimer's Disease****Alia Bucciarelli**

Paperback, US \$24.95

978-1-937585-53-2

E-Book, \$19.95

978-1-937585-56-3

Library E-Book, US \$74.95

978-1-68392-249-0**Asthma****David Olle**

Paperback, US \$21.95

978-1-68392-031-1

E-Book, US \$9.95

978-1-68392-032-8

Library E-Book, US \$74.95

978-1-68392-255-1**Behcet's Disease****Joanne Zeis**

Paperback & CD, US \$24.95

978-1-938549-40-3

E-Book, US \$9.95

978-1-942270-18-8

Library E-Book, US \$74.95

978-1-942270-19-5**Childhood Obesity****Rita Buckley**

Paperback, Oct 2015, US \$24.95

978-1-937585-42-6

E-Book, Jan 2016, US \$9.95

978-1-942270-87-4

Library E-Book,

Diabetes**Nicola Cowap**

Paperback & DVD, US \$24.95

978-1-938549-18-2

E-Book, US \$19.95

978-1-938549-21-2

Library E-Book, US \$74.95

978-1-938549-20-5**Emotional Health and Well-Being***Practical Mind Science***J. Alcoe & E. Gajewski**

Paperback & CD, US \$24.95

978-1-938549-22-9

E-Book, US \$19.95

978-1-938549-25-0

Library E-Book, US \$74.95

978-1-938549-24-3**GERD***Living with Acid Reflux Disease***David Olle**

Paperback, US \$21.95

978-1-942270-05-8

E-Book, US \$9.95

978-1-942270-68-3

Library E-Book, US \$74.95

978-1-942270-67-6**Heart Disease and Health****G. Gadkari & Jeff Larsen**

Paperback & DVD, US \$24.95

978-1-937585-90-7

E-Book, US \$19.95

978-1-937585-93-8

Library E-Book, US \$74.95

978-1-937585-92-1**Obesity****G. Gadkari & Elaine Coveney**

Paperback & DVD, US \$24.95

978-1-937585-86-0

E-Book, US \$19.95

978-1-937585-88-4

Library E-Book, US \$74.95

978-1-937585-89-1**Psychedelic Drug Treatments***Assisting the Therapeutic Process***Ben Sessa & Eileen Worthley**

Paper, US \$24.95

978-1-936420-44-5

E-Book, US \$19.95

978-1-937585-59-4

Library E-Book, US \$74.95

978-1-937585-58-7**Video Game Addiction****David Olle & Jean Westcott**

Paperback, US \$24.95

978-1-937585-82-2

E-Book, US \$19.95

978-1-937585-84-6

Library E-Book, US \$74.95

978-1-68392-323-7

GENERAL INFORMATION

CORPORATE OFFICE

MERCURY LEARNING AND INFORMATION
PO Box 194
Duxbury, MA 02331
Tel: (781) 934-0500
Fax: (781) 934-0557

ORDERS & CUSTOMER SERVICE

PO Box 605, Herndon, VA 20172-0605
Tel: (703) 661-1581 or (800) 232-0223
Fax: (703) 661-1501
E-mail: StylusMail@PressWarehouse.com

EDITORIAL CONTACT

David Pallai, Publisher
dpallai@merclearning.com

MEDIA INQUIRIES

Jean Westcott
jean.westcott@styluspub.com

WORLD WIDE WEB

www.merclearning.com
mli.presswarehouse.com

E-MAIL

info@merclearning.com

TELEPHONE ORDERS & CUSTOMER SERVICE

9 a.m.-5 p.m., M-F (Eastern Time)
1-800-232-0223 (toll free)

ORDERING BY MAIL

MERCURY LEARNING AND INFORMATION
PO Box 605, Herndon, VA 20172-0605

FAX ORDERING

(703) 661-1501

RETURNS

MERCURY LEARNING AND INFORMATION
c/o Books International
22880 Quicksilver Drive
Dulles, VA 20166

ACADEMIC INQUIRIES / EXAMINATION COPIES

If you are an instructor and wish to receive an examination copy, please complete the form on our Web site at: www.merclearning.com or contact us at info@merclearning.com for general textbook inquiries.

INTERNATIONAL SALES & ORDERING

ASIA

Cengage Learning Asia Pte Ltd
151 Lorong Chuan #02-08
New Tech Park
Singapore 556741
Tel: (65) 6410 1200 Fax: (65) 6410 1208
E-mail: info@cengage.com
www.cengageasia.com

AUSTRALIA, NEW ZEALAND

Woodslane Pty Ltd
7/5 Vuko Place
Warriewood NSW 2102
Tel: +61-2-99705111 Fax: +61-2-99705002
www.woodslane.com

CANADA

Login Brothers
300 Saulteaux Crescent
Winnipeg, MB
R3J 3T2
Tel: (800) 665-1148 Fax: (204) 837-3116
orders@lb.ca
www.lb.ca

EUROPE, UK

Eurospan Group
www.eurospanbookstore.com
3 Henrietta Street
London WC2E 8LU
United Kingdom

Trade Orders & Enquiries:

Tel: +44 (0) 1767 604972
Fax: +44 (0) 1767 601640
Email: info@eurospangroup.com

Individual Orders:

www.eurospanbookstore.com/styluspublishing
Individuals may also order using the contact details above

GREECE, MIDDLE EAST, NORTH AFRICA

IPR
PO BOX 25731
1311 Nicosia
CYPRUS
Tel: +357-228-72356 Fax: +357-228-72359
iprschl@spidernet.com.cy

MEXICO/CARIBBEAN/CENTRAL AND SOUTH AMERICA

Cranbury International LLC
7 Clarendon Ave.
Montpelier, VT 05602 USA
Tel: 802-223-6565 Fax: 802-223-6824
eatkin@cranburyinternational.com

