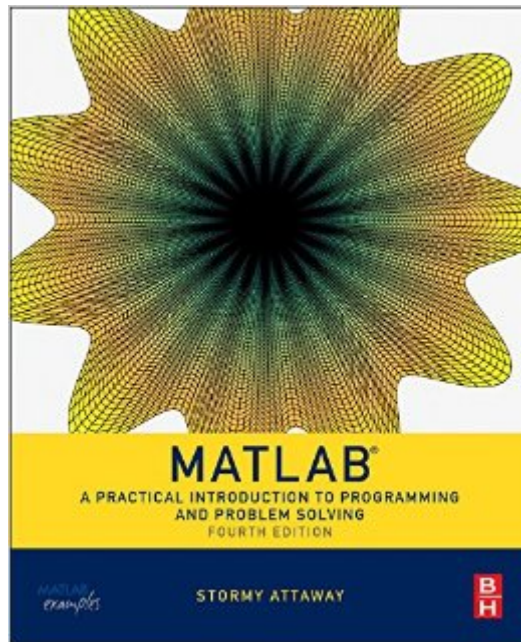# Matlab, Fourth Edition: A Practical Introduction To Programming And Problem Solving

Synopsis

MATLAB: A Practical Introduction to Programming and Problem Solving, Fourth Edition, has been updated to reflect the functionality of the current version of MATLAB, including the new H2 Graphics system. It features new and revised end-of-chapter exercises, more engineering applications to help the reader learn this software tool in context, and a new section on object-oriented programming in MATLAB. MATLAB has become the standard software tool for solving scientific and engineering problems due to its powerful built-in functions and its ability to program. Assuming no knowledge of programming, this book guides the reader both programming and built-in functions to easily exploit MATLAB's extensive capabilities for tackling engineering problems. The book starts with programming concepts, such as variables, assignments, and selection statements, moves on to loops, and then solves problems using both the programming concept and the power of MATLAB. In-depth coverage is given to input/output, a topic fundamental to many engineering applications.Presents programming concepts and MATLAB built-in functions side-by-sideOffers a systematic, step-by-step approach, building on concepts throughout the book and facilitating easier learningIncludes sections on common pitfalls and programming guidelines to direct students toward best practicesCombines basic programming concepts, built-in functions, and advanced topics for problem solving with MATLAB to make this book uniquely suitable for a wide range of courses teaching or using MATLAB across the curriculum

Book Information

Paperback: 600 pages

Publisher: Butterworth-Heinemann; 4 edition (August 6, 2016)

Language: English

ISBN-10: 0128045256

ISBN-13: 978-0128045251

Product Dimensions: 7.4 x 1 x 9.2 inches

Shipping Weight: 2.9 pounds (View shipping rates and policies)

Average Customer Review: 5.0 out of 5 starsÂ Â See all reviewsÂ (1 customer review)

Best Sellers Rank: #15,396 in Books (See Top 100 in Books)   #4 inÂ Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics > Microelectronics   #7 inÂ Books > Science & Math > Mathematics > Pure Mathematics > Algebra > Linear   #9 inÂ Books > Computers & Technology > Software > Mathematical & Statistical

Customer Reviews

To use this very practical book effectively, one must(should) have some level of the...MATLAB software...installed or have access to it.Though not a Programmed Instruction book, common in the 50s, 60s, and 70s, you are encouraged to work your way through the book. That is, from the very beginning you are working with actual code as you learn the proper formats. You learn by actually being a participant rather than an observer! Questions, problems, and meaningful exercises are the main methods for teaching and learning used in this book. They are plentiful throughout the book. Each page requires the reader to actually practice what is being taught. The book provide the proper formats for MATLAB coding.A beginner will find this book to be a full-fledged source for learning MATLAB. Those with experience would find it useful for reviewing in general and/or refreshing one's memory of topics and techniques that may have become cloudy. Thus the book serves the dual purposes of a learning source as well as an excellent source of review....The Chapters are....1. Introduction to MATLAB2. Vectors and Matrices3. Introduction to MATLAB Programming4. Selection Statements5. Loop Statements and Vectorizing Code6. MATLAB Programs7. String Manipulation8, Data Structures9. Advanced File Input and Output10. Advanced Functions11. Introduction to Object-Orientated Programming12. Advanced Plotting Techniques13. Sights and Sounds14. Advanced MathematicsEach Chapter ends with...Common Pitfalls and Programming Style Guidelines....One can choose topics based on experience and/or background. However, the book is designed to teach step by step!Its approach will be useful to those who are learning for the first time and/or those who may have become a little rusty and are seeking to review.This is not a Programmed Instruction Book. But it has the pedagogy of one. You are encouraged to work your way through the book. As a result it's hard to imagine how one would not learn by using it. I am currently using this book and have never used MATLAB before. I find this book's approach to be ideal for my interests and background. As a result I am giving it five stars.

Matlab, Fourth Edition: A Practical Introduction to Programming and Problem Solving Matlab: A Practical Introduction to Programming and Problem Solving Clinical Problem Solving in Orthodontics and Paediatric Dentistry, 2e (Clinical Problem Solving in Dentistry) Clinical Problem Solving in Periodontology and Implantology, 1e (Clinical Problem Solving in Dentistry) Swift Programming Artificial Intelligence: Made Easy, w/ Essential Programming Learn to Create your * Problem Solving * Algorithms! TODAY! w/ Machine ... engineering, r programming, iOS development) Swift: Programming, Master's Handbook; A TRUE Beginner's Guide! Problem Solving, Code, Data Science, Data Structures & Algorithms (Code like a PRO in ... engineering, r programming, iOS development) Java Artificial Intelligence: Made Easy, w/ Java Programming; Learn to Create your *

Problem Solving * Algorithms! TODAY! w/ Machine Learning & Data ... engineering, r programming, iOS development) Javascript Artificial Intelligence: Made Easy, w/ Essential Programming; Create your * Problem Solving * Algorithms! TODAY! w/ Machine Learning & Data ... engineering, r programming, iOS development) Php: Programming, Master's Handbook: A TRUE Beginner's Guide! Problem Solving, Code, Data Science, Data Structures & Algorithms (Code like a PRO in ... engineering, r programming, iOS development,) Python: Programming, Master's Handbook; A TRUE Beginner's Guide! Problem Solving, Code, Data Science, Data Structures & Algorithms (Code like a PRO ... engineering, r programming, iOS development) Artificial Intelligence: Made Easy w/ Ruby Programming; Learn to Create your * Problem Solving * Algorithms! TODAY! w/ Machine Learning & Data ... engineering, r programming, iOS development) Problem Solving and Programming Concepts (9th Edition) Genetic Programming III: Darwinian Invention and Problem Solving (Vol 3) Programming And Problem Solving With Ada 95 Ruby: Programming, Master's Handbook: A TRUE Beginner's Guide! Problem Solving, Code, Data Science, Data Structures & Algorithms (Code like a PRO in ... web design, tech, perl, ajax, swift, python,) Java Programming: Master's Handbook: A TRUE Beginner's Guide! Problem Solving, Code, Data Science, Data Structures & Algorithms (Code like a PRO in ... web design, tech, perl, ajax, swift, python) Java: Artificial Intelligence; Made Easy, w/ Java Programming; Learn to Create your * Problem Solving * Algorithms! TODAY! w/ Machine Learning & Data Structures (Artificial Intelligence Series) Javascript Artificial Intelligence: Made Easy, w/ Essential Programming; Create your * Problem Solving * Algorithms! TODAY! w/ Machine Learning & Data Structures (Artificial Intelligence Series) Signals and Systems for Bioengineers, Second Edition: A MATLAB-Based Introduction (Biomedical Engineering) Organizational Behavior: A Practical, Problem-Solving Approach