The book was found

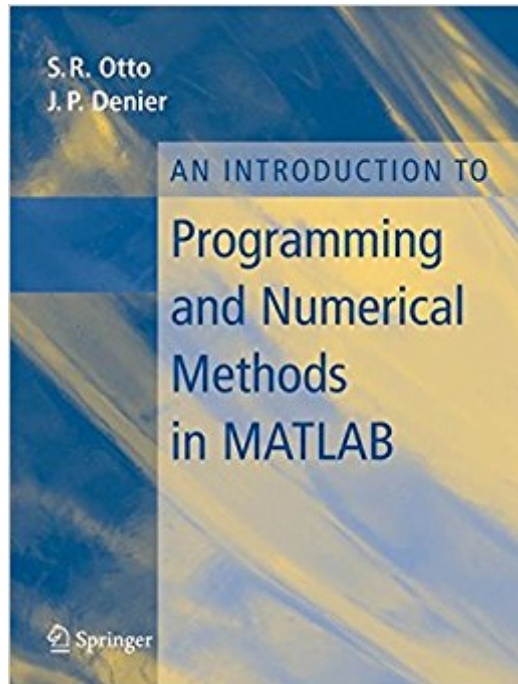# An Introduction To Programming And Numerical Methods In MATLAB

S.R. Otto
J.P. Denier

AN INTRODUCTION TO
Programming and Numerical Methods in MATLAB

Springer

Synopsis

An elementary first course for students in mathematics and engineering Practical in approach: examples of code are provided for students to debug, and tasks Ã¢â ¬â œ with full solutions Ã¢â ¬â œ are provided at the end of each chapter Includes a glossary of useful terms, with each term supported by an example of the syntaxes commonly encountered

Book Information

Paperback: 464 pages

Publisher: Springer; 2005 edition (May 3, 2005)

Language: English

ISBN-10: 1852339195

ISBN-13: 978-1852339197

Product Dimensions: 7 x 1.1 x 9.2 inches

Shipping Weight: 2.1 pounds (View shipping rates and policies)

Average Customer Review: 4.5 out of 5 stars   3 customer reviews

Best Sellers Rank: #452,234 in Books (See Top 100 in Books)   #57 inÃ Â Books > Science & Math > Mathematics > Number Systems   #60 inÃ Â Books > Science & Math > Mathematics > Applied > Linear Programming   #72 inÃ Â Books > Science & Math > Mathematics > Popular & Elementary > Counting & Numeration

Customer Reviews

From the reviews of the first edition: "This book is an introduction to the numerical methods that are frequently used in science and engineering undergraduate courses and it is based on the MATLAB programming environment. Ã¢â ¬Â| The text is easy to read even for those who have little experience with computer practice. Ã¢â ¬Â| There are three appendices and the most useful of them, about 70 pages, gives solutions to the tasks at the end of chapters." (Matti Vuorinen, Zentralblatt MATH, Vol. 1076, 2006)

MATLAB is a powerful programme, which naturally lends itself to the rapid implementation of most numerical algorithms. This text, which uses MATLAB, gives a detailed overview of structured programming and numerical methods for the undergraduate student. The book covers numerical methods for solving a wide range of problems, from integration to the numerical solution of differential equations or the stimulation of random processes. Examples of programmes that solve problems directly, as well as those that use MATLABÃ¢â ¬â„¢s high-level commands are given.

Each chapter includes extensive examples and tasks, at varying levels of complexity. For practice, the early chapters include programmes that require debugging by the reader, while full solutions are given for all the tasks. The book also includes: a glossary of MATLAB commands appendices of mathematical techniques used in numerical methods.   Designed as a text for a first course in programming and algorithm design, as well as in numerical methods courses, the book will be of benefit to a wide range of students from mathematics and engineering, to commerce.

Thanks

Taking it slow so that I can understand the program. I would definitely recommend it for beginning math students looking to gain an advantage.

Otto certainly gives you a good exposure to Matlab. The many examples and problems will greatly help you acquire the expertise, if you can knuckle down and tackle them.The other utility of the book is in learning the various numerical methods, independent of the specific language of Matlab that they are implemented in. There is a possible advantage to doing so with Matlab, as contrasted to coding the methods in a general purpose language like C or Java. Since Matlab is already optimised [in some sense] for handling such methods. And especially with easily accessible and powerful graphing routines readily at hand. In other languages, a lot of your effort will inevitably be focused on writing this routines, as opposed to actually dealing with the numerical methods themselves.

Download to continue reading...

An Introduction to Programming and Numerical Methods in MATLAB Python Programming: Python Programming for Beginners, Python Programming for Intermediates, Python Programming for Advanced C++: The Ultimate Crash Course to Learning the Basics of C++ (C programming, C++ in easy steps, C++ programming, Start coding today) (CSS,C Programming, ... Programming,PHP, Coding, Java Book 1) Applied Numerical Methods with MATLAB for Engineers and Scientists Numerical and Statistical Methods for Bioengineering: Applications in MATLAB (Cambridge Texts in Biomedical Engineering) Applied Numerical Methods with MATLAB for Engineers and Scientists (Civil Engineering) Applied Numerical Methods W/MATLAB: for Engineers & Scientists Signals and Systems using MATLAB, Second Edition (Signals and Systems Using MATLAB w/ Online Testing) Image Processing with MATLAB: Applications in Medicine and Biology (MATLAB Examples) Accelerating MATLAB Performance: 1001 tips to speed up MATLAB programs Matlab: A Practical

Introduction to Programming and Problem Solving Matlab, Fourth Edition: A Practical Introduction to Programming and Problem Solving C++ and Python Programming: 2 Manuscript Bundle: Introductory Beginners Guide to Learn C++ Programming and Python Programming C++ and Python Programming 2 Bundle Manuscript. Introductory Beginners Guide to Learn C++ Programming and Python Programming Python Programming: The Complete Step By Step Guide to Master Python Programming and Start Coding Today! (Computer Programming Book 4) Programming for Computations - Python: A Gentle Introduction to Numerical Simulations with Python (Texts in Computational Science and Engineering) CNC 50 Hour Programming Course: For lathes, ISO Standard functions, Siemens fixed cycles, parametric programming, methods of use Linear Programming with MATLAB (MPS-SIAM Series on Optimization) Introduction to Numerical Continuation Methods (Classics in Applied Mathematics) Signals and Systems: Analysis Using Transform Methods & MATLAB