Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB

By Amos Gilat, Vish Subramaniam

Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB By Amos Gilat, Vish Subramaniam

Following a unique approach, this innovative book integrates the learning of numerical methods with practicing computer programming and using software tools in applications. It covers the fundamentals while emphasizing the most essential methods throughout the pages. Readers are also given the opportunity to enhance their programming skills using MATLAB to implement algorithms. They'll discover how to use this tool to solve problems in science and engineering.

⬇ Download Numerical Methods for Engineers and Scientists: An ...pdf

⊟ Read Online Numerical Methods for Engineers and Scientists: ...pdf

Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB

By Amos Gilat, Vish Subramaniam

Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB
By Amos Gilat, Vish Subramaniam

Following a unique approach, this innovative book integrates the learning of numerical methods with practicing computer programming and using software tools in applications. It covers the fundamentals while emphasizing the most essential methods throughout the pages. Readers are also given the opportunity to enhance their programming skills using MATLAB to implement algorithms. They'll discover how to use this tool to solve problems in science and engineering.

Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB By Amos Gilat, Vish Subramaniam Bibliography

- Rank: #176563 in Books
- Brand: Wiley
- Published on: 2007-04-06
- Ingredients: Example Ingredients
- Original language: English
- Number of items: 1
- Dimensions: 10.06" h x .85" w x 8.33" l, 2.04 pounds
- Binding: Hardcover
- 480 pages

Editorial Review

From the Back Cover
A clear and concise guide to numerical methods and their application

Mastering numerical methods has never been easier than with Gilat/Subramaniam's *Numerical Methods For Engineers and Scientists: An Introduction with Applications Using MATLAB.* Uniquely accessible and concise, this book takes an innovative approach that integrates the study of numerical methods with hands-on programming practice using the popular MATLAB environment to solve realistic problems in engineering and science.

Ideal for both students and professionals who would like to become more adept at numerical methods, *Numerical Methods For Engineers and Scientists* familiarizes you with:

- The mathematical background and fundamentals of numerical methods
- Solving nonlinear equations
- Solving a system of linear equations
- Eigenvalues and Eigenvectors
- Function approximation, curve fitting, and interpolation
- Differentiation
- Integration
- First-order and higher-order ODEs
- Initial and boundary value problems

Using MATLAB's built-in functions as tools for solving problems, you will practice applying numerical methods for analysis of real-world problems. All the information is presented in manageable, step-by-step fashion, supported by a large number of annotated examples and end-of-chapter problems.

Lucid, carefully structured, and flexibly designed to fulfill a wide range of academic and practical needs, this book will help you develop the skills in numerical methods that will serve you well as a practicing engineer.

About the Author
Amos Gilat, Ph.D., is Professor of Mechanical Engineering at The Ohio State University. Dr. Gilat's main research interests are in plasticity, specifically, in developing experimental techniques for testing materials over a wide range of strain rates and temperatures and in investigating constitutive relations for viscoplasticity. Dr. Gilat's research has been supported by the National Science Foundation, NASA, Department of Energy, Department of Defense, and various industries.

Vish Subramaniam, Ph.D., is Professor of Mechanical Engineering & Chemical Physics at The Ohio State University. Dr. Subramaniam's main research interests are in plasma and laser physics and processes, particularly those that involve non-equilibrium phenomena. Dr. Subramaniam's research is both experimental and computational, and has been supported by the Department of Defense, National Science Foundation, and numerous industries.

Users Review

From reader reviews:

Clemencia Torres:

Why don't make it to be your habit? Right now, try to prepare your time to do the important work, like looking for your favorite book and reading a reserve. Beside you can solve your problem; you can add your knowledge by the publication entitled Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB. Try to face the book Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB as your buddy. It means that it can for being your friend when you feel alone and beside that of course make you smarter than ever. Yeah, it is very fortuned for yourself. The book makes you a lot more confidence because you can know anything by the book. So , we should make new experience as well as knowledge with this book.

Ruth Barr:

The reserve untitled Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB is the e-book that recommended to you you just read. You can see the quality of the publication content that will be shown to an individual. The language that author use to explained their ideas are easily to understand. The copy writer was did a lot of analysis when write the book, so the information that they share for you is absolutely accurate. You also might get the e-book of Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB from the publisher to make you much more enjoy free time.

Frank Botelho:

Are you kind of busy person, only have 10 or perhaps 15 minute in your time to upgrading your mind proficiency or thinking skill even analytical thinking? Then you have problem with the book in comparison with can satisfy your short time to read it because pretty much everything time you only find publication that need more time to be examine. Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB can be your answer as it can be read by a person who have those short free time problems.

Reuben Beaubien:

With this era which is the greater man or woman or who has ability in doing something more are more precious than other. Do you want to become considered one of it? It is just simple way to have that. What you have to do is just spending your time not very much but quite enough to get a look at some books. One of many books in the top list in your reading list is definitely Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB. This book that is certainly qualified as The Hungry Inclines can get you closer in turning out to be precious person. By looking right up and review this guide you can get many advantages.

Download and Read Online Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB By Amos Gilat, Vish Subramaniam #074IA2YMKZW

Read Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB By Amos Gilat, Vish Subramaniam for online ebook

Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB By Amos Gilat, Vish Subramaniam Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB By Amos Gilat, Vish Subramaniam books to read online.

Online Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB By Amos Gilat, Vish Subramaniam ebook PDF download

Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB By Amos Gilat, Vish Subramaniam Doc

Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB By Amos Gilat, Vish Subramaniam Mobipocket

Numerical Methods for Engineers and Scientists: An Introduction with Applications Using MATLAB By Amos Gilat, Vish Subramaniam EPub