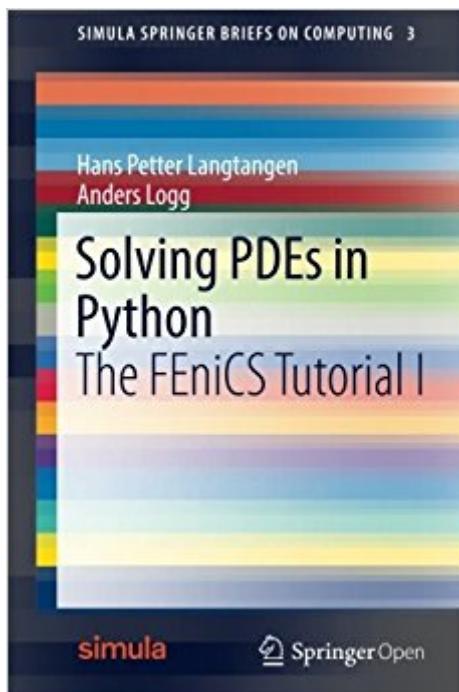


The book was found

Solving PDEs In Python: The FEniCS Tutorial I (Simula SpringerBriefs On Computing)



Synopsis

This book offers a concise and gentle introduction to finite element programming in Python based on the popular FEniCS software library. Using a series of examples, including the Poisson equation, the equations of linear elasticity, the incompressible Navier–Stokes equations, and systems of nonlinear advection–diffusion–reaction equations, it guides readers through the essential steps to quickly solving a PDE in FEniCS, such as how to define a finite variational problem, how to set boundary conditions, how to solve linear and nonlinear systems, and how to visualize solutions and structure finite element Python programs. This book is open access under a CC BY license.

Book Information

Series: Simula SpringerBriefs on Computing (Book 3)

Paperback: 146 pages

Publisher: Springer; 1st ed. 2016 edition (March 22, 2017)

Language: English

ISBN-10: 3319524615

ISBN-13: 978-3319524610

Product Dimensions: 6.1 x 0.4 x 9.2 inches

Shipping Weight: 12 ounces (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #515,539 in Books (See Top 100 in Books) #65 in Books > Science & Math > Mathematics > Number Systems #80 in Books > Science & Math > Mathematics > Applied > Graph Theory #143 in Books > Textbooks > Computer Science > Algorithms

Customer Reviews

This book offers a concise and gentle introduction to finite element programming in Python based on the popular FEniCS software library. Using a series of examples, including the Poisson equation, the equations of linear elasticity, the incompressible Navier–Stokes equations, and systems of nonlinear advection–diffusion–reaction equations, it guides readers through the essential steps to quickly solving a PDE in FEniCS, such as how to define a finite variational problem, how to set boundary conditions, how to solve linear and nonlinear systems, and how to visualize solutions and structure finite element Python programs. This book is open access under a CC BY license.

[Download to continue reading...](#)

Solving PDEs in Python: The FEniCS Tutorial I (Simula SpringerBriefs on Computing) Python: The Complete Python Quickstart Guide (For Beginner's) (Python, Python Programming, Python for Dummies, Python for Beginners) Python: Programming: Your Step By Step Guide To Easily Learn Python in 7 Days (Python for Beginners, Python Programming for Beginners, Learn Python, Python Language) Hacking with Python: Beginner's Guide to Ethical Hacking, Basic Security, Penetration Testing, and Python Hacking (Python Programming, Hacking, Python Coding, Python and Hacking Book 3) PYTHON: PYTHON'S COMPANION, A STEP BY STEP GUIDE FOR BEGINNERS TO START CODING TODAY! (INCLUDES A 6 PAGE PRINTABLE CHEAT SHEET)(PYTHON FOR BEGINNERS, PYTHON FOR DUMMIES, PYTHON PROGRAMMING) Python Programming: Python Programming for Beginners, Python Programming for Intermediates, Python Programming for Advanced PYTHON: LEARN PYTHON in A Day and MASTER IT WELL. The Only Essential Book You Need To Start Programming in Python Now. Hands On Challenges INCLUDED! (Programming for Beginners, Python) PYTHON: Python Programming, Learn Coding Fast! (With 100 Tests & Answers for Interview) Crash Course, A Quick Start Tutorial Book with Hands-On Projects. In Easy Steps! An Ultimate Beginner's Guide! Python: Learn Python in a Day and Master It Well: The Only Essential Book You Need to Start Programming in Python Now Maya Python for Games and Film: A Complete Reference for Maya Python and the Maya Python API Python Programming: An In-Depth Guide Into The Essentials Of Python Programming (Included: 30+ Exercises To Master Python in No Time!) Python: The Fundamentals Of Python Programming: A Complete Beginners Guide To Python Mastery. Programmed Inequality: How Britain Discarded Women Technologists and Lost Its Edge in Computing (History of Computing) Biomedical Statistics with Computing (Medical Computing Series) Making Music with Computers: Creative Programming in Python (Chapman & Hall/CRC Textbooks in Computing) Introduction to Computing Using Python: An Application Development Focus Introduction to Computing and Programming in Python (4th Edition) Image Formation in Low-Voltage Scanning Electron Microscopy (SPIE Tutorial Text Vol. TT12) (Tutorial Texts in Optical Engineering) Python Programming Advanced: A Complete Guide on Python Programming for Advanced Users Python: Python Programming for Intermediates

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)