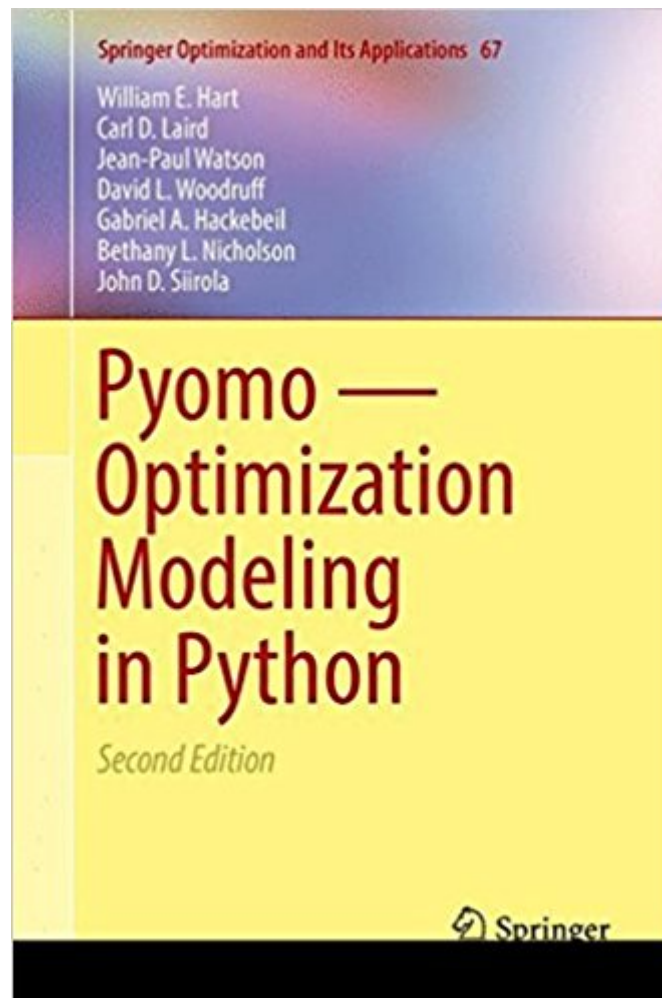




Ebook Directory
the best source of ebook

The book was found

Pyomo — Optimization Modeling In Python (Springer Optimization And Its Applications)



Synopsis

This book provides a complete and comprehensive guide to Pyomo[®] (Python Optimization Modeling Objects) for beginning and advanced modelers, including students at the undergraduate and graduate levels, academic researchers, and practitioners. Using many examples to illustrate the different techniques useful for formulating models, this text beautifully elucidates the breadth of modeling capabilities that are supported by Pyomo and its handling of complex real-world applications. This second edition provides an expanded presentation of Pyomo[™]'s modeling capabilities, providing a broader description of the software that will enable the user to develop and optimize models. Introductory chapters have been revised to extend tutorials; chapters that discuss advanced features now include the new functionalities added to Pyomo since the first edition including generalized disjunctive programming, mathematical programming with equilibrium constraints, and bilevel programming. Pyomo is an open source software package for formulating and solving large-scale optimization problems. The software extends the modeling approach supported by modern AML (Algebraic Modeling Language) tools. Pyomo is a flexible, extensible, and portable AML that is embedded in Python, a full-featured scripting language. Python is a powerful and dynamic programming language that has a very clear, readable syntax and intuitive object orientation. Pyomo includes Python classes for defining sparse sets, parameters, and variables, which can be used to formulate algebraic expressions that define objectives and constraints. Moreover, Pyomo can be used from a command-line interface and within Python's interactive command environment, which makes it easy to create Pyomo models, apply a variety of optimizers, and examine solutions.

Book Information

Series: Springer Optimization and Its Applications (Book 67)

Hardcover: 277 pages

Publisher: Springer; 2nd ed. 2017 edition (May 27, 2017)

Language: English

ISBN-10: 3319588192

ISBN-13: 978-3319588193

Product Dimensions: 6.5 x 0.8 x 9.6 inches

Shipping Weight: 1 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #505,623 in Books (See Top 100 in Books) #87 in Books > Science & Math >

Mathematics > Popular & Elementary > Counting & Numeration #107 in Books > Computers & Technology > Computer Science > Computer Simulation #243 in Books > Business & Money > Processes & Infrastructure > Operations Research

Customer Reviews

This book provides a complete and comprehensive guide to Pyomo[®] (Python Optimization Modeling Objects) for beginning and advanced modelers, including students at the undergraduate and graduate levels, academic researchers, and practitioners. Using many examples to illustrate the different techniques useful for formulating models, this text beautifully elucidates the breadth of modeling capabilities that are supported by Pyomo and its handling of complex real-world applications. This second edition provides an expanded presentation of Pyomo[™]'s modeling capabilities, providing a broader description of the software that will enable the user to develop and optimize models. Introductory chapters have been revised to extend tutorials; chapters that discuss advanced features now include the new functionalities added to Pyomo since the first edition including generalized disjunctive programming, mathematical programming with equilibrium constraints, and bilevel programming. Pyomo is an open source software package for formulating and solving large-scale optimization problems. The software extends the modeling approach supported by modern AML (Algebraic Modeling Language) tools. Pyomo is a flexible, extensible, and portable AML that is embedded in Python, a full-featured scripting language. Python is a powerful and dynamic programming language that has a very clear, readable syntax and intuitive object orientation. Pyomo includes Python classes for defining sparse sets, parameters, and variables, which can be used to formulate algebraic expressions that define objectives and constraints. Moreover, Pyomo can be used from a command-line interface and within Python's interactive command environment, which makes it easy to create Pyomo models, apply a variety of optimizers, and examine solutions. Review of the first edition: Documents a simple, yet versatile tool for modeling and solving optimization problems. | The book, by Bill Hart, Carl Laird, Jean-Paul Watson, and David Woodruff, is essential to the usability of Pyomo, serving as the Pyomo documentation. | has contents for both an inexperienced user, and a computational operations research expert. | with examples of each of the concepts discussed. •Nedialko B. Dimitrov, INFORMS Journal on Computing, Vol. 24 (4), Fall 2012

William E. Hart, Jean-Paul Watson, Carl D. Laird, Bethany L. Nicholson, and John D. Sirola are researchers affiliated with the Sandia National Laboratories in Albuquerque, New Mexico. David

Woodruff is professor in the graduate school of management at the University of California, Davis.
Gabriel Hackebeit is a math programming consultant at the University of Michigan.

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

Pyomo • Optimization Modeling in Python (Springer Optimization and Its Applications) 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: 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 Programming: Python Programming for Beginners, Python Programming for Intermediates, Python Programming for Advanced Transportation Systems Analysis: Models and Applications (Springer Optimization and Its Applications) The Wonders of the Colorado Desert (Southern California), Vol. 1 of 2: Its Rivers and Its Mountains, Its Canyons and Its Springs, Its Life and Its ... Journey Made Down the Overflow of the Colo Maya Python for Games and Film: A Complete Reference for Maya Python and the Maya Python API Python: Learn Python in a Day and Master It Well: The Only Essential Book You Need to Start Programming in Python Now 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. Engineering Design Optimization using Calculus Level Methods: A Casebook Approach: Math Modeling, Simulation, & Optimization Symbolism, Its Origins and Its Consequences (Art, Literature and Music in Symbolism, Its Origins and Its) Data Analytics and Python Programming: 2 Bundle Manuscript: Beginners Guide to Learn Data Analytics, Predictive Analytics and Data Science with Python Programming 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 and Hacking Made Simple: Full Beginners Bundle To Master Python and Hacking (2 Books in 1) How to Code 2.0: Pushing Your Skills Further with Python: Learn how to code with Python and Pygame in 10 Easy Lessons (Super Skills)

Contact Us

DMCA

Privacy

FAQ & Help