The book was found

Linear Optimization: The Simplex Workbook (Undergraduate Texts In Mathematics)

Glenn H. Hurlbert

UNDERGRADUATE TEXTS IN MATHEMATICS

Linear Optimization

A Simplex Workbook

Springer
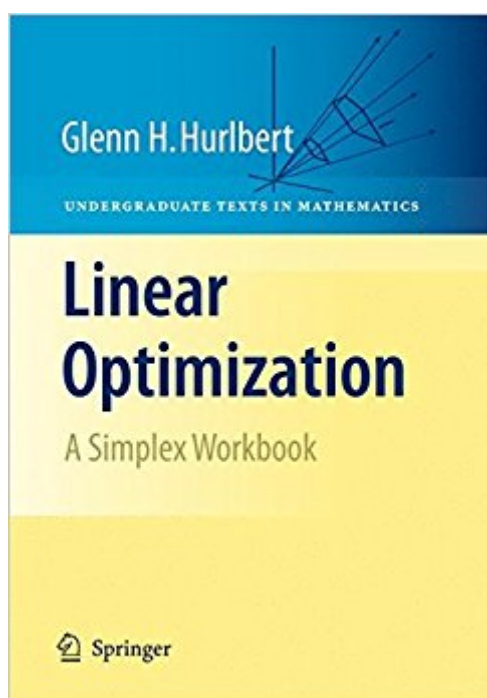
Synopsis

The Subject A little explanation is in order for our choice of the title Linear Opti- 1 mization (and corresponding terminology) for what has traditionally been called Linear Programming.Theword programming in this context can be confusing and/or misleading to students. Linear programming problems are referred to as optimization problems but the general term linear p- gramming remains. This can cause people unfamiliar with the subject to think that it is about programming in the sense of writing computer code. It isnÃ¢â¬â„¢t. This workbook is about the beautiful mathematics underlying the ideas of optimizing linear functions subject to linear constraints and the algorithms to solve such problems. In particular, much of what we d- cuss is the mathematics of Simplex Algorithm for solving such problems, developed by George Dantzig in the late 1940s. The word program in linear programming is a historical artifact. When Dantzig ?rstdevelopedthe Simplex Algorithm to solvewhat arenowcalled linear programming problems, his initial model was a class of resource - location problems to be solved for the U.S. Air Force. The decisions about theallocationswerecalledÃ¢â¬ËœProgramsÃ¢â¬â„¢bytheAirForce,andhencetheterm.

Book Information

Series: Undergraduate Texts in Mathematics

Hardcover: 272 pages

Publisher: Springer; 2010 edition (September 28, 2009)

Language: English

ISBN-10: 0387791477

ISBN-13: 978-0387791470

Product Dimensions: 9.4 x 7.2 x 0.8 inches

Shipping Weight: 1.4 pounds (View shipping rates and policies)

Average Customer Review: 1.0 out of 5 stars   1 customer review

Best Sellers Rank: #642,922 in Books (See Top 100 in Books)   #37 inÃ Â Books > Science & Math > Mathematics > Research   #96 inÃ Â Books > Science & Math > Mathematics > Applied > Linear Programming   #124 inÃ Â Books > Science & Math > Mathematics > Pure Mathematics > Combinatorics

Customer Reviews

From the reviews:Ã¢â¬Å“In an effort at reform, Hurlbert (Arizona State) dubs his subject Ã¢â¬Ëœlinear optimizationÃ¢â¬â„¢ Ã¢â¬Â¦ . the author designs his work for discovery-based learning. Ã¢â¬Â¦ Ideally, this volume offers students the opportunity to recapitulate the Socratic

process for reinforcement Ã¢â ¬Â| . Summing Up: Recommended. Lower-division undergraduates.Ã¢â ¬Â• (D. V. Feldman, Choice, Vol. 47 (9), May, 2010)Ã¢â ¬Å"HurlbertÃ¢â ¬â„¢s textbook focuses on the mathematics of linear programming and important connections to linear algebra, graph theory, convexity, and game theory. The author has adopted the Moore method in which students are given some basic terminology and definitions and are then asked to develop the subject by proving a series of theorems. Ã¢â ¬Â| This textbook would be very suitable for an undergraduate course in linear programming that uses the Moore method.Ã¢â ¬Â• (Brian Borchers, The Mathematical Association of America, February, 2010)Ã¢â ¬Å"This text is Ã¢â ¬Â| oriented toward duality as central to solving and understanding linear optimization problems. Ã¢â ¬Â| Sequential steps in the Ã¢â ¬ËœWorkoutsÃ¢â ¬â„¢ help guide the student through the discovery process. Ã¢â ¬Â| this book would be an excellent choice for an instructor wishing to teach linear optimization to a motivated class. There is enough in here to sustain every taste and approach and create an excellent first course in optimization.Ã¢â ¬Â• (Steven R. Dunbar, SIAM Review, Vol. 53 (3), 2011)

This undergraduate textbook is written for a junior/senior level course on linear optimization. Unlike other texts, the treatment allows the use of the "modified Moore method" approach by working examples and proof opportunities into the text in order to encourage students to develop some of the content through their own experiments and arguments while reading the text. Additionally, the focus is on the mathematics underlying the ideas of optimizing linear functions under linear constraints and the algorithms used to solve them. In particular, the author uses the Simplex Algorithm to motivate these concepts. The text progresses at a gentle and inviting pace. The presentation is driven by numerous examples and illustrations. Ample exercises are provided at the end of each chapter for mastering the material. Opportunities for integrating Maple (or similar) software are included in the book. The authorÃ¢â ¬â„¢s own WebSim software can be freely downloaded from his website for pedagogical use. The teacher's version of the text contains solutions embedded within the text, rather than in an appendix. It also has extra material and suggestions for the teacherÃ¢â ¬â„¢s benefit. Junior/senior level undergraduate students will benefit from the book, as will beginning graduate students. Future secondary school mathematics teachers will also find this book useful. Arizona State University Professor Glenn H. Hurlbert has published nearly 50 articles in graph theory, combinatorics, and optimization, and has been the recipient of numerous teaching and mentoring awards from ASU, the ASU Parents Association, the School of Mathematical and Statistical Sciences, and the Mathematical Association of America.

This book in no way is worth the 30 dollars I spent on it. Though it is the official version printed in america straight from the publisher over 20 different languages persist throughout the text. Not only this but there is no explanations given what-so-ever in the text meaning you are just buying a book full of problems to do that in no way explains anything. I am pretty sure who ever wrote this was drunk.so remember

toÃƒÂ•Ã Â¿Ãƒâˆ©Ã â ¬ÃƒÂ•Ã Â ÃƒÂ•Ã ÂºÃƒâˆ©Ã â ÃƒÂ•Ã Â¸ÃƒÂ•Ã ÂºÃƒÂ•Ã Â
ÃƒÂ•Ã Â¿Ãƒâˆ©Ã â ¬ÃƒÂ•Ã Â ÃƒÂ•Ã ÂºÃƒâˆ©Ã â ÃƒÂ•Ã Â¸ÃƒÂ•Ã ÂºÃƒÂ•Ã Â
ÃƒÂ•Ã Â¿Ãƒâˆ©Ã â ¬ÃƒÂ•Ã Â ÃƒÂ•Ã ÂºÃƒâˆ©Ã â ÃƒÂ•Ã Â¸ÃƒÂ•Ã ÂºÃƒÂ•Ã Â

Linear Optimization: The Simplex Workbook (Undergraduate Texts in Mathematics) Linear Algebra: An Introduction to Abstract Mathematics (Undergraduate Texts in Mathematics) Mathematical Introduction to Linear Programming and Game Theory (Undergraduate Texts in Mathematics) An Introduction to Wavelets Through Linear Algebra (Undergraduate Texts in Mathematics) Linear Algebra Done Right (Undergraduate Texts in Mathematics) Introduction to Linear Optimization (Athena Scientific Series in Optimization and Neural Computation, 6) Mathematics and Technology (Springer Undergraduate Texts in Mathematics and Technology) The Mathematics of Nonlinear Programming (Undergraduate Texts in Mathematics) The Art of Proof: Basic Training for Deeper Mathematics (Undergraduate Texts in Mathematics) Discrete Mathematics: Elementary and Beyond (Undergraduate Texts in Mathematics) Proofs and Fundamentals: A First Course in Abstract Mathematics (Undergraduate Texts in Mathematics) Mathematics and Its History (Undergraduate Texts in Mathematics) Reading, Writing, and Proving: A Closer Look at Mathematics (Undergraduate Texts in Mathematics) The Mathematics of Medical Imaging: A BeginnerÃ¢â ¬â„¢s Guide (Springer Undergraduate Texts in Mathematics and Technology) Linear Algebra With Applications (Jones and Bartlett Publishers Series in Mathematics. Linear) An Introduction to Mathematical Finance with Applications: Understanding and Building Financial Intuition (Springer Undergraduate Texts in Mathematics and Technology) Combinatorics and Graph Theory (Springer Undergraduate Texts in Mathematics and Technology) Combinatorics and Graph Theory (Undergraduate Texts in Mathematics) Ideals, Varieties, and Algorithms: An Introduction to Computational Algebraic Geometry and Commutative Algebra (Undergraduate Texts in Mathematics) Elementary Number Theory: Primes, Congruences, and Secrets: A Computational Approach (Undergraduate Texts in Mathematics)

Contact Us

DMCA

Privacy

FAQ & Help