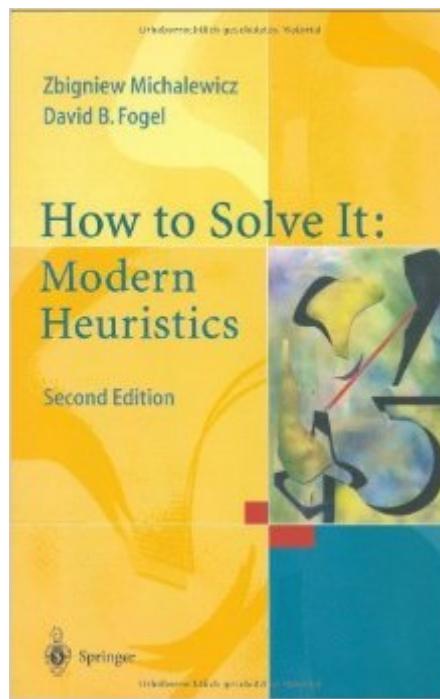


The book was found

How To Solve It: Modern Heuristics



Synopsis

"This book is the only source that provides comprehensive, current, and correct information on problem solving using modern heuristics. It covers classic methods of optimization, including dynamic programming, the simplex method, and gradient techniques, as well as recent innovations such as simulated annealing, tabu search, and evolutionary computation. Integrated into the discourse is a series of problems and puzzles to challenge the reader. The book is written in a lively, engaging style and is intended for students and practitioners alike. Anyone who reads and understands the material in the book will be armed with the most powerful problem solving tools currently known. This second edition contains two new chapters, one on coevolutionary systems and one on multicriterial decision-making. Also some new puzzles are added and various subchapters are revised."

Book Information

File Size: 7416 KB

Print Length: 584 pages

Page Numbers Source ISBN: 3540224947

Publisher: Springer; Enlarged 2nd edition (December 8, 2004)

Publication Date: December 8, 2004

Sold by: Digital Services LLC

Language: English

ASIN: B000SEKUUS

Text-to-Speech: Enabled

X-Ray: Not Enabled

Word Wise: Not Enabled

Lending: Not Enabled

Enhanced Typesetting: Not Enabled

Best Sellers Rank: #276,300 Paid in Kindle Store (See Top 100 Paid in Kindle Store) #9 in Kindle Store > Kindle eBooks > Nonfiction > Science > Mathematics > Applied > Linear Programming #21 in Kindle Store > Kindle eBooks > Nonfiction > Science > Mathematics > Applied > Game Theory #37 in Books > Science & Math > Mathematics > Applied > Linear Programming

Customer Reviews

I read this book while taking an advanced class in heuristics. I found the book to be extremely well written and very compelling to read. Although dealing with advanced topics, the authors' friendly and

clear writing style makes it accessible to anyone with a CS background. The first half of the book is on search heuristics, covering methods such as traditional searches (exhaustive search, greedy algorithms, divide and conquer, dynamic programming, A*, etc), methods to escape local optima (simulated annealing, tabu search), and, perhaps most interesting of all, evolutionary algorithms. I later found out that these topics are typically taught in undergraduate artificial intelligence courses, an elective I never took. The second half of the book covers even more advanced areas, such as constraint-handling, neural networks, and fuzzy systems. The authors use three recurring example applications to demonstrate each search technique: the boolean satisfiability problem (SAT), travelling salesman (TSP), and a nonlinear programming problem (NLP). I really liked the consistent use of these three examples, as they give a sense of continuity throughout the book that helps the reader compare search techniques clearly. I had of course studied the TSP problem in my undergraduate algorithms class but never in the context of such interesting approximation algorithms. In my heuristics class we had assignments to implement the TSP search problem using the Lin-Kernighan method, dynamic programming, and an evolutionary algorithm. The written English in this book is simply outstanding and crystal-clear, which was something of a shock since I was unable to even pronounce the first author's name. The writing is in a very friendly tone with elements of humour dispersed throughout.

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

How to Solve It: Modern Heuristics Methods of Discovery: Heuristics for the Social Sciences (Contemporary Societies) New Book of Puzzles: 101 Classic and Modern Puzzles to Make and Solve How to Let God Solve Your Problems: 12 Keys for Finding Clear Guidance in Life's Trials The Pioneer Woman Cooks: Dinnertime - Comfort Classics, Freezer Food, 16-minute Meals, and Other Delicious Ways to Solve Supper Practical Packet Analysis: Using Wireshark to Solve Real-World Network Problems Puzzles Old and New: How to Make and Solve Them Northwest Gardener's Handbook: Your Complete Guide: Select, Plan, Plant, Maintain, Problem-Solve - Oregon, Washington, Northern California, British Columbia Mid-Atlantic Gardener's Handbook: Your Complete Guide: Select, Plan, Plant, Maintain, Problem-Solve - Delaware, Maryland, New Jersey, New York, Pennsylvania, Virginia, West Virginia, Washington D.C. Southwest Gardener's Handbook: Your Complete Guide: Select, Plan, Plant, Maintain, Problem-Solve - Texas, Arizona, New Mexico, Oklahoma, Southern Nevada, Utah Midwest Gardener's Handbook: Your Complete Guide: Select - Plan - Plant - Maintain - Problem-solve - Illinois, Indiana, Iowa, Kansas, Michigan, ... North Dakota, Ohio, South Dakota, Wisconsin Cat Training: The Ultimate Cat Training Guide - Learn How To Train Your Cat And Solve Behavior Problems (Cats Care & Health, Kitten Care,

Animal Care) Formulas and Calculations for Drilling, Production, and Workover, Fourth Edition: All the Formulas You Need to Solve Drilling and Production Problems Formulas and Calculations for Drilling, Production, and Workover, Third Edition: All the Formulas You Need to Solve Drilling and Production Problems Get Unstuck Now: How Smart People Gain Clarity and Solve a Problem Fast, And How You Can Too Collaborative Intelligence: Using Teams to Solve Hard Problems Cryptic Crosswords & How to Solve Them (Official American Mensa puzzle book) Beginner's Guide to Cryptic Crosswords: How to Interpret and Solve Crossword Clues (Crosswords) One Minute Mysteries: 65 More Short Mysteries You Solve With Science How to Solve Sudoku: A Step-by-Step Guide

[Dmca](#)