<<离散数学>>

图书基本信息

书名:<<离散数学>>

13位ISBN编号:9787111201670

10位ISBN编号:7111201671

出版时间:2006-11

出版时间:机械工业

作者:多西

页数:664

版权说明:本站所提供下载的PDF图书仅提供预览和简介,请支持正版图书。

更多资源请访问:http://www.tushu007.com

<<离散数学>>

内容概要

本书凝聚了作者多年的研究成果和实践经验,是一本优秀的离散数学入门教材。

本书充分考虑到初学者的需要,内容、例题、习题都经过精心的挑选和组织,讲解细致,循序渐进,实例贴近日常生活或计算机应用。

本书注重算法,且算法描述独立于某种具体的编程语言。

教师可根据学生的层次和兴趣来灵活拓展和组织讲解内容。

本书可作为计算机专业或其他相关专业的离散数学教材或教学参考书,也可作为自学者的参考用书

Page 2

<<离散数学>>

作者简介

作者:(美)多西



书籍目录

PREFACETO THE STUDENT1 AN INTRODUCTION TO COMBINATORIAL PROBLEMS AND TECHNIQUES 1.1 The Time to Complete a Project 1.2 A Matching Problem 1.3 A Knapsack Problem 1.4 Algorithms and Their Efficiency Historical Notes Supplementary Exercises Computer Projects Suggested Readings2 SETS, RELATIONS, AND FUNCTIONS 2.1 Set Operations 2.2 Equivalence Relations 2.3 Partial Ordering Relations 2.4 Functions 2.5 Mathematical Induction 2.6 Applications Historical Notes Supplementary Exercises Computer Projects Suggested Readings3 CODING THEORY 3.1 Congruence 3.2 The Euclidean Algorithm 3.3 The RSA Method 3.4 Error-Detecting and Error-Correcting Codes 3.5 Matrix Codes 3.6 Matrix Codes that Correct All Single-Digit Errors Historical Notes Supplementary Exercises Computer Projects Suggested Readings4 GRAPHS 4.1 Graphs and Their Representations 4.2 Paths and Circuits 4.3 Shortest Paths and Distance 4.4 Coloringa Graph 4.5 Directed Graphs and Multigraphs Historical Notes Supplementary Exercises Computer Projects Suggested Readings 5 TREES 5.1 Properties of Trees 5.2 Spanning Trees 5.3 Depth-First Search 5.4 Rooted Trees 5.5 Binary Trees and Traversals 5.6 Optimal Binary Trees and Binary Search Trees Historical Notes Supplementary Exercises Computer Projects Suggested Readings6 MATCHING 6.1 Systems of Distinct Representatives 6.2 Matchings in Graphs 6.3 A Matching Algorithm 6.4 Applications of the Algorithm 6.5 The Hungarian Method Historical Notes Supplementary Exercises Computer Projects Suggested Readings 7 NETWORK FLOWS 7.1 Flows and Cuts 7.2 A Flow Augmentation Algorithm 7.3 The Max-Flow Min-CutTheorem 7.4 Flows and Matchings Historical Notes Supplementary Exercises Computer Projects Suggested Readings8 COUNTING TECHNIQUES 8.1 Pascal's Triangle and the Binomial Theorem 8.2 Three Fundamental Principles 8.3 Permutations and Combinations 8.4 Arrangements and Selections with Repetitions 8.5 Probability 8.6 The Principle of Inclusion-Exclusion 8.7 Generating Permutations and r-Combinations Historical Notes Supplementary Exercises Computer Projects Suggested Readings 9 RECURRENCE RELATIONS AND GENERATING FUNCTIONS 9.1 Recurrence Relations 9.2 The Method of Iteration 9.3 Linear Difference Equations with Constant Coefficients 9.4 Analyzing the Efficiency of Algorithms with Recurrence Relations 9.5 Counting with Generating Functions 9.6 The Algebra of Generating Functions Historical Notes Supplementary Exercises Computer Projects Suggested Readings 10 COMBINATORIAL CIRCUITS AND FINITE STATE MACHINES 10.1 Logical Gates 10.2 Creating Combinatorial Circuits 10.3 Karnaugh Maps 10.4 Finite State Machines Historical Notes Supplementary Exercises Computer Projects Suggested Readings A AN INTRODUCTION TO LOGICAND PROOF A.1 Statements and Connectives A.2 Logical Equivalence A.3 Methods of Proof Historical Notes Supplementary Exercises Suggested ReadingsB MATRICES Historical Notes CTHE ALGORITHMS INTHIS BOOKBIBLIOGRAPHY ANSWERS TO ODD-NUMBERED EXERCISESPHOTO CREDITSINDEX

<<离散数学>>

版权说明

本站所提供下载的PDF图书仅提供预览和简介,请支持正版图书。

更多资源请访问:http://www.tushu007.com