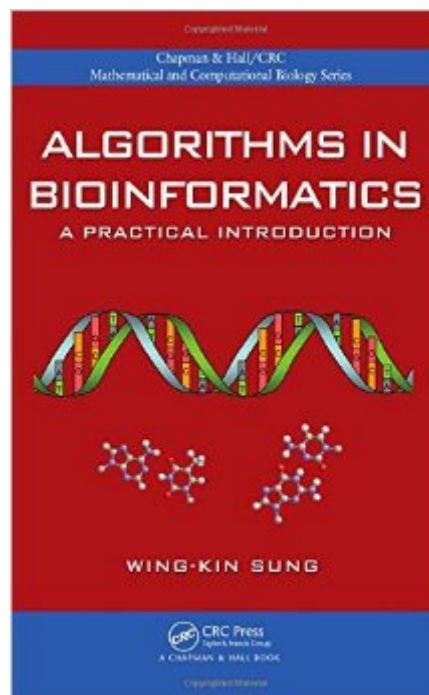


The book was found

Algorithms In Bioinformatics: A Practical Introduction (Chapman & Hall/CRC Mathematical And Computational Biology)



Synopsis

Thoroughly Describes Biological Applications, Computational Problems, and Various Algorithmic Solutions Developed from the author's own teaching material, *Algorithms in Bioinformatics: A Practical Introduction* provides an in-depth introduction to the algorithmic techniques applied in bioinformatics. For each topic, the author clearly details the biological motivation and precisely defines the corresponding computational problems. He also includes detailed examples to illustrate each algorithm and end-of-chapter exercises for students to familiarize themselves with the topics. Supplementary material is available at http://www.comp.nus.edu.sg/~ksung/algo_in_bioinfo/. This classroom-tested textbook begins with basic molecular biology concepts. It then describes ways to measure sequence similarity, presents simple applications of the suffix tree, and discusses the problem of searching sequence databases. After introducing methods for aligning multiple biological sequences and genomes, the text explores applications of the phylogenetic tree, methods for comparing phylogenetic trees, the problem of genome rearrangement, and the problem of motif finding. It also covers methods for predicting the secondary structure of RNA and for reconstructing the peptide sequence using mass spectrometry. The final chapter examines the computational problem related to population genetics.

Book Information

Series: Chapman & Hall/CRC Mathematical and Computational Biology

Hardcover: 407 pages

Publisher: Chapman and Hall/CRC; 1 edition (November 24, 2009)

Language: English

ISBN-10: 1420070339

ISBN-13: 978-1420070330

Product Dimensions: 6.2 x 1 x 9.3 inches

Shipping Weight: 1.6 pounds (View shipping rates and policies)

Average Customer Review: 4.5 out of 5 stars See all reviews (2 customer reviews)

Best Sellers Rank: #843,755 in Books (See Top 100 in Books) #9 in Books > Computers & Technology > Programming > Algorithms > Genetic #202 in Books > Computers & Technology > Computer Science > Bioinformatics #595 in Books > Engineering & Transportation > Engineering > Bioengineering > Biotechnology

Customer Reviews

Great book in the topic.

the book is very nice and good, it just arrive one month after I order it, but it was international shipping, it's understandable the book starts with molecular biology background and then explains the importance of the algorithms, and how to implement them

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

Algorithms in Bioinformatics: A Practical Introduction (Chapman & Hall/CRC Mathematical and Computational Biology) Introduction to Computational Biology: Maps, Sequences and Genomes (Chapman & Hall/CRC Interdisciplinary Statistics) Image Processing and Acquisition using Python (Chapman & Hall/CRC Mathematical and Computational Imaging Sciences Series) Biology: The Ultimate Self Teaching Guide - Introduction to the Wonderful World of Biology - 3rd Edition (Biology, Biology Guide, Biology For Beginners, Biology For Dummies, Biology Books) Computational Methods of Feature Selection (Chapman & Hall/CRC Data Mining and Knowledge Discovery Series) Computational Partial Differential Equations Using MATLAB (Chapman & Hall/CRC Applied Mathematics & Nonlinear Science) Data Classification: Algorithms and Applications (Chapman & Hall/CRC Data Mining and Knowledge Discovery Series) The Garbage Collection Handbook: The Art of Automatic Memory Management (Chapman & Hall/CRC Applied Algorithms and Data Structures series) Introduction to Modern Cryptography: Principles and Protocols (Chapman & Hall/CRC Cryptography and Network Security Series) An Introduction to Multicomplex SPates and Functions (Chapman & Hall/CRC Pure and Applied Mathematics) Introduction to Modern Cryptography, Second Edition (Chapman & Hall/CRC Cryptography and Network Security Series) Introduction to Network Security (Chapman & Hall/CRC Computer and Information Science Series) Introduction to Probability (Chapman & Hall/CRC Texts in Statistical Science) Stochastic Processes: An Introduction, Second Edition (Chapman & Hall/CRC Texts in Statistical Science) An Introduction to Partial Differential Equations with MATLAB (Chapman & Hall/CRC Applied Mathematics & Nonlinear Science) A Concise Introduction to Pure Mathematics, Fourth Edition (Chapman Hall/CRC Mathematics) The Kurzweil-Henstock Integral and Its Differential: A Unified Theory of Integration on \mathbb{R} and \mathbb{R}^n (Chapman & Hall/CRC Pure and Applied Mathematics) Web 2.0 and Beyond: Principles and Technologies (Chapman & Hall/CRC Textbooks in Computing) Coding Theory and Cryptography: The Essentials, Second Edition (Chapman & Hall/CRC Pure and Applied Mathematics) Binary Polynomial Transforms and Non-Linear Digital Filters (Chapman & Hall/CRC Pure and Applied Mathematics)

[Dmca](#)