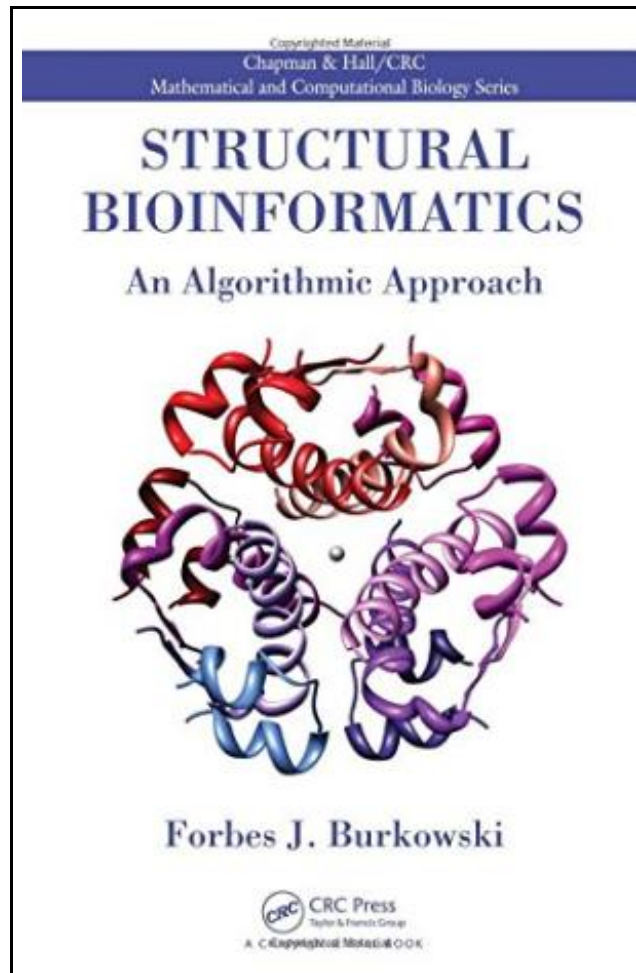# Structural Bioinformatics: An Algorithmic Approach

Filesize: 2.41 MB

Reviews

Extensive information for ebook fans. it was writtern very flawlessly and useful. You are going to like just how the author publish this pdf.

(Jarrod Prosacco)

STRUCTURAL BIOINFORMATICS: AN ALGORITHMIC APPROACH

Taylor & Francis Inc. Hardback. Book Condition: new. BRAND NEW, Structural Bioinformatics: An Algorithmic Approach, Forbes J. Burkowski, The Beauty of Protein Structures and the Mathematics behind Structural Bioinformatics Providing the framework for a one-semester undergraduate course, Structural Bioinformatics: An Algorithmic Approach shows how to apply key algorithms to solve problems related to macromolecular structure. Helps Students Go Further in Their Study of Structural Biology Following some introductory material in the first few chapters, the text solves the longest common subsequence problem using dynamic programming and explains the science models for the Nussinov and MFOLD algorithms. It then reviews sequence alignment, along with the basic mathematical calculations needed for measuring the geometric properties of macromolecules. After looking at how coordinate transformations facilitate the translation and rotation of molecules in a 3D space, the author introduces structural comparison techniques, superposition algorithms, and algorithms that compare relationships within a protein. The final chapter explores how regression and classification are becoming more useful in protein analysis and drug design. At the Crossroads of Biology, Mathematics, and Computer Science Connecting biology, mathematics, and computer science, this practical text presents various bioinformatics topics and problems within a scientific methodology that emphasizes nature (the source of empirical observations), science (the mathematical modeling of the natural process), and computation (the science of calculating predictions and mathematical objects based on mathematical models).

Read Structural Bioinformatics: An Algorithmic Approach Online

Download PDF Structural Bioinformatics: An Algorithmic Approach

Relevant Kindle Books

The Well-Trained Mind: A Guide to Classical Education at Home (Hardback)

WW Norton Co, United States, 2016. Hardback. Book Condition: New. 4th Revised edition. 244 x 165 mm. Language: English . Brand New Book. The Well-Trained Mind will instruct you, step by step, on how to...

Save eBook »

Goodparents.com: What Every Good Parent Should Know About the Internet (Hardback)

Prometheus Books, United States, 2000. Hardback. Book Condition: New. 226 x 152 mm. Language: English . Brand New Book. The Internet may now be the most powerful, single source of information in the world, and...

Save eBook »

Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 3: The Backpack (Hardback)

Oxford University Press, United Kingdom, 2011. Hardback. Book Condition: New. 174 x 142 mm. Language: English . Brand New Book. Read With Biff, Chip and Kipper is the UK s best-selling home reading series. It...

Save eBook »

Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 3: The Sing Song (Hardback)

Oxford University Press, United Kingdom, 2011. Hardback. Book Condition: New. 176 x 150 mm. Language: English . Brand New Book. Read With Biff, Chip and Kipper is the UK s best-selling home reading series. It...

Save eBook »

Oxford Reading Tree Read with Biff, Chip, and Kipper: Phonics: Level 2: The Fizz-buzz (Hardback)

Oxford University Press, United Kingdom, 2011. Hardback. Book Condition: New. 174 x 142 mm. Language: English . Brand New Book. Read With Biff, Chip and Kipper is the UK s best-selling home reading series. It...

Save eBook »