Bioinformatics for Biologists

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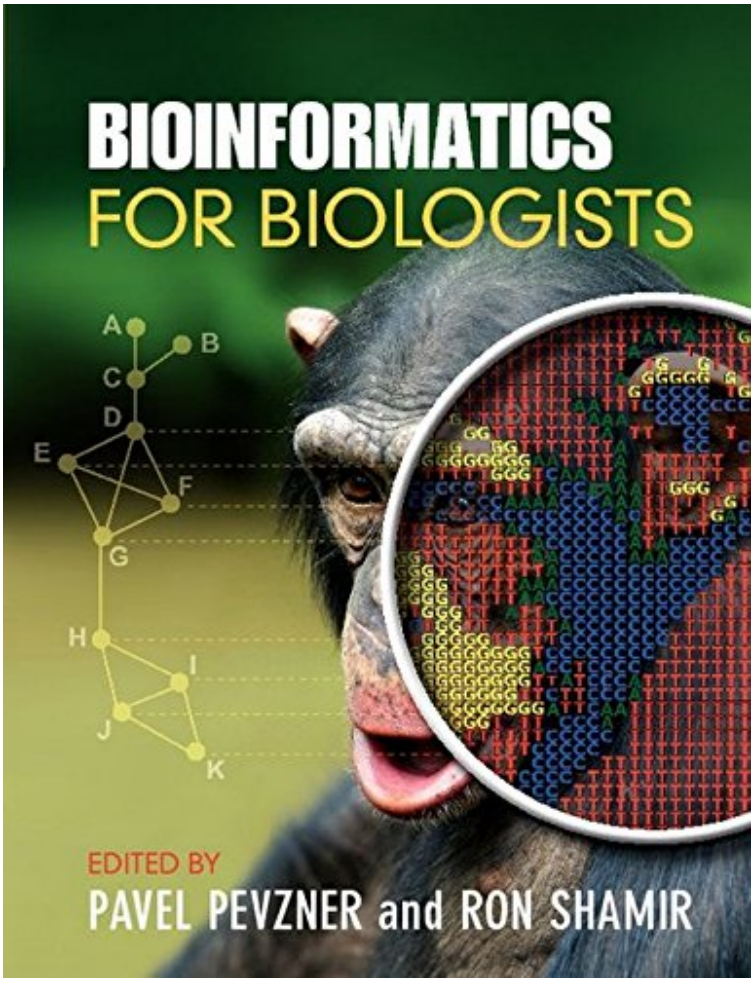

#1413838 in Books Cambridge University Press 2011-11-21Original language:EnglishPDF # 1 9.69 x .83 x 7.44l, 1.72 #File Name: 1107648874394 pages | File size: 70.Mb

From Brand: Cambridge University Press : Bioinformatics for Biologists before purchasing it in order to gage whether or not it would be worth my time, and all praised Bioinformatics for Biologists:

0 of 0 people found the following review helpful. If you want a general panorama of what bioinformatics is ...By Ruben AgreloIf you want a general panorama of what bioinformatics is about you should read this bookHowever it is not a practical one1 of 1 people found the following review helpful. Great book!By MaggieI bought this for my bioinformatics class and I love it. In addition to the book there are slides online that provide supplementary information for each chapter which is great. This has made bioinformatics much more simple than I expected it to be. Each chapter can be read alone which makes the book versatile and great for a variety of classes. Even complicated ideas are presented in an easy to understand fashion, so people without a math or computer science background can understand the problem (even if they wouldn't know how to solve it without the help of the book). I highly recommend this book for any biologists (or CS ppl) who want to learn more about bioinformatics.16 of 21 people found the

following review helpful. Not enough stars!By Graduate ResearcherThe first book that tries to uncover computational ideas behind modern bioinformatics. I see no shortage of books (or should I say manuals?) that treat me as a dummy and do not even try to explain what is under the hood of all these bioinformatics algorithms. After reading this book I finally understood how NGS fragment assemblers work and how genetic fingerprinting is done.

The computational education of biologists is changing to prepare students for facing the complex datasets of today's life science research. In this concise textbook, the authors' fresh pedagogical approaches lead biology students from first principles towards computational thinking. A team of renowned bioinformaticians take innovative routes to introduce computational ideas in the context of real biological problems. Intuitive explanations promote deep understanding, using little mathematical formalism. Self-contained chapters show how computational procedures are developed and applied to central topics in bioinformatics and genomics, such as the genetic basis of disease, genome evolution or the tree of life concept. Using bioinformatic resources requires a basic understanding of what bioinformatics is and what it can do. Rather than just presenting tools, the authors - each a leading scientist - engage the students' problem-solving skills, preparing them to meet the computational challenges of their life science careers.

Pre-Publication : "This volume contains a remarkable collection of individually-authored chapters cutting a wide swathe across the field as it is currently constituted. What is noteworthy, aside from the wide angle of the snapshot of today's bioinformatics, something the editors promise to update in future editions, is the innovative and effective pedagogical emphasis apparent throughout. The editors set out to provide a resource for teaching bioinformatics to life science undergraduates, and this is reflected in the language, organization and mathematical restraint of the different chapters... It is highly suitable as a text or reference for bioinformatics courses at the graduate level, for biologists, medical students and computer scientists. Biological navet in thinking and writing plagues bioinformatics, and Pevzner and Shamir's Bioinformatics for Biologists offers a wonderful therapy for that condition as well as an effective palliative for life science students' math phobias." Professor David Sankoff, University of OttawaPre-Publication : "A serious and valuable effort to bring essential and much-needed training in the computational sciences to students of modern biology." Michael Waterman, University of Southern California"... a very well-written book that caters to the needs of a growing number of biology students who want to understand this important subject. Highly recommended." V. Mathura, Open University for Choice Magazine"This volume represents an excellent eort towards creating an interesting and useful introductory bioinformatics text. In its current form it may benet computational scientists more than biologists, but has the potential to evolve into an invaluable resource for all bioinformaticists, independent of their primary eld of study." y Dimitris Papamichail, University of Miami for SIGACT NewsAbout the AuthorPavel Pevzner is Ronald R. Taylor Professor of Computer Science and Director of the Bioinformatics and Systems Biology Program at the University of California, San Diego. He was named a Howard Hughes Medical Institute Professor in 2006.Ron Shamir is the Raymond and Beverly Sackler Professor of Bioinformatics and Head of the Edmond J. Safra Bioinformatics Program at Tel Aviv University. He founded the joint Life Sciences/Computer Science undergraduate degree program in Bioinformatics at Tel Aviv University.