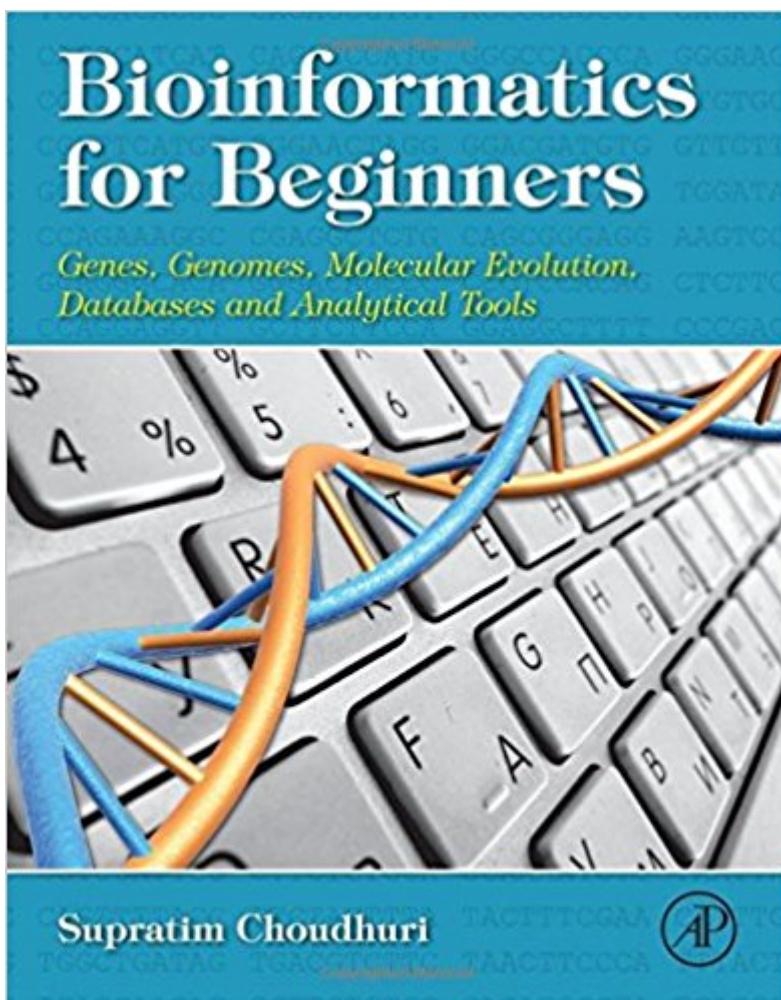


The book was found

Bioinformatics For Beginners: Genes, Genomes, Molecular Evolution, Databases And Analytical Tools



Synopsis

Bioinformatics for Beginners: Genes, Genomes, Molecular Evolution, Databases and Analytical Tools provides a coherent and friendly treatment of bioinformatics for any student or scientist within biology who has not routinely performed bioinformatic analysis. The book discusses the relevant principles needed to understand the theoretical underpinnings of bioinformatic analysis and demonstrates, with examples, targeted analysis using freely available web-based software and publicly available databases. Eschewing non-essential information, the work focuses on principles and hands-on analysis, also pointing to further study options. Avoids non-essential coverage, yet fully describes the field for beginners. Explains the molecular basis of evolution to place bioinformatic analysis in biological context. Provides useful links to the vast resource of publicly available bioinformatic databases and analysis tools. Contains over 100 figures that aid in concept discovery and illustration.

Book Information

Hardcover: 238 pages

Publisher: Academic Press; 1 edition (May 26, 2014)

Language: English

ISBN-10: 0124104711

ISBN-13: 978-0124104716

Product Dimensions: 8.6 x 0.7 x 11 inches

Shipping Weight: 2 pounds (View shipping rates and policies)

Average Customer Review: 3.8 out of 5 stars 5 customer reviews

Best Sellers Rank: #428,212 in Books (See Top 100 in Books) #109 in Books > Computers & Technology > Computer Science > Bioinformatics #126 in Books > Textbooks > Medicine & Health Sciences > Research > Biostatistics #220 in Books > Medical Books > Basic Sciences > Biostatistics

Customer Reviews

Dr. Supratim Choudhuri is a toxicologist at the Center for Food Safety and Applied Nutrition, U.S. Food and Drug Administration. Dr. Choudhuri has extensively published in the fields of molecular toxicology, metabolism, genomics, and epigenetics. He has previously edited a book, titled *Genomics: Fundamentals and Applications* with a colleague Dr. David B. Carlson.

This is a good, technical introduction to the field. I used this as a CS guy going into a bioinformatics

role and it was really useful for getting my bearings.

This book is not coherently written, and one can see this immediately in the first chapter (Section 1.2, for example) where the author states that DNA is the universal genetic material. The subsequent paragraphs meander off-topic and discuss RNA viruses. This happens again and again throughout. Also, editing for the Kindle book is haphazard and distracting. Many pictures are simply too small to see. Tables are not formatted well. I guess I am spoiled by some of the wonderful textbooks that I've purchased on Kindle where everything (illustrations, tables, narrative) fit perfectly.

Free web-based computational tools were not available when I was a bench scientist. I used proprietary software, such as the Wisconsin package for sequence formatting, editing, mapping, alignment and comparative analyses of cDNA and protein sequences. New and better bioinformatics tools are now available for public use since the sequencing of the human genome. Examples and instructions on how to use these tools are included in the book. However, the book is not only about free tools and databases, and how to use them. The contents of the book are organized into sections that include background information about genes and genomes, molecular evolution and genomic technologies. These sections are well written and are easy to read and understand since terms have been defined well and concepts are explained in plain language. I particularly enjoyed reading the molecular evolution section, as this field appears to be the main beneficiary of the advances made in sequencing of the genome of various species. The book makes references to the history of a topic under discussion, including sometimes on how the algorithms were developed. By doing so, the author fosters an interest in the subject and lays the ground for further discussion of the topic. Original and discerning illustrations are the other features of the book that a reader would appreciate. Moreover, the contents of the book and presentations have benefited from the author's background in academia, research and regulatory experiences. I believe the book would be appropriate for a wider audience, and would have relevance to students, professionals and the curious public (The Angelina Jolie effect) that would like to learn about the advances in molecular evolution and medicine in this age of genomic revolution. In terms of the online references in the book, I sometimes encountered changes in the user interface that made using the screenshots and step by step instructions in the book impracticable. An updatable website maintained by the publisher could accompany the book to solve these issues.

Very thorough overview of the subject is given in the book. Someone like me who came from a Theoretical Physics background, can learn so much that it can raise interest to do research in the area.

Excelent!!!

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

Bioinformatics for Beginners: Genes, Genomes, Molecular Evolution, Databases and Analytical Tools Bioinformatics Biocomputing and Perl: An Introduction to Bioinformatics Computing Skills and Practice Thesauri Used in Online Databases: An Analytical Guide Genetics: Analysis of Genes and Genomes, 8th Edition Advanced Genetic Analysis: Genes, Genomes, and Networks in Eukaryotes Genetic Analysis: Genes, Genomes, and Networks in Eukaryotes From Genes to Genomes: Concepts and Applications of DNA Technology Genetics: From Genes to Genomes, 5th edition Genetics: From Genes to Genomes Genetics: From Genes to Genomes (Hartwell, Genetics) Bioinformatics: A Practical Guide To The Analysis Of Genes And Proteins, 3Rd Ed Bioinformatics: A Practical Guide to the Analysis of Genes and Proteins Molecular Biology: Structure and Dynamics of Genomes and Proteomes Inheritance: How Our Genes Change Our Lives--and Our Lives Change Our Genes SQL for Beginners: Learn the Structured Query Language for the Most Popular Databases including Microsoft SQL Server, MySQL, MariaDB, PostgreSQL, and Oracle The Analytical Chemistry of Cannabis: Quality Assessment, Assurance, and Regulation of Medicinal Marijuana and Cannabinoid Preparations (Emerging Issues in Analytical Chemistry) An Introduction to Bioinformatics Algorithms (Computational Molecular Biology) Bioinformatics Data Skills: Reproducible and Robust Research with Open Source Tools Dr. Gundry's Diet Evolution: Turn Off the Genes That Are Killing You and Your Waistline Designer Genes: A New Era in the Evolution of Man

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)