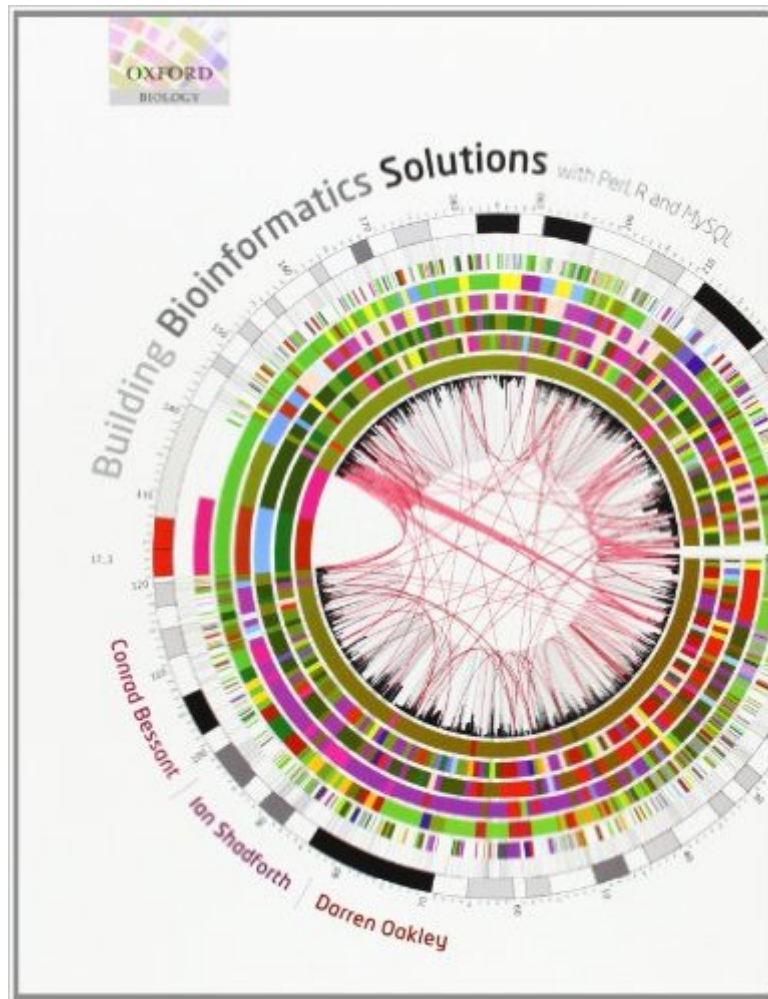# Building Bioinformatics Solutions: With Perl, R And MySQL

Synopsis

Modern bioinformatics encompasses a broad and ever-changing range of activities involved with the management and analysis of data from molecular biology experiments. Despite the diversity of activities and applications, the basic methodology and core tools needed to tackle bioinformatics problems is common to many projects. Building Bioinformatics Solutions provides a comprehensive introduction to this methodology, explaining how to acquire and use the most popular development tools, how to apply them to build processing pipelines, and how to make the results available through visualizations and web-based services for deployment either locally or via the Internet. The main development tools covered in this book are the MySQL database management system, the Perl programming language, and the R language for statistical computing. These industry standard open source tools form the core of many bioinformatics projects, both in academia and industry. The methodologies introduced are platform independent, and all the examples that feature have been tested on Windows, Linux and Mac OS. This advanced textbook is suitable for graduate students and researchers in the life sciences who wish to automate analyses or create their own databases and web-based tools. No prior knowledge of software development is assumed. Having worked through the book, the reader should have the necessary core skills to develop computational solutions for their specific research programmes. The book will also help the reader overcome the inertia associated with penetrating this field, and provide them with the confidence and understanding required to go on to develop more advanced bioinformatics skills.

Book Information

Paperback: 254 pages

Publisher: Oxford University Press; 1 edition (February 28, 2009)

Language: English

ISBN-10: 0199230234

ISBN-13: 978-0199230235

Product Dimensions: 9.6 x 0.5 x 7.4 inches

Shipping Weight: 1.2 pounds

Average Customer Review: 4.1 out of 5 stars See all reviews (8 customer reviews)

Best Sellers Rank: #1,097,272 in Books (See Top 100 in Books)   #76 in Books > Computers & Technology > Programming > Languages & Tools > Perl   #135 in Books > Computers & Technology > Databases & Big Data > MySQL   #278 in Books > Computers & Technology > Computer Science > Bioinformatics

Customer Reviews

This is a great book, I am very satisfied with it.In fact, this book combines the most popular tools in bioinformatics:Perl, R and MySQL.Some of us may be expert for one or two of these tools. But how to systemically to use them together, this book gives answers.It aslo gives direction of how to go further if you want to master one of these tools.Plus,it has a lot of practical examples which you can easily transform for your own work.And I must say the authors are very responsibe. They answered my questions promptly and in details. I really apprecitate this.Thank you.

I have formal education in Bioinformatics, however applied Bioinformatics is somewhat different. This book is a great stepping stone for those who want to work as Bioinformatics analysts, developers etc.

This book really helps to understand how one can use countless possibilities of modern bioinformatics through publicly available tools. I appreciate the inner logic of the text and accurate description of methods. Authors did a great work! I recommend this book to all biologists, who, like me, want to analyse their data themselves and in efficient way.

This is a very nice bioinformatics book. Concise and touching the point. Covers the very basic and practical skills on developing computational skills on biological question. After reading this book, I'm almost equipped the right tools, skills and directionality for practical research problems and more thoughtful organizations on my database. Highly recommend for everyone!

I'm very satisfied with this book.Very clear explanations and examples.Contains all the relevant chapters that one needs to get into bioinformatics.

This is a very introductory book. It will get you started and up to the point where you can continue by using free info on the internet.

GOOD INTRODUCTORY BOOK. BRIEF INTRO FOR ALL USED COMPUTER LANGUAGES.

I think this is worth it if you have limited experience with programming and do not wish to dig into it more. Personally, I think that it is better to use other excellent books to learn Perl, R, and any databasing language (suggest MariaDB).

Building Bioinformatics Solutions: with Perl, R and MySQL Building Bioinformatics Solutions 2nd edition Beginning Perl for Bioinformatics Mastering Perl for Bioinformatics Perl Programming Success in a Day: Beginners Guide to Fast, Easy, and Efficient Learning of Perl Programming MySQL Cookbook: Solutions for Database Developers and Administrators Perl: Crash Course - The Ultimate Beginner's Course to Learning Perl Programming in Under 12 Hours Effective Perl Programming: Ways to Write Better, More Idiomatic Perl (2nd Edition) (Effective Software Development Series) Mastering Perl/Tk: Graphical User Interfaces in Perl Programming the Perl DBI: Database programming with Perl Bioinformatics and Computational Biology in Drug Discovery and Development Microsoft SharePoint 2013 Designing and Architecting Solutions: Designing and Architecting Solutions Bioinformatics: The Machine Learning Approach, Second Edition (Adaptive Computation and Machine Learning) Bioinformatics and Functional Genomics Discovering Genomics, Proteomics and Bioinformatics (2nd Edition) Python for Bioinformatics (Chapman & Hall/CRC Mathematical and Computational Biology) Java for the Web with Servlets, JSP, and EJB: A Developer's Guide to J2EE Solutions: A Developer's Guide to Scalable Solutions Structural Bioinformatics Understanding Bioinformatics Bioinformatics For Dummies