

Perl Programming for Biologists

D. Curtis Jamison

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D. Curtis Jamison : Perl Programming for Biologists before purchasing it in order to gage whether or not it would be worth my time, and all praised Perl Programming for Biologists:

0 of 0 people found the following review helpful. Perl Bioinformatics DeveloperBy RachelExcellent book for the beginner programmer who is interested in Bioinformatics. However, an additional Perl reference book with examples is needed.8 of 8 people found the following review helpful. Not nearly as good as Learning/Intermediate Perl or Tisdall's booksBy C. J. FieldsAlthough James Tisdall's Perl books (Beginning/Mastering Perl for Bioinformatics) could be a little scattered, I found that they offered more for the biologist learning Perl than this one; you could almost buy both those books for the price of this one! This book seems structured more along the lines of the (superior)

Learning Perl and Intermediate Perl by Schwartz et al, with a few biological references thrown in as examples. Some of the most important aspects of biological sequence analysis were glossed over fairly quickly if at all. I found it somewhat amazing that file format parsing, restriction enzyme analysis, sequence conversion, transcription-translation, program output parsing, and other fundamental topics were either covered very briefly in passing or not covered at all. Disappointing! I believe one might find this book was a great read first time out (it is well written), but that once they progressed to other texts (Learning Perl, Intermediate Perl, Programming Perl), they would rarely, if ever, refer back to this one. That's not good for a \$50 book. I can't see myself using it in the future when I have the Camel and Llama covering my back, along with Tisdall's texts. Basically a lot of sugar coating without much substance. Oh, and there's a major mistake in the Object-Oriented Programming section, one which really breaks your programs. In short: - != = My advice: spend your money on those texts and use your imagination on what Perl can accomplish for you as a biologist. If you are an advanced Perl programmer and biologist, at least check out Tisdall's books and wait for the long-rumored BioPerl book. I would give it 3 stars for the writing but the price doesn't justify it, sorry. The review system won't let me change the rating though, so you lucked out this time! 0 of 0 people found the following review helpful. Intelligently written, but flawed. By B. Brender. Jamison's narrative is well thought out; he is a good teacher, provided you are attentive enough to initialize the variables, arrays and hashes in the required order without him reminding you. But he also needs a good editor. It is a shame his book is marred with so many typos. For instance, on p. 47, there are several typos. A couple are text typos, "when" instead of "we", which throw off the meaning of the text. More serious, however, is the statement after the print command, ""\$gene is on both maps\n";", when the code above really refers to three hashes, which contain three map keys. Unexplained is the fact that the RH map refers to the mouse radiation hybrid map, maintained by the Broad Institute. Still, for all its faults, it's the only game in town for biologists who are just cutting their teeth on Perl. It is essential to use a good Perl-friendly text editor/debugger with this book. Be savvy about using all the examples he mentions in passing, because the end-of-chapter exercises are inadequate to learning the language, and some of the programming challenges are mystifying. A major fault is that no answers are given. Another thing to note: Jamison may be an excellent software engineer, but he is no biologist. At one point, he confuses transcription and translation. Rely on your own biological knowledge.

Working on the assumption that the reader has no formal training in programming, Perl Programming for Biologists demonstrates how Perl is used to solve biological problems. Each chapter opens with a set of learning objectives, provides numerous review questions and self-study exercises, and concludes with a bulleted summary of key points. The author incorporates numerous real-life examples throughout the text. Upon completing the book, readers are able to quickly perform such tasks as correcting recurring errors in spreadsheets, scanning a Fasta sequence for every occurrence of an EcoRI site, adapting other writers' scripts to one's own purposes, and most important, writing reusable and maintainable scripts that spare the rote repetition of code.

"This well written book illustrates PERL with examples. Those with less or no programming skills should read this book before attempting the practice of bioinformatics ideas." (Journal of Statistical Computation Simulation, January 2005) "the book is useful to biologists who already use languages like C+ or Visual Basic and want to learn Perl." (Biomolecular Engineering, November 2004) written in a pleasant chatty style with obvious enthusiasm for the topic (Robotica, Vol. 22, 2004) ...unique and I highly recommend it as a first book on programming for biology-oriented professionals interested in using perl...excellent for self-study...can also be a great resource as classroom material... (Clinical Chemistry, Vol. 50, No. 2, 2004) "...not be surprised to see [it] finding a space on the bookshelves in many biological laboratories in the near future." (Briefings in Bioinformatics, Vol 5(1), March 2004) From the Back Cover With a loose structure that allows for fast and easy coding, the Perl programming language is the most widely used scripting language in bioinformatics. Working on the assumption that the reader has never had any formal training in programming, and using examples geared toward real problems faced by biologists, Perl Programming for Biologists serves as an accessible, introductory reference for teaching Perl programming. Curtis Jamison's innovative text introduces basic elements of computer science and software engineering in an abbreviated format, building toward a bioinformatics users' guide for Perl. Each chapter opens with a set of learning objectives, provides numerous review questions and self-study exercises, and concludes with a bulleted summary of key points. Jamison incorporates numerous real-life examples throughout to illustrate how Perl is used to solve biological problems, offering valuable code fragments that the current practitioner can recycle into his or her own program. Divided into sections on basic, intermediate, and advanced-level Perl, the book includes chapters on: Variables and data types Arrays and hashes Control structures Subroutines String manipulation Object-oriented programming Upon completing the book, readers will be able to quickly perform such tasks as correcting recurring errors in spreadsheets, scanning a Fasta sequence for every occurrence of an EcoRI site, adapting other writers' scripts to one's own purposes, and most important, writing reusable and maintainable scripts that will spare the rote repetition of code. Upper-level undergraduates, graduate students, biologists, and other life scientists will find Perl Programming for Biologists to be an essential resource.