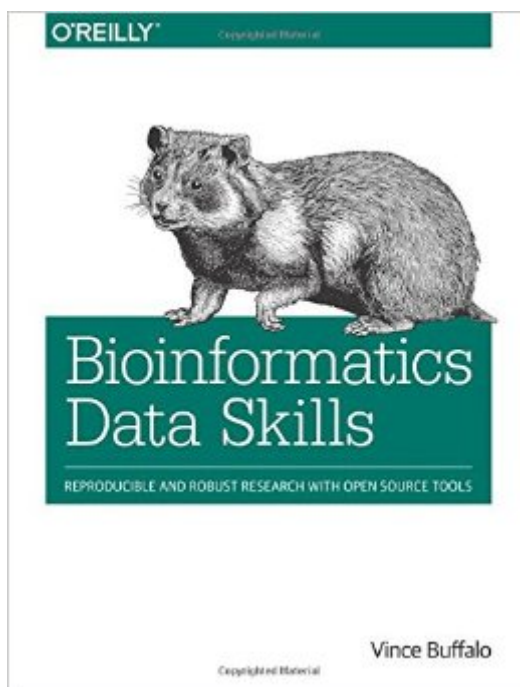The book was found

Bioinformatics Data Skills: Reproducible And Robust Research With Open Source Tools

Synopsis

This practical book teaches the skills that scientists need for turning large sequencing datasets into reproducible and robust biological findings. Many biologists begin their bioinformatics training by learning scripting languages like Python and R alongside the Unix command line. But there's a huge gap between knowing a few programming languages and being prepared to analyze large amounts of biological data. Rather than teach bioinformatics as a set of workflows that are likely to change with this rapidly evolving field, this book demsonstrates the practice of bioinformatics through data skills. Rigorous assessment of data quality and of the effectiveness of tools is the foundation of reproducible and robust bioinformatics analysis. Through open source and freely available tools, you'll learn not only how to do bioinformatics, but how to approach problems as a bioinformatician.Go from handling small problems with messy scripts to tackling large problems with clever methods and tools Focus on high-throughput (or "next generation") sequencing data Learn data analysis with modern methods, versus covering older theoretical concepts Understand how to choose and implement the best tool for the job Delve into methods that lead to easier, more reproducible, and robust bioinformatics analysis

Book Information

Paperback: 538 pages

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Average Customer Review: 4.1 out of 5 stars   14 customer reviews

Best Sellers Rank: #142,788 in Books (See Top 100 in Books)   #33 in Books > Computers & Technology > Computer Science > Bioinformatics   #202 in Books > Engineering & Transportation > Engineering > Bioengineering > Biochemistry   #360 in Books > Computers & Technology > Programming > Software Design, Testing & Engineering > Software Development

Customer Reviews

Vince Buffalo is currently a first-year graduate student studying population genetics in Graham Coop's lab at UC Davis in the Population Biology Graduate Group. Before starting his PhD in population genetics, Vince worked professionally as a bioinformatician in the Bioinformatics Core at

the UC Davis Genome Center and in the Department of Plant Sciences. An obsessive programmer since he was a young teenager, Vince was drawn to the statistical and computational problems of genomics. He works on open source bioinformatics tools in his work and free time, and enjoys fly fishing and cooking when away from the computer.

The book is a gem. The clear and unambiguous description of technical details sets it apart from many similar volumes. The author's wise advice on good practice could save many a researcher time and trouble in the long run.

Great resource for learning your way around linux based systems in relation to bioinformatics/genomic analysis tools. Everything is followed through step-by-step and doesn't leave you wondering why something was done, while at the same time it doesn't keep teaching you past commands unnecessarily.

A good text for the amateur bioinformatician or the journeyman looking to improve their overall approach. Not meant for the novice with little command line experience. The book provides an overview of many broad topics as opposed to specific tools, and the author does a good job of emphasizing reproducibility, which is surprisingly poorly practiced in the field. Recommended.

Chose this book for a class in bioinformatics,Pros: great range of topics covered: bash shell, git, ssh, working with data, data compressionCons: the author is a little long winded and and it does not have great examples

Data science is the hottest ticket in town for tech jobs these days. Bioinformatics is a great practical use of data science. What better way to learn data science?

The book is well written

helpful for using linux as a bioinformatician!

Great resource!

Bioinformatics Data Skills: Reproducible and Robust Research with Open Source Tools

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