

"In my 20 years as a professor, I have never run across a textbook on bioinformatics algorithms that a biologist can read from cover to cover and understand. This is the one."

Pavel Pevzner, Ronald R. Taylor Distinguished Professor of Computer Science, University of California at San Diego

Don't have a computing background, but need to learn how to solve real biological problems using computational tools? Need to improve your confidence in programming for biological applications?

Specifically designed for undergraduate students in the life sciences with no previous programming experience, this textbook addresses both of these needs and more.

- Teaches general and widely-applicable Python programming skills, applicable to both Python versions 2 and 3
- Each major part poses a compelling biological question before providing the algorithmic ideas and programming tools necessary to explore it – algorithms covered include gene finding, sequence alignment, and phylogenetic methods
- Explains the design of efficient algorithms, simulation, NP-hardness, and the maximum likelihood method, among other key concepts and methods
- Designed to equip students with the skills to write programs for solving a range of biological problems, the book is accompanied by numerous programming exercises available at www.cs.hmc.edu/CFB



Online Resources
www.cambridge.org/c4b

➤ **Solutions for integrated exercises, password-protected for instructors**

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