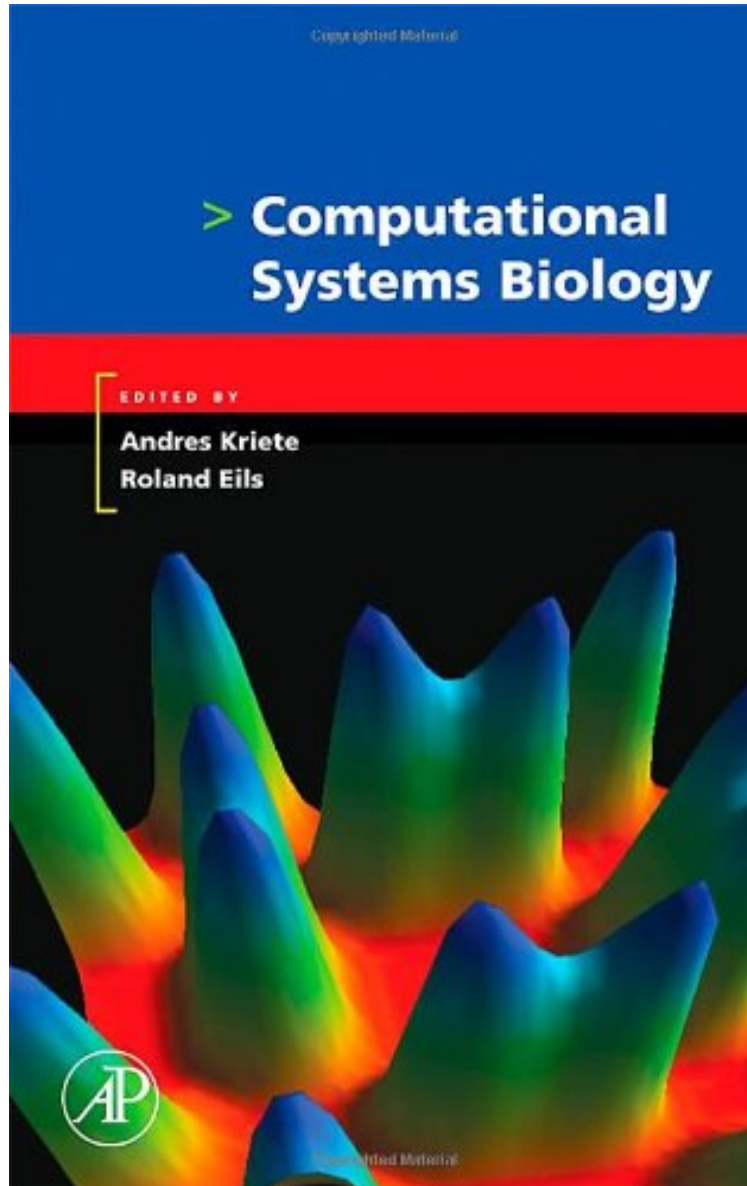


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From Academic Press : Computational Systems Biology before purchasing it in order to gauge whether or not it would be worth my time, and all praised Computational Systems Biology:

8 of 9 people found the following review helpful. A great compilation of new Systems Biology concepts and tools By Babatunde Ogunnaike This book is a worthy successor to the well-received "Foundations of Systems Biology" edited by Kitano in 2001. That earlier book provided, under a single cover, Kitano's perspective of the central aspects of this

emerging field. Five years hence, many things have changed in this fast evolving field, but the changes have been more in terms of the increased volume and improved clarity of detail of the constituents of the central core topics rather than in the core topics themselves. In this edited volume, Dr. Kriete and Dr. Eils have provided the Systems Biology community with a timely update of the central topics of systems biology, emphasizing computational tools and bioinformatics, and showcasing newer modeling, simulation and analysis techniques such as multi-scale modeling and analysis. I highly recommend this book to anyone interested in a broad but carefully presented overview of the current state of the art in computational systems biology; it should also become an invaluable part of the library of anyone engaged in systems biology research.

Systems Biology is concerned with the quantitative study of complex biosystems at the molecular, cellular, tissue, and systems scales. Its focus is on the function of the system as a whole, rather than on individual parts. This exciting new arena applies mathematical modeling and engineering methods to the study of biological systems. This book is the first of its kind to focus on the newly emerging field of systems biology with an emphasis on computational approaches. The work covers new concepts, methods for information storage, mining and knowledge extraction, reverse engineering of gene and metabolic networks, as well as modelling and simulation of multi-cellular systems. Central themes include strategies for predicting biological properties and methods for elucidating structure-function relationships.

From the Back Cover Computational systems biology is a field that aims to develop a systems level understanding of biological processes using computational techniques. This book presents a timely compendium of the state-of-the-art in this new era of biological understanding. A distinguished group of contributors reviews bioinformation engineering and data integration technologies along with biomedical applications. Different computational approaches to model and simulate biological systems are discussed. Current computational research efforts, comprehensively covered in this volume, are focused on regulatory, signaling and metabolic networks. As an exciting outlook new concepts for computer representations on multi-scales predicting emergent properties of biological systems are introduced. Andres Kriete is Associate Professor for Bioinformation Engineering at Drexel University, Philadelphia and Director of the Biocomputing Laboratory at the Coriell Institute for Medical Research. Roland Eils is Professor of Bioinformatics at the University of Heidelberg and Director of the Division of Theoretical Bioinformatics at the German Cancer Research Center (DKFZ) in Heidelberg. About the Author Associate Professor for Bioinformation Engineering at Drexel University, Philadelphia and Director of the Biocomputing Laboratory at the Coriell Institute for Medical Research Professor of Bioinformatics at the University of Heidelberg and Director of the Division of Theoretical Bioinformatics at the German Cancer Research Center (DKFZ) in Heidelberg