Big Data in Omics and Imaging: Association Analysis (Hardback)

By Momiao Xiong

Taylor Francis Inc, United States, 2017. Hardback. Condition: New. Language: English . Brand New Book. Big Data in Omics and Imaging: Association Analysis addresses the recent development of association analysis and machine learning for both population and family genomic data in sequencing era. It is unique in that it presents both hypothesis testing and a data mining approach to holistically dissecting the genetic structure of complex traits and to designing efficient strategies for precision medicine. The general frameworks for association analysis and machine learning, developed in the text, can be applied to genomic, epigenomic and imaging data. FEATURES Bridges the gap between the traditional statistical methods and computational tools for small genetic and epigenetic data analysis and the modern advanced statistical methods for big data Provides tools for high dimensional data reduction Discusses searching algorithms for model and variable selection including randomization algorithms, Proximal methods and matrix subset selection Provides real-world examples and case studies Will have an accompanying website with R code The book is designed for graduate students and researchers in genomics, bioinformatics, and data science. It represents the paradigm shift of genetic studies of complex diseases- from shallow to deep genomic analysis, from low-dimensional to high dimensional,...

READ ONLINE
[2.65 MB]

Reviews

It is an awesome publication which i actually have ever read through. it had been writtern really properly and valuable. I found out this book from my i and dad recommended this pdf to discover.
-- Doyle Schmeler

This book is definitely not simple to begin on studying but quite fun to see. I actually have read and that i am sure that i will gonna read through yet again once again in the foreseeable future. It is extremely difficult to leave it before concluding, once you begin to read the book.
-- Brennan Koelpin