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Sommario/riassunto

An in-depth look at the latest research, methods, and applications in the field of protein bioinformaticsThis book presents the latest developments in protein bioinformatics, introducing for the first time cutting-edge research results alongside novel algorithmic and AI methods for the analysis of protein data. In one complete, self-contained volume, Algorithmic and Artificial Intelligence Methods for Protein Bioinformatics addresses key challenges facing both computer scientists and biologists, arming readers with tools and techniques for analyzing and interpreting protein data and solving a variety of biological problems.Featuring a collection of authoritative articles by leaders in the field, this work focuses on the analysis of protein sequences, structures, and interaction networks using both traditional algorithms and AI methods. It also examines, in great detail, data preparation, simulation, experiments, evaluation methods, and applications. Algorithmic and Artificial Intelligence Methods for Protein Bioinformatics:. Highlights protein analysis applications such as protein-related drug activity comparison. Incorporates salient case studies illustrating how to apply the methods outlined in the book. Tackles the complex relationship between proteins from a systems

biology point of view. Relates the topic to other emerging technologies such as data mining and visualization. Includes many tables and illustrations demonstrating concepts and performance figuresAlgorithmic and Artificial Intelligence Methods for Protein Bioinformatics is an essential reference for bioinformatics specialists in research and industry, and for anyone wishing to better understand the rich field of protein bioinformatics.