Presented book, titled *Knowledge Discovery in Bioinformatics – Techniques, Methods, and Applications* is an edited book that brings together the ideas and findings of data mining researchers and bioinformaticians by discussing cutting-edge research topics. Data mining in bioinformatics holds the promise of solving such fundamental problems as protein structure, gene finding, data retrieval, and integration. Therefore this book is an essential reading for all researchers in bioinformatics. This pioneering text brings together an unparalleled group of leading experts in both data mining and informatics, presenting a broad range of novel methods, techniques, and applications of data mining for the analysis and management of bioinformatics data sets. The edited book comprises the following topics:

- RNA and protein structure analysis
- DNA computing
- Sequence mapping and genome comparison
- Gene expression data mining
- Metabolic network modeling
- Phyloinformatics
- Biomedical literature data mining
- Biological data integration and searching

For each topic, readers get an inside perspective into the latest research – what works and what doesn’t and where additional research and development is needed.

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