

Preface

It gives us great pleasure to introduce the book entitled “Advances in Computational Biology.” The book is composed of a collection of papers received in response to an announcement that was widely distributed to academicians and practitioners in the broad area of computational biology. Also, selected authors of accepted papers of BIOCOMP’09 proceedings (International Conference on Bioinformatics and Computational Biology: July 13–16, 2009; Las Vegas, NV, USA) were invited to submit the extended versions of their papers for evaluation.

The collection of papers in Part I, present advances in Bioinformatics Databases, Data Mining, and Pattern Discovery. Microarray, Gene Expression Analysis, and Gene Regulatory Networks are presented in Part II. Followed by Part III that is composed of a collection of papers in the areas of Protein Classification and Structure Prediction, and Computational Structural Biology. Part IV is composed of a number of articles that discusses significant issues in the areas of Comparative Sequence, Genome Analysis, Genome Assembly, and Genome Scale Computational Methods. Drug Design, Drug Screening, and related topics are discussed in Part V. Part VI presents various Computational Methods and Diagnostic Tools in Biomedical applications. Lastly, general topics in the area of Bioinformatics are presented in Part VII.

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Hamid R. Arabnia, PhD

Professor, Computer Science; Fellow, Int'l Society of Intelligent Biological Medicine (ISIBM); Editor-in-Chief, The Journal of Supercomputing (Springer); Co-Editor/Board, Journal of Computational Science (Elsevier); Member, Advisory Board, IEEE Technical Committee on Scalable Computing (TCSC); Department of Computer Science, The University of Georgia, Athens, GA 30602-7404, USA



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