1. Record Nr. UNINA9910143576103321

Titolo	Parallel computing for bioinformatics and computational biology [[electronic resource]] : models, enabling technologies, and case studies / / edited by Albert Y. Zomaya
Pubbl/distr/stampa	Hoboken, N.J., : Wiley-Interscience, c2006
ISBN	1-280-46270-1 9786610462704 0-470-36220-0 0-471-75650-4 0-471-75649-0
Descrizione fisica	1 online resource (814 p.)
Collana	Wiley series on parallel and distributed computing
Altri autori (Persone)	ZomayaAlbert Y
Disciplina	570.285435 572.8/0285
Soggetti	Bioinformatics Computational biology Parallel processing (Electronic computers) Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	PARALLEL COMPUTING FOR BIOINFORMATICS AND COMPUTATIONAL BIOLOGY; CONTENTS; Preface; Contributors; Acknowledgments; PART I ALGORITHMS AND MODELS; 1 Parallel and Evolutionary Approaches to Computational Biology; 1.1 Introduction; 1.2 Bioinformatics; 1.3 Evolutionary Computation Applied to Computational Biology; 1.4 Conclusions; References; 2 Parallel Monte Carlo Simulation of HIV Molecular Evolution in Response to Immune Surveillance; 2.1 Introduction; 2.2 The Problem; 2.3 The Model; 2.4 Parallelization with MPI; 2.5 Parallel Random Number Generation; 2.6 Preliminary Simulation Results 2.7 Future DirectionsReferences; 3 Differential Evolutionary Algorithms for In Vivo Dynamic Analysis of Glycolysis and Pentose Phosphate Pathway in Escherichia coli; 3.1 Introduction; 3.2 Mathematical Model; 3.3 Estimation of the Parameters of the Model; 3.4 Kinetic Parameter

Estimation by DE; 3.5 Simulation and Results; 3.6 Stability Analysis; 3.7 Control Characteristic; 3.8 Conclusions; References; 4 Compute-Intensive Simulations for Cellular Models; 4.1 Introduction; 4.2 Simulation Methods for Stochastic Chemical Kinetics; 4.3 Aspects of Biology - Genetic Regulation
4.4 Parallel Computing for Biological Systems4.5 Parallel Simulations; 4.6 Spatial Modeling of Cellular Systems; 4.7 Modeling Colonies of Cells; References; 5 Parallel Computation in Simulating Diffusion and Deformation in Human Brain; 5.1 Introduction; 5.2 Anisotropic Diffusion Simulation in White Matter Tractography; 5.3 Brain Deformation Simulation in Image-Guided Neurosurgery; 5.4 Summary; References; PART II SEQUENCE ANALYSIS AND MICROARRAYS; 6 Computational Molecular Biology; 6.1 Introduction; 6.2 Basic Concepts in Molecular Biology; 6.3 Global and Local Biological Sequence Alignment
6.4 Heuristic Approaches for Biological Sequence Comparison6.5 Parallel and Distributed Sequence Comparison; 6.6 Conclusions; References; 7 Special-Purpose Computing for Biological Sequence Analysis; 7.1 Introduction; 7.2 Hybrid Parallel Computer; 7.3 Dynamic Programming Communication Pattern; 7.4 Performance Evaluation; 7.5 Future Work and Open Problems; 7.6 Tutorial; References; 8 Multiple Sequence Alignment in Parallel on a Cluster of Workstations; 8.1 Introduction; 8.2 CLUSTAL W; 8.3 Implementation; 8.4 Results; 8.5 Conclusion; References
9 Searching Sequence Databases Using High-Performance BLASTs9.1 Introduction; 9.2 Basic Blast Algorithm; 9.3 Blast Usage and Performance Factors; 9.4 High Performance BLASTs; 9.5 Comparing BLAST Performance; 9.6 UMD-BLAST; 9.7 Future Directions; 9.8 Related Work; 9.9 Summary; References; 10 Parallel Implementations of Local Sequence Alignment: Hardware and Software; 10.1 Introduction; 10.2 Sequence Alignment Primer; 10.3 Smith-Waterman Algorithm; 10.4 FASTA; 10.5 BLAST; 10.6 HMMER - Hidden Markov Models; 10.7 ClustalW; 10.8 Specialized Hardware: FPGA; 10.9 Conclusion; References
11 Parallel Computing in the Analysis of Gene Expression Relationships

Sommario/riassunto

Discover how to streamline complex bioinformatics applications with parallel computingThis publication enables readers to handle more complex bioinformatics applications and larger and richer data sets. As the editor clearly shows, using powerful parallel computing tools can lead to significant breakthroughs in deciphering genomes, understanding genetic disease, designing customized drug therapies, and understanding evolution.A broad range of bioinformatics applications is covered with demonstrations on how each one can be parallelized to improve performance and gain faster

2. Record Nr. UNINA9910787136503321

Autore	Cline Leonard <1893-1929, >
Titolo	God head : a novel / / Leonard Cline ; Shaun Allshouse, design
Pubbl/distr/stampa	DeKalb, Illinois : , : NIU Press, , 2012 ©2012
ISBN	1-5017-5708-3 1-60909-033-0
Descrizione fisica	1 online resource (221 p.)
Collana	Switchgrass Books
Classificazione	FIC000000
Disciplina	813/.52
Soggetti	Finns - Michigan Superstition
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Originally published: New York : The Viking Press, 1925.
Nota di contenuto	Front matter -- CONTENTS -- PART ONE Kullervo -- PART TWO Lemminkainen -- PART THREE Viiniimoinen
Sommario/riassunto	"Lavished with praise at the time of its 1925 publication, Leonard Cline's phantasmagoric God Head is being republished so a new generation of readers can marvel at its dark magic. Cline's mesmerizing debut follows the journey of Paulus Kempf, a fugitive labor agitator who takes refuge with a colony of Finns on the remote shores of Lake Superior in the upper peninsula of Michigan. Kempf, a former surgeon, poet, writer, sculptor, and hyper-intellectual, is at first deeply impressed by the folklore and traditions of the quiet, gentle Finns, not to mention their generosity and hospitality. But he soon begins to play upon their superstitions and exploits their kindness through the power of his cunning and imagination, manipulating them into seeing him as a kind of a god. As Cline's novel hurtles toward its unforgettable climax, Kempf's capacity for compassion or mercy swiftly falls to the wayside as he seduces his host's wife and then murders the man in cold blood. Soon thereafter he carves a giant God Head into the side of a nearby mountainside, which the villagers look upon with awe and fear, held in the thrall of Kempf's mysterious intimations of its malicious power. Having achieved complete domination over the Finns, Kempf ultimately tires

of their gullibility and returns to civilization, his quest for self-mastery complete. God Head's descent into the dark void of the human heart will thrill modern readers who are sure to cherish this lost literary artifact from the shadow canon of American fiction"--