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María Botón-Fernández · Carlos Martín-Vide Sergio Santander-Jiménez Miguel A. Vega-Rodríguez (Eds.)

Algorithms for Computational Biology

Third International Conference, AlCoB 2016 Trujillo, Spain, June 21–22, 2016 Proceedings



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Preface

These proceedings contain the papers that were presented at the Third International Conference on Algorithms for Computational Biology (AlCoB 2016), held in Trujillo, Spain, during June 21–22, 2016.

The scope of AlCoB includes topics of either theoretical or applied interest, namely:

- Exact sequence analysis
- Approximate sequence analysis
- Pairwise sequence alignment
- Multiple sequence alignment
- Sequence assembly
- Genome rearrangement
- Regulatory motif finding
- Phylogeny reconstruction
- Phylogeny comparison
- Structure prediction
- Compressive genomics
- Proteomics: molecular pathways, interaction networks
- Transcriptomics: splicing variants, isoform inference and quantification, differential analysis
- Next-generation sequencing: population genomics, metagenomics, metatranscriptomics
- Microbiome analysis
- Systems biology

AlCoB 2016 received 23 submissions. Most papers were reviewed by three Program Committee members. There were also several external reviewers consulted. After a thorough and lively discussion phase, the committee decided to accept 13 papers (which represents an acceptance rate of about 56 %). The conference program included three invited talks and some presentations of work in progress as well.

The excellent facilities provided by the EasyChair conference management system allowed us to deal with the submissions successfully and handle the preparation of these proceedings in time.

We would like to thank all invited speakers and authors for their contributions, the Program Committee and the external reviewers for their cooperation, and Springer for its very professional publishing work.

March 2016

María Botón-Fernández Carlos Martín-Vide Sergio Santander-Jiménez Miguel A. Vega-Rodríguez

Organization

AlCoB 2016 was organized by the Computer Architecture and Logic Design Group (ARCO) of the University of Extremadura, Cáceres, the Extremadura Centre for Advanced Technologies (CETA-CIEMAT), Trujillo, and the Research Group on Mathematical Linguistics (GRLMC) of Rovira i Virgili University, Tarragona.

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Contents

Invited Talk	
The Trees in the Peaks	3
Biological Networks and Modelling	
Relating Bisimulations with Attractors in Boolean Network Models Daniel Figueiredo	17
Neural Networks Simulation of Feeding Adaptations of Daphnia	26
Generating the Logicome of a Biological Network	38
Biological Structure Processing	
Counting, Generating and Sampling Tree Alignments	53
A New Multi-objective Approach for Molecular Docking Based on RMSD and Binding Energy	65
Gibbs/MCMC Sampling for Multiple RNA Interaction with Sub-optimal Solutions	78
Phylogenetics	
Accumulated Coalescence Rank and Excess Gene Count for Species Tree Inference	93
Bootstrapping Algorithms for Gene Duplication and Speciation Events Agnieszka Mykowiecka and Pawel Górecki	106
Robustness of the Parsimonious Reconciliation Method in Cophylogeny	119

and Marie-France Sagot

X Contents

Seguence	Analysis	and	Rearrangement	
Sequence	Allaivsis	anu	Kearrangement	,

Sorting with Forbidden Intermediates	133
Evaluation and Improvement of Fast Algorithms for Exact Matching on Genome Sequences	145
Identification of Variant Compositions in Related Strains Without Reference	158
New Error Tolerant Method for Search of Long Repeats in DNA Sequences Sergey P. Tsarev and Michael G. Sadovsky	171
Author Index	183