

18th International Workshop on Algorithms in Bioinformatics

WABI 2018, August 20–22, 2018, Helsinki, Finland

Edited by

Laxmi Parida

Esko Ukkonen



Editors

Laxmi Parida
IBM T. J. Watson Research Center
parida@us.ibm.com

Esko Ukkonen
University of Helsinki
esko.ukkonen@helsinki.fi

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■ Preface

This proceedings volume contains papers presented at the 18th Workshop on Algorithms in Bioinformatics (WABI 2018), which was held at Aalto University, Helsinki, Finland, from August 20–22, 2018. WABI 2018 was one of seven conferences that were organized as part of ALGO 2018.

The Workshop on Algorithms in Bioinformatics is an annual conference established in 2001 to cover all aspects of algorithmic work in bioinformatics, computational biology, and systems biology. The workshop is intended as a forum for discrete algorithms and machine-learning methods that address important problems in molecular biology, that are founded on sound models, that are computationally efficient, and that have been implemented and tested in simulations and on real datasets. The meeting's focus is on recent research results, including significant work-in-progress, as well as identifying and exploring directions of future research.

WABI 2018 is grateful for the support to the sponsors of ALGO 2018: Federation of Finnish Learned Societies, Helsinki Institute for Information Technology HIIT, City of Helsinki, and European Association for Theoretical Computer Science (EATCS).

In 2018, a total of 57 manuscripts were submitted to WABI from which 25 were selected for presentation at the conference and are included in this proceedings volume as full papers. Extended versions of selected papers will be invited for publication in a thematic series in the journal *Algorithms for Molecular Biology (AMB)*, published by BioMed Central.

The 25 papers were selected based on a thorough peer review, involving at least three independent reviewers per submitted paper, followed by discussions among the WABI Program Committee members. The selected papers cover a wide range of topics including phylogenetic studies, network analysis, sequence and genome analysis, topological data analysis and analysis of mass spectrometry data.

We thank all the authors of submitted papers and the members of the WABI Program Committee and their reviewers for their efforts that made this conference possible. We are also grateful to the WABI Steering Committee for their help and advice. We thank all the conference participants and speakers who contributed to a great scientific program. In particular, we are indebted to the keynote speaker of the conference, Mihai Pop, for his presentation. We also thank Niina Haiminen and Jarkko Toivonen as well as Päivi Lindeman and Pirjo Mulari for their help with editing the proceedings and setting up the poster session. Finally, we thank the ALGO Organizing Committee and Parinya Chalermsook, Petteri Kaski, and Jukka Suomela in particular for their hard work in making all of the local arrangements.

June 2018

Laxmi Parida
Esko Ukkonen



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■ List of Authors

Chabrielle Allen
caa6@rice.edu
Rice University
United States

Mai Alzamel
mai.alzamel@kcl.ac.uk
King's College London
United Kingdom

Lorraine A. K. Ayad
lorraine.ayad@kcl.ac.uk
King's College London
United Kingdom

Saugata Basu
sbasu@purdue.edu
Purdue University
United States

Travis Benedict
trb6@rie.edu
Rice University
United States

Bonnie Berger
bab@csail.mit.edu
MIT
United States

Giulia Bernardini
giuliabernardini.morg@gmail.com
University of Milan-Bicocca
Italy

Sebastian Böcker
sebastian.boecker@uni-jena.de
Friedrich Schiller University Jena
Germany

Julian Booth
julius_booth@sfu.ca
Simon Fraser University
Canada

Christina Boucher
cboucher@cise.ufl.edu
University of Florida
United States

Bertrand Caron
b.caron@uq.edu.au
School of Chemistry & Molecular Biosciences,
The University of Queensland, St Lucia
Australia

Bastien Cazaux
bastien.cazaux@lirmm.fr
University of Helsinki
Finland

Cedric Chauve
cedric_chauve@sfu.ca
Simon Fraser University
Canada

Leonid Chindelevitch
leonid@sfu.ca
Simon Fraser University
Canada

Stéphane Chrétien
stephane.chretien@npl.co.uk
National Physical Laboratory
United Kingdom

Michał Aleksander Ciach
m_ciach@student.uw.edu.pl
Institute of Mathematics, Informatics and
Mechanics, University of Warsaw
Poland

Tamal K. Dey
dey.8@osu.edu
The Ohio State University
United States

Riccardo Dondi
riccardo.dondi@unibg.it
Università degli Studi di Bergamo
Italy

Kai Dührkop
Kai.Duehrkop@uni-jena.de
Friedrich-Schiller-University Jena
Germany

18th International Workshop on Algorithms in Bioinformatics (WABI 2018).
Editors: Laxmi Parida and Esko Ukkonen



Leibniz International Proceedings in Informatics
Schloss Dagstuhl – Leibniz-Zentrum für Informatik, Dagstuhl Publishing, Germany

Peter Dulworth
psd2@rice.edu
Rice University
United States

Richard Durbin
rd@sanger.ac.uk
Department of Genetics, University of
Cambridge
United Kingdom

Lavinia Egidì
lavinia.egidi@mfn.unipmn.it
Computer Science Institute, University of
Eastern Piedmont
Italy

Mohammed El-Kebir
melkebir@illinois.edu
University of Illinois at Urbana-Champaign
United States

Ryan A. Leo Elworth
r.a.leo.elworth@rice.edu
Rice University
United States

Martin S. Engler
martin.engler@cwi.nl
Life Sciences and Health Group, Centrum
Wiskunde & Informatics, Amsterdam
Netherlands

Travis Gagie
travis.gagie@gmail.com
Diego Portales University
Chile

Anna Gambin
aniag@mimuw.edu.pl
Institute of Mathematics, Informatics and
Mechanics, University of Warsaw
Poland

Erik Garrison
eg10@sanger.ac.uk
Wellcome Sanger Institute
United Kingdom

Daan P. Geerke
d.p.geerke@vu.nl
AIMMS Division of Molecular and
Computational Toxicology, Vrije Universiteit
Amsterdam
Netherlands

Roberto Grossi
grossi@di.unipi.it
University of Pisa
Italy

Christophe Guyeux
christophe.guyeux@univ-fcomte.fr
University of Bourgogne Franche-Comté
France

Morteza Chalabi Hajkarim
morteza.hajkarim@bric.ku.dk
University of Copenhagen
Denmark

Till Hartmann
Till.Hartmann@uni-due.de
University of Duisburg-Essen
Germany

Costas S. Iliopoulos
c.iliopoulos@kcl.ac.uk
King's College London
United Kingdom

Nikolai Karpov
nkarpov@iu.edu
Indiana University Bloomington
United States

Gunnar W. Klau
gunnar.klau@hhu.de
Algorithmic Bioinformatics, Heinrich Heine
University Düsseldorf
Germany

Dmitry Kosolobov
dkosolobov@mail.ru
Ural Federal University
Russia

Alan Kuhnle
akuhnle418@gmail.com
University of Florida
United States

Manuel Lafond
mlafond2@uOttawa.ca
Université de Sherbrooke
Canada

Marie A. Lataretu
marie.lataretu@uni-jena.de
Friedrich-Schiller-University Jena
Germany

Felipe A. Louza
louza@usp.br
Department of Computing and Mathematics,
University of São Paulo
Brazil

Szymon Majewski
smajewski@impan.pl
Institute of Mathematics, Polish Academy of
Sciences
Poland

Veli Mäkinen
vmakinen@cs.helsinki.fi
University of Helsinki
Finland

Salem Malikic
smalikic@sfu.ca
Simon Fraser University
Canada

Sayan Mandal
mandal.25@osu.edu
The Ohio State University
United States

Mehrdad Mansouri
mehrdad_mansouri@sfu.ca
Simon Fraser University
Canada

Giovanni Manzini
giovanni.manzini@unipmn.it
Computer Science Institute, University of
Eastern Piedmont
Italy

Alan E. Mark
a.e.mark@uq.edu.au
School of Chemistry & Molecular Biosciences,
The University of Queensland, St Lucia
Australia

Błażej Miasojedow
bmia@mimuw.edu.pl
Institute of Mathematics, Informatics and
Mechanics, University of Warsaw
Poland

Serge Moulin
serge.moulin@hotmail.fr
University of Bourgogne Franche-Comté
France

Martin D. Muggli
martin.muggli@colostate.edu
Colorado State University
United States

Luay Nakhleh
nakhleh@cs.rice.edu
Rice University
United States

Wanda Niemyska
w.niemyska@mimuw.edu.pl
Institute of Mathematics, Informatics and
Mechanics, University of Warsaw
Poland

Tuukka Norri
tsnorri@iki.fi
University of Helsinki
Finland

Adam M. Novak
anovak@soe.ucsc.edu
University of California, Santa Cruz
United States

Laxmi Parida
parida@us.ibm.com
IBM T. J. Watson Research Center
United States

Benedict J. Paten
bpaten@ucsc.edu
University of California, Santa Cruz
United States

Nadia Pisanti
pisanti@di.unipi.it
Dipartimento di Informatica, Università di
Pisa, Italy & Erable Team, INRIA
Italy

Solon P. Pissis
solon.pissis@kcl.ac.uk
King's College London
United Kingdom

Nicola Prezza
nicola.prezza@di.unipi.it
University of Pisa
Italy

Simon J. Puglisi
simon.j.puglisi@gmail.com
University of Helsinki
Finland

Md. Khaledur Rahman
morahma@uemail.iu.edu
Indiana University Bloomington
United States

Sven Rahmann
Sven.Rahmann@uni-due.de
University of Duisburg-Essen
Germany

Satish Rao
satishr@cs.berkeley.edu
University of California, Berkeley
United States

Pasi Rastas
pasi.rastas@helsinki.fi
University of Helsinki
Finland

Yohei M. Rosen
yohei@ucsc.edu
University of California, Santa Cruz
United States

Giovanna Rosone
giovanna.rosone@unipi.it
Dipartimento di Informatica - Università di
Pisa
Italy

S. Cenk Sahinalp
cenksahi@indiana.edu
Indiana University Bloomington
United States

Leena Salmela
leena.salmela@cs.helsinki.fi
University of Helsinki
Finland

Marinella Sciortino
marinella.sciortino@unipa.it
University of Palermo
Italy

Celine Scornavacca
celine.scornavacca@umontpellier.fr
Institut des Sciences de l'Evolution
(Université de Montpellier, CNRS, IRD,
EPHE)
France

Roded Sharan
roded@post.tau.ac.il
Tel-Aviv University
Israel

Jouni Sirén
jouni.siren@iki.fi
University of California, Santa Cruz
United States

Michał Startek
mist@duch.mimuw.edu.pl
Institute of Mathematics, Informatics and
Mechanics, University of Warsaw
Poland

Tamon Stephen
tamon@sfu.ca
Simon Fraser University
Canada

Barak Sternberg
barakolo@gmail.com
Tel-Aviv University
Israel

Guilherme P. Telles
gpt@ic.unicamp.br
Institute of Computing, University of
Campinas
Brazil

Eli Upfal
eli@cs.brown.edu
Brown University
United States

Filippo Utro
futro@us.ibm.com
IBM T. J Watson Research Center
United States

Fabio Vandin
fabio.vandin@unipd.it
University of Padova
Italy

Lourens Veen
l.veen@esciencecenter.nl
Netherlands eScience Center, Amsterdam
Netherlands

Margaryta Vityaz
margaryta_vityaz@sfu.ca
Simon Fraser University
Canada

Riku Walve
riku.walve@helsinki.fi
University of Helsinki
Finland

Tandy Warnow
warnow@illinois.edu
University of Illinois at Urbana-Champaign
United States

W. Timothy J. White
tim.white@bihealth.de
Berlin Institute of Health
Germany

Hooman Zabeti
hzabeti@sfu.ca
Simon Fraser University
Canada

Qiuyi (Richard) Zhang
qiyi@math.berkeley.edu
University of California, Berkeley
United States

