

Lecture Notes in Computer Science

Edited by G. Goos, J. Hartmanis and J. van Leeuwen

2054

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Anne Condon Grzegorz Rozenberg (Eds.)

DNA Computing

6th International Workshop on DNA-Based Computers, DNA 2000
Leiden, The Netherlands, June 13-17, 2000
Revised Papers



Springer

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Cataloging-in-Publication Data applied for

Die Deutsche Bibliothek - CIP-Einheitsaufnahme

DNA computing : revised papers / 6th International Workshop on DNA Based Computers, DNA 2000, Leiden, The Netherlands, June 13 - 17, 2000. Anne Condon ; Grzegorz Rozenberg (ed.). - Berlin ; Heidelberg ; New York ; Barcelona ; Hong Kong ; London ; Milan ; Paris ; Singapore ; Tokyo : Springer, 2001
(Lecture notes in computer science ; 2054)
ISBN 3-540-42076-2

CR Subject Classification (1998): F.1, F.2.2, I.2.9, J.3

ISSN 0302-9743

ISBN 3-540-42076-2 Springer-Verlag Berlin Heidelberg New York

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Springer-Verlag Berlin Heidelberg New York
a member of BertelsmannSpringer Science+Business Media GmbH

<http://www.springer.de>

© Springer-Verlag Berlin Heidelberg 2001
Printed in Germany

Typesetting: Camera-ready by author, data conversion by PTP Berlin, Stefan Sossna
Printed on acid-free paper SPIN 10781535 06/3142 5 4 3 2 1 0

Preface

The papers in this volume were presented at the 6th International Meeting on DNA Based Computers, organized by the Leiden Center for Natural Computing and held from June 13 to June 17, 2000 at The Lorentz Center, University of Leiden, Leiden, The Netherlands. DNA Computing is a novel and fascinating development at the interface of computer science and molecular biology. It has emerged in recent years, not simply as an exciting technology for information processing, but also as a catalyst for knowledge transfer between information processing, nanotechnology, and biology. This area of research has the potential to change our understanding of the theory and practice of computing.

The call for papers and poster presentations sought contributions of original research and technical expositions in all areas of bio-computation. A total of 33 abstracts were submitted of which 16 were accepted for presentation and included in the proceedings. The papers were selected by the program committee based on originality and quality of research and on relevance to the bio-computing field. Invited talks were given by Masami Hagiya (Tokyo University), Laura Landweber (Princeton University), John Reif (Duke University), Thomas Schmidt (Leiden University), and Lloyd M. Smith (University of Wisconsin). Invited papers based on the talks by Hagiya and Reif are included in this volume, along with the contributed papers. Additional tutorials were held on the first and last days of the conference.

The conference was held under the auspices of the ACM Special Interest Group on Algorithms and Computation Theory (ACM SIGACT) and the European Association for Theoretical Computer Science (EATCS). We gratefully acknowledge support and sponsorship from the following organizations: the European Molecular Computing Consortium (EMCC), the European Commission (EC) Institute for Programming research and Algorithmics (IPA), the Leiden Institute of Advanced Computer Science (LIACS), the Lorentz Visitor Center (LC), and the Netherlands Organization for Scientific Research (NWO).

The program committee wishes to thank all those who submitted papers for consideration.

March 2001

Anne Condon
Program Chair

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Table of Contents

Engineered Communications for Microbial Robotics	1
<i>Ron Weiss and Thomas F. Knight, Jr.</i>	
Successive State Transitions with I/O Interface by Molecules	17
<i>Ken Komiya, Kensaku Sakamoto, Hidetaka Gouzu, Shigeyuki Yokoyama, Masanori Arita, Akio Nishikawa, and Masami Hagiya</i>	
Solution of a Satisfiability Problem on a Gel-Based DNA Computer	27
<i>Ravinderjit S. Braich, Cliff Johnson, Paul W.K. Rothmund, Darryl Hwang, Nickolas Chelyapov, and Leonard M. Adleman</i>	
Diophantine Equations and Splicing: A New Demonstration of the Generative Capability of H Systems	43
<i>Pierluigi Frisco</i>	
About Time-Varying Distributed H Systems	53
<i>Maurice Margenstern and Yurii Rogozhin</i>	
String Tile Models for DNA Computing by Self-Assembly	63
<i>Erik Winfree, Tony Eng, and Grzegorz Rozenberg</i>	
From Molecular Computing to Molecular Programming	89
<i>Masami Hagiya</i>	
Graph Replacement Chemistry for DNA Processing	103
<i>John S. McCaskill and Ulrich Niemann</i>	
DNA and Circular Splicing	117
<i>Paola Bonizzoni, Clelia De Felice, Giancarlo Mauri, and Rosalba Zizza</i>	
Molecular Computing with Generalized Homogeneous P-Systems	130
<i>Rudolf Freund and Franziska Freund</i>	
Computationally Inspired Biotechnologies: Improved DNA Synthesis and Associative Search Using Error-Correcting Codes and Vector-Quantization	145
<i>John H. Reif and Thomas H. LaBean</i>	
Challenges and Applications for Self-Assembled DNA Nanostructures	173
<i>John H. Reif, Thomas H. LaBean, and Nadrian C. Seeman</i>	
A Space-Efficient Randomized DNA Algorithm for k -Sat	199
<i>Kevin Chen and Vijay Ramachandran</i>	
A DNA-Based Random Walk Method for Solving k -SAT	209
<i>Sergio Díaz, Juan Luis Esteban, and Mitsunori Ogihara</i>	

Solving Computational Learning Problems of Boolean Formulae on DNA
Computers 220
Yasubumi Sakakibara

The Fidelity of Annealing-Ligation: A Theoretical Analysis 231
John A. Rose and Russell J. Deaton

DNA Implementation of a Royal Road Fitness Evaluation 247
Elizabeth Goode, David Harlan Wood, and Junghuei Chen

Steady Flow Micro-Reactor Module for Pipelined DNA Computations 263
*John S. McCaskill, Robert Penchovsky, Marlies Gohlke,
Jörg Ackermann, and Thomas Rucker*

Author Index 271