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Preface

The papers in this volume were presented at the 23rd International Symposium on Algorithms and Computation (ISAAC 2012), held at National Taiwan University, Taipei, Taiwan, on December 19–21, 2012. In the past, ISAAC was held in Tokyo (1990), Taipei (1991), Nagoya (1992), Hong Kong (1993), Beijing (1994), Cairns (1995), Osaka (1996), Singapore (1997), Taejon (1998), Chennai (1999), Taipei (2000), Christchurch (2001), Vancouver (2002), Kyoto (2003), Hong Kong (2004), Hainan (2005), Kolkata (2006), Sendai (2007), Gold Coast (2008), Hawaii (2009), Jeju (2010), and Yokohama (2011).

The mission of the ISAAC series is to provide a top-notch forum for researchers working in algorithms and theory of computation. Papers presenting original research in all areas of algorithms and theory of computation are sought. In response to the call-for-papers, ISAAC 2012 received 174 submissions from 33 countries. The Program Committee selected 68 papers for oral presentation. “Algorithmica,” “Theoretical Computer Science,” and the “International Journal of Computational Geometry and Applications” will publish a special issue dedicated to selected papers from ISAAC 2012.

The best student paper awards were presented to Nanao Kita for her paper “A Partially Ordered Structure and a Generalization of the Canonical Partition for General Graphs with Perfect Matchings” and to Norie Fu for her paper “A Strongly Polynomial-Time Algorithm for the Shortest Path Problem on Coherent Planar Periodic Graphs.”

We thank the invited speakers, John E. Hopcroft from Cornell University, USA, Timothy M. Chan from the University of Waterloo, Canada, and Erik D. Demaine from MIT, USA, for their distinguished lectures.

We thank all Program Committee members and external reviewers for their excellent work in the review process. We thank the Organizing Committee, chaired by Hung-Lung Wang, and conference volunteers for their extraordinary engagement in the conference preparation. We also thank the Advisory Committee, chaired by Takeshi Tokuyama, for their valuable guidance. Finally, we thank our sponsoring institutions for their support.

December 2012

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Table of Contents

Invited Talk (I)

Future Directions in Computer Science Research	1
<i>John E. Hopcroft</i>	

Invited Talk (II)

Combinatorial Geometry and Approximation Algorithms	2
<i>Timothy M. Chan</i>	

Invited Talk (III)

Origami Robots and Star Trek Replicators	3
<i>Erik D. Demaine</i>	

Graph Algorithms (I)

Strong Conflict-Free Coloring for Intervals	4
<i>Panagiotis Cheilaris, Luisa Gargano, Adele A. Rescigno, and Shakhar Smorodinsky</i>	

Closing Complexity Gaps for Coloring Problems on H -Free Graphs	14
<i>Petr A. Golovach, Daniël Paulusma, and Jian Song</i>	

Randomly Coloring Regular Bipartite Graphs and Graphs with Bounded Common Neighbors	24
<i>Ching-Chen Kuo and Hsueh-I Lu</i>	

Reconfiguration of List $L(2,1)$ -Labelings in a Graph	34
<i>Takehiro Ito, Kazuto Kawamura, Hirotaka Ono, and Xiao Zhou</i>	

Online and Streaming Algorithms

An $8/3$ Lower Bound for Online Dynamic Bin Packing	44
<i>Prudence W.H. Wong, Fencol C.C. Yung, and Mihai Burcea</i>	

Computing k -center over Streaming Data for Small k	54
<i>Hee-Kap Ahn, Hyo-Sil Kim, Sang-Sub Kim, and Wanbin Son</i>	

Precision vs Confidence Tradeoffs for ℓ_2 -Based Frequency Estimation in Data Streams	64
<i>Sumit Ganguly</i>	

Competitive Design and Analysis for Machine-Minimizing Job
Scheduling Problem 75
Mong-Jen Kao, Jian-Jia Chen, Ignaz Rutter, and Dorothea Wagner

Combinatorial Optimization (I)

A Partially Ordered Structure and a Generalization of the Canonical
Partition for General Graphs with Perfect Matchings 85
Nanao Kita

Fast and Simple Fully-Dynamic Cut Tree Construction 95
Tanja Hartmann and Dorothea Wagner

Green Scheduling, Flows and Matchings 106
Evrpidis Bampis, Dimitrios Letsios, and Giorgio Lucarelli

Popular and Clan-Popular b -Matchings 116
Katarzyna Paluch

Computational Complexity (I)

Kernelization and Parameterized Complexity of Star Editing and Union
Editing 126
Jiong Guo and Yash Raj Shrestha

On the Advice Complexity of Buffer Management 136
Reza Dorrigiv, Meng He, and Norbert Zeh

On the Complexity of the Maximum Common Subgraph Problem
for Partial k -Trees of Bounded Degree 146
Tatsuya Akutsu and Takeyuki Tamura

Speeding Up Shortest Path Algorithms 156
Andrej Brodnik and Marko Grgurovič

Computational Geometry (I)

How Many Potatoes Are in a Mesh? 166
Marc van Kreveld, Maarten Löffler, and János Pach

On Higher Order Voronoi Diagrams of Line Segments 177
Evanthia Papadopoulou and Maksym Zavershynskiy

On the Farthest Line-Segment Voronoi Diagram 187
Evanthia Papadopoulou and Sandeep Kumar Dey

String Algorithms

Computing the Longest Common Subsequence of Two Run-Length Encoded Strings	197
<i>Yoshifumi Sakai</i>	
Efficient Counting of Square Substrings in a Tree	207
<i>Tomasz Kociumaka, Jakub Pachocki, Jakub Radoszewski, Wojciech Rytter, and Tomasz Waleń</i>	
A General Method for Improving Insertion-Based Adaptive Sorting	217
<i>Riku Saikkonen and Eljas Soisalon-Soininen</i>	

Computational Complexity (II)

Counting Partitions of Graphs	227
<i>Pavol Hell, Miki Hermann, and Mayssam Mohammadi Nevisi</i>	
Constant Unary Constraints and Symmetric Real-Weighted Counting CSPs	237
<i>Tomoyuki Yamakami</i>	
Interval Scheduling and Colorful Independent Sets	247
<i>René van Bevern, Matthias Mnich, Rolf Niedermeier, and Mathias Weller</i>	
More on a Problem of Zarankiewicz	257
<i>Chinmoy Dutta and Jaikumar Radhakrishnan</i>	

Graph Algorithms (II)

Efficient Dominating and Edge Dominating Sets for Graphs and Hypergraphs	267
<i>Andreas Brandstädt, Arne Leitert, and Dieter Rautenbach</i>	
On the Hyperbolicity of Small-World and Tree-Like Random Graphs	278
<i>Wei Chen, Wenjie Fang, Guangda Hu, and Michael W. Mahoney</i>	
On the Neighbourhood Helly of Some Graph Classes and Applications to the Enumeration of Minimal Dominating Sets	289
<i>Mamadou Moustapha Kanté, Vincent Limouzy, Arnaud Mary, and Lhouari Nourine</i>	
Induced Immersions	299
<i>Rémy Belmonte, Pim van 't Hof, and Marcin Kamiński</i>	

Computational Geometry (II)

Rectilinear Covering for Imprecise Input Points (Extended Abstract) ...	309
<i>Hee-Kap Ahn, Sang Won Bae, and Shin-ichi Tanigawa</i>	
Robust Nonparametric Data Approximation of Point Sets via Data Reduction	319
<i>Stephane Durocher, Alexandre Leblanc, Jason Morrison, and Matthew Skala</i>	
Optimal Point Movement for Covering Circular Regions	332
<i>Danny Z. Chen, Xuehou Tan, Haitao Wang, and Gangshan Wu</i>	
Solving Circular Integral Block Decomposition in Polynomial Time	342
<i>Yunlong Liu and Xiaodong Wu</i>	

Approximation Algorithms

The Canadian Traveller Problem Revisited	352
<i>Yamming Huang and Chung-Shou Liao</i>	
Vehicle Scheduling on a Graph Revisited	362
<i>Wei Yu, Mordecai Golin, and Guochuan Zhang</i>	
A 4.31-Approximation for the Geometric Unique Coverage Problem on Unit Disks	372
<i>Takehiro Ito, Shin-ichi Nakano, Yoshio Okamoto, Yota Otachi, Ryuhei Uehara, Takeaki Uno, and Yushi Uno</i>	
The Minimum Vulnerability Problem	382
<i>Sepehr Assadi, Ehsan Emamjomeh-Zadeh, Ashkan Norouzi-Fard, Sadra Yazdanbod, and Hamid Zarrabi-Zadeh</i>	

Graph Algorithms (III)

A Strongly Polynomial Time Algorithm for the Shortest Path Problem on Coherent Planar Periodic Graphs	392
<i>Norie Fu</i>	
Cubic Augmentation of Planar Graphs	402
<i>Tanja Hartmann, Jonathan Rollin, and Ignaz Rutter</i>	
On the Number of Upward Planar Orientations of Maximal Planar Graphs	413
<i>Fabrizio Frati, Joachim Gudmundsson, and Emo Welzl</i>	

Universal Point Subsets for Planar Graphs	423
<i>Patrizio Angelini, Carla Binucci, William Evans, Ferran Hurtado, Giuseppe Liotta, Tamara Mchedlidze, Henk Meijer, and Yoshio Okamoto</i>	

Computational Complexity (III)

Abstract Flows over Time: A First Step towards Solving Dynamic Packing Problems	433
<i>Jan-Philipp W. Kappmeier, Jannik Matuschke, and Britta Peis</i>	
Extending Partial Representations of Subclasses of Chordal Graphs	444
<i>Pavel Klavík, Jan Kratochvíl, Yota Otachi, and Toshiki Saitoh</i>	
Isomorphism for Graphs of Bounded Connected-Path-Distance-Width ..	455
<i>Yota Otachi</i>	
Algorithmic Aspects of the Intersection and Overlap Numbers of a Graph	465
<i>Danny Hermelin, Romeo Rizzi, and Stéphane Vialette</i>	

Graph Drawing

Linear Layouts in Submodular Systems	475
<i>Hiroshi Nagamochi</i>	
Segmental Mapping and Distance for Rooted Labeled Ordered Trees ...	485
<i>Tomohiro Kan, Shoichi Higuchi, and Kouichi Hirata</i>	
Detecting Induced Minors in AT-Free Graphs	495
<i>Petr A. Golovach, Dieter Kratsch, and Daniël Paulusma</i>	
Degree-Constrained Orientations of Embedded Graphs	506
<i>Yann Disser and Jannik Matuschke</i>	
Interval Graph Representation with Given Interval and Intersection Lengths	517
<i>Johannes Köbler, Sebastian Kuhnert, and Osamu Watanabe</i>	

Data Structures

Finger Search in the Implicit Model	527
<i>Gerth Stølting Brodal, Jesper Sindahl Nielsen, and Jakob Truelsen</i>	
A Framework for Succinct Labeled Ordinal Trees over Large Alphabets	537
<i>Meng He, J. Ian Munro, and Gelin Zhou</i>	

A Space-Efficient Framework for Dynamic Point Location	548
<i>Meng He, Patrick K. Nicholson, and Norbert Zeh</i>	
Selection in the Presence of Memory Faults, with Applications to In-place Resilient Sorting	558
<i>Tsvi Kopelowitz and Nimrod Talmon</i>	
An Improved Algorithm for Static 3D Dominance Reporting in the Pointer Machine	568
<i>Christos Makris and Konstantinos Tsakalidis</i>	

Combinatorial Optimization (II)

The Multi-Service Center Problem	578
<i>Hung-I Yu and Cheng-Chung Li</i>	
Computing Minmax Regret 1-Median on a Tree Network with Positive/Negative Vertex Weights	588
<i>Binay Bhattacharya, Tsunehiko Kameda, and Zhao Song</i>	
Fence Patrolling by Mobile Agents with Distinct Speeds	598
<i>Akitoshi Kawamura and Yusuke Kobayashi</i>	

Computational Geometry (III)

Weak Visibility Queries of Line Segments in Simple Polygons	609
<i>Danny Z. Chen and Haitao Wang</i>	
Beyond Homothetic Polygons: Recognition and Maximum Clique.	619
<i>Konstanty Junosza-Szaniawski, Jan Kratochvíl, Martin Pergel, and Paweł Rzażewski</i>	
Area Bounds of Rectilinear Polygons Realized by Angle Sequences	629
<i>Sang Won Bae, Yoshio Okamoto, and Chan-Su Shin</i>	

Randomized Algorithms

A Time-Efficient Output-Sensitive Quantum Algorithm for Boolean Matrix Multiplication	639
<i>François Le Gall</i>	
On Almost Disjunct Matrices for Group Testing	649
<i>Arya Mazumdar</i>	
Parameterized Clique on Scale-Free Networks	659
<i>Tobias Friedrich and Anton Krohmer</i>	

Algorithmic Game Theory

Multi-unit Auctions with Budgets and Non-uniform Valuations	669
<i>H.F. Ting and Xiangzhong Xiang</i>	
Efficient Computation of Power Indices for Weighted Majority Games	679
<i>Takeaki Uno</i>	
Revenue Maximization in a Bayesian Double Auction Market	690
<i>Xiaotie Deng, Paul Goldberg, Bo Tang, and Jinshan Zhang</i>	
Author Index	701