

# Table of Contents

Recent Developments in Maximum Flow Algorithms (Invited Lecture) . . . .	1
<i>A. V. Goldberg</i>	
An $\epsilon$ - Approximation Algorithm for Weighted Shortest Paths on Polyhedral Surfaces . . . . .	11
<i>L. Aleksandrov, M. Lanthier, A. Maheshwari, J. R. Sack</i>	
Facility Location with Dynamic Distance Functions . . . . .	23
<i>R. Bhatia, S. Guha, S. Khuller, Y. J. Sussmann</i>	
An Approximation Scheme for Bin Packing with Conflicts . . . . .	35
<i>K. Jansen</i>	
Approximations for the General Block Distribution of a Matrix . . . . .	47
<i>B. Aspvall, M. M. Halldórsson, F. Manne</i>	
An Optimal Algorithm for Computing Visible Nearest Foreign Neighbors among Colored Line Segments . . . . .	59
<i>T. Graf, K. Veezhinathan</i>	
Moving an Angle around a Region . . . . .	71
<i>F. Hoffmann, C. Icking, R. Klein, K. Kriegel</i>	
Models and Motion Planning . . . . .	83
<i>M. de Berg, M. J. Katz, M. Overmars, A. F. van der Stappen, J. Vleugels</i>	
Constrained Square-Center Problems . . . . .	95
<i>M. J. Katz, K. Kedem, M. Segal</i>	
Worst-Case Efficient External-Memory Priority Queues . . . . .	107
<i>G. S. Brodal, J. Katajainen</i>	
Simple Confluently Persistent Catenable Lists . . . . .	119
<i>H. Kaplan, C. Okasaki, R. E. Tarjan</i>	
Improved Upper Bounds for Time-Space Tradeoffs for Selection with Limited Storage . . . . .	131
<i>V. Raman, S. Ramnath</i>	
Probabilistic Data Structures for Priority Queues . . . . .	143
<i>R. Sridhar, K. Rajasekar, C. Pandu Rangan</i>	

Extractors for Weak Random Sources and Their Applications (Invited Lecture) . . . . .	155
<i>D. Zuckerman</i>	
Comparator Networks for Binary Heap Construction . . . . .	158
<i>G. S. Brodal, M. C. Pinotti</i>	
Two-Variable Linear Programming in Parallel . . . . .	169
<i>D. Z. Chen, J. Xu</i>	
Optimal Deterministic Protocols for Mobile Robots on a Grid . . . . .	181
<i>R. Grossi, A. Pietracaprina, G. Pucci</i>	
Concurrent Multicast in Weighted Networks . . . . .	193
<i>G. De Marco, L. Gargano, U. Vaccaro</i>	
Some Recent Strong Inapproximability Results (Invited Lecture) . . . . .	205
<i>J. Håstad</i>	
Minimal Elimination of Planar Graphs . . . . .	210
<i>E. Dahlhaus</i>	
Memory Requirements for Table Computations in Partial $k$ -Tree Algorithms . . . . .	222
<i>B. Aspvall, A. Proskurowski, J. A. Telle</i>	
Formal Language Constrained Path Problems . . . . .	234
<i>C. Barrett, R. Jacob, M. Marathe</i>	
Local Search Algorithms for SAT: Worst-Case Analysis . . . . .	246
<i>E. A. Hirsch</i>	
Speed Is More Powerful than Clairvoyance . . . . .	255
<i>P. Berman, C. Coulston</i>	
Randomized Online Multi-threaded Paging . . . . .	264
<i>S. S. Seiden</i>	
Determinant: Old Algorithms, New Insights . . . . .	276
<i>M. Mahajan, V. Vinay</i>	
Solving Fundamental Problems on Sparse-Meshes . . . . .	288
<i>J. F. Sibeyn</i>	
Output-Sensitive Cell Enumeration in Hyperplane Arrangements . . . . .	300
<i>N. Sleumer</i>	
Fast and Efficient Computation of Additively Weighted Voronoi Cells for Applications in Molecular Biology . . . . .	310
<i>H. M. Will</i>	

On the Number of Regular Vertices of the Union of Jordan Regions . . . . .	322
<i>B. Aronov, A. Efrat, D. Halperin, M. Sharir</i>	
Distribution-Sensitive Algorithms . . . . .	335
<i>S. Sen, N. Gupta</i>	
<b>Author Index</b> . . . . .	347

Algorithm Theory - SWAT'98

6th Scandinavian Workshop on Algorithm Theory,  
Stockholm, Sweden, July 8-10, 1998, Proceedings

Arnborg, S.; Ivansson, L. (Eds.)

1998, X, 350 p., Softcover

ISBN: 978-3-540-64682-2