

Table of Contents

Invited Lectures

Selecting Problems for Algorithm Evaluation	1
<i>Andrew V. Goldberg</i>	
BSP Algorithms – “Write Once, Run Anywhere”	12
<i>Bill McColl</i>	
Ten Years of LEDA: Some Thoughts	14
<i>Kurt Mehlhorn</i>	

Contributed Papers

Computing the K Shortest Paths: A New Algorithm and an Experimental Comparison	15
<i>Víctor M. Jiménez, Andrés Marzal</i>	
Efficient Implementation of Lazy Suffix Trees	30
<i>Robert Giegerich, Stefan Kurtz, Jens Stoye</i>	
Experiments with List Ranking for Explicit Multi-Threaded (XMT) Instruction Parallelism (Extended Abstract)	43
<i>Shlomit Dascal, Uzi Vishkin</i>	
Finding Minimum Congestion Spanning Trees	60
<i>Renato Fonseca F. Werneck, João Carlos Setubal, Arlindo F. da Conceição</i>	
Evaluation of an Algorithm for the Transversal Hypergraph Problem	72
<i>Dimitris J. Kavvadias, Elias C. Stavropoulos</i>	
Construction Heuristics and Domination Analysis for the Asymmetric TSP	85
<i>Fred Glover, Gregory Gutin, Anders Yeo, Alexey Zverovich</i>	
Counting in Mobile Networks: Theory and Experimentation	95
<i>Kostas Hatzis, George Pentaris, Paul Spirakis, Basil Tampakas</i>	
Dijkstra’s Algorithm On-Line: An Empirical Case Study from Public Railroad Transport	110
<i>Frank Schulz, Dorothea Wagner, Karsten Weihe</i>	
Implementation and Experimental Evaluation of Graph Connectivity Algorithms Using LEDA	124
<i>Panagiota Fatourou, Paul Spirakis, Panagiotis Zarafidis, Anna Zoura</i>	

On-Line Zone Construction in Arrangements of Lines in the Plane	139
<i>Yuval Aharoni, Dan Halperin, Iddo Hanniel, Sarel Har-Peled, Chaim Linhart</i>	
The Design and Implementation of Planar Maps in CGAL	154
<i>Eyal Flato, Dan Halperin, Iddo Hanniel, Oren Nechushtan</i>	
An Easy to Use Implementation of Linear Perturbations within CGAL	169
<i>Jochen Comes, Mark Ziegelmann</i>	
Analysing Cache Effects in Distribution Sorting	183
<i>Naila Rahman, Rajeev Raman</i>	
Fast Regular Expression Search	198
<i>Gonzalo Navarro, Mathieu Raffinot</i>	
An Experimental Evaluation of Hybrid Data Structures for Searching	213
<i>Maureen Korda, Rajeev Raman</i>	
LEDA-SM: Extending LEDA to Secondary Memory	228
<i>Andreas Crauser, Kurt Mehlhorn</i>	
A Priority Queue Transform	243
<i>Michael L. Fredman</i>	
Implementation Issues and Experimental Study of a Wavelength Routing Algorithm for Irregular All-Optical Networks	258
<i>Athanasios Bouganis, Ioannis Caragiannis, Christos Kaklamanis</i>	
Estimating Large Distances in Phylogenetic Reconstruction	271
<i>Daniel H. Huson, Kelly Ann Smith, Tandy J. Warnow</i>	
The Performance of Concurrent Red-Black Tree Algorithms	286
<i>Sabine Hanke</i>	
Performance Engineering Case Study: Heap Construction	301
<i>Jesper Bojesen, Jyrki Katajainen, Maz Spork</i>	
A Fast and Simple Local Search for Graph Coloring	316
<i>Massimiliano Caramia, Paolo Dell’Olmo</i>	
BALL: Biochemical Algorithms Library	330
<i>Nicolas Boghossian, Oliver Kohlbacher, Hans-Peter Lenhof</i>	
An Experimental Study of Priority Queues in External Memory	345
<i>Klaus Brengel, Andreas Crauser, Paolo Ferragina, Ulrich Meyer</i>	
Author Index	361

Algorithm Engineering

3rd International Workshop, WAE'99 London, UK, July

19-21, 1999 Proceedings

Vitter, J.S.; Zaroliagis, C. (Eds.)

1999, VIII, 368 p., Softcover

ISBN: 978-3-540-66427-7