

WEA'2004 - III International Workshop on Experimental and Efficient Algorithms

Angra dos Reis, Brazil, May 25-28, 2004

Conference Program

Tuesday, May 25 - Morning:

Session TU1 - Chairperson: Celso C. Ribeiro

8:15 - 8:30: Opening address and general information

8:30 - 9:30: Giuseppe F. Italiano, "Engineering shortest path algorithms"

9:30 - 10:00: P. Bartodziej and U. Derigs, "On an experimental algorithm for revenue management for cargo airlines"

Coffee break

Session TU2 - Chairperson: Giuseppe F. Italiano

10:30 - 11:00: C.C. de Souza, A.M. Lima, N. Moreano, and G. Araujo, "The datapath merging problem in reconfigurable systems: Lower bounds and heuristic evaluation"

11:00 - 11:30: J. Du and S.G. Kolliopoulos, "Implementing approximation algorithms for the single-source unsplittable flow problem"

11:30 - 12:00: E. Boros, K. Elbassioni, V. Gurvich, and L. Khachiyan, "Efficient implementation of a joint generation algorithm"

12:00 - 12:30: D. Sawitzki, "Experimental studies of symbolic shortest-path algorithms"

Lunch

Tuesday, May 25 - Afternoon:

Session TU3 - Chairperson: Cid C. de Souza

15:00 - 15:30: C. Tadonki and J. Rolim, "An analytical model for energy minimization"

15:30 - 16:00: F.J. Ovalle-Martínez, I. Stojmenovic, F. García-Nocetti, and J. Solano-González, "Finding minimum transmission radii for preserving connectivity and constructing minimal spanning trees in ad hoc and sensor networks"

16:00 - 16:30: I. Chatzigiannakis, M. Markou, and S. Nikolettseas, "Distributed circle formation for anonymous oblivious robots"

Coffee break

Session TU4 - Chairperson: Catherine McGeoch

17:00 - 17:30: H. Hyvrö, K. Fredriksson, and G. Navarro, “Increased bit-parallelism for approximate string matching”

17:30 - 18:00: R. Sinha and J. Zobel, “Using random sampling to build approximate tries for efficient string sorting”

18:00 - 18:30: E.C. Bracht, L.A.A. Meira, and F.K. Miyazawa, “A greedy approximation algorithm for the uniform labeling problem analyzed by a primal-dual technique”

18:30 - 19:00: D.K. Kim, J. Jo, and H. Park, “A fast algorithm for constructing suffix arrays for fixed-size alphabet”

Wednesday, May 26 - Morning

Session WE1 - Chairperson: Ulrich Derigs

8:00 - 9:00: Richard Karp, “The role of experimental algorithms in genomics”

Session WE2 - Chairperson: Endre Boros

9:00 - 9:30: A.C.F. Alvim and C. C. Ribeiro, “A hybrid bin-packing heuristic to multiprocessor scheduling”

9:30 - 10:00: C.A.S. Oliveira, P.M. Pardalos, and M.G.C. Resende, “GRASP with path-relinking for the quadratic assignment problem”

10:00 - 10:30: V. Phan and S. Skiena, “An improved time-sensitive metaheuristic framework for combinatorial optimization”

Coffee break

Tropical Islands Tour starts at 11:00

Thursday, May 27 - Morning

Session TH1 - Chairperson: Maurício G.C. Resende

8:30 - 9:00: M. Holzer, F. Schulz, and T. Willhalm, “Combining speed-up techniques for shortest-path computations”

9:00 - 9:30: T. Dimitriou and P. Spirakis, “How to tell a good neighborhood from a bad one: Satisfiability of boolean formulas”

9:30 - 10:00: G.C. Silva, L.S. Ochi, and S.L. Martins, “Experimental comparison of greedy randomized adaptive search procedures for the maximum diversity problem”

Coffee break

Session TH2 - Chairperson: José Rolim

10:30 - 11:00: C.M.H. Figueiredo, G.D. Fonseca, V.G.P. S, and J. Spinrad, “Faster deterministic and randomized algorithms on the homogeneous set sandwich problem”

11:00 - 11:30: C. A. Martinhon and F. Protti, “An improved derandomized approximation algorithm for the max-controlled set problem”

11:30 - 12:00: M.C. Boeres, C.C. Ribeiro, and I. Bloch, “A randomized heuristic for scene recognition by graph matching”

12:00 - 12:30: C. Martínez and X. Molinero, “An experimental study of unranking algorithms”

Lunch

Thursday, May 27 - Afternoon:

Session TH3 - Chairperson: Simone L. Martins

15:00 - 15:30: D.J. Pearce and P. H. J. Kelly, “A dynamic algorithm for topologically sorting directed acyclic graphs”

15:30 - 16:00: A. Duch and C. Martínez, “Fingered multidimensional search trees”

16:00 - 16:30: R. Sinha, “Using compact tries for cache-efficient sorting of integers”

Coffee break

Session TH4 - Chairperson: Richard Karp

17:00 - 17:30: S.V. Pemmaraju, S. Penumatcha, and R. Raman, “Approximating interval coloring and max-coloring in chordal graphs”

17:30 - 18:00: C. Lucet, F. Mendes, and A. Moukrim, “Pre-processings and linear-decomposition algorithm to solve the k-colorability problem”

18:00 - 18:30: A. Tarassov, N.S. Nikolov, and J. Branke, “Minimum-width graph layering with consideration of dummy nodes”

18:30 - 19:00: E.J. Hanashiro, H. Mongelli, and S.W. Song, “Efficient implementation of the BSP/CGM parallel vertex cover FPT algorithm”

Friday, May 28 - Morning

Session FR1 - Chairperson: Panos M. Pardalos

8:30 - 9:30: Christos Kaklamanis, “Recent advances in energy-efficient communication in ad hoc wireless networks”

9:30 - 10:00: E. Amaldi, L. Liberti, N. Maculan, and F. Maffioli, “Efficient edge-swapping heuristics for finding minimum fundamental cycle bases”

Coffee break

Session FR2 - Chairperson: Celina M.H. Figueiredo

10:30 - 11:00: J. Pérez, R.A. Pazos, J. Frausto, G. Rodríguez, L. Cruz, and H. Fraire, “A statistical approach for algorithm selection”

11:00 - 11:30: M. Basseur, J. Lemesre, C. Dhaenens and El-G. Talbi, “Cooperation between branch and bound and evolutionary approaches to solve a biobjective flow shop problem”

11:30 - 12:00: G. Cintra and Y. Wakabayashi, “Dynamic programming and column generation based approaches for two-dimensional guillotine cutting problems”

12:00 - 12:30: P.J. Ballester and J.N. Carter, “An algorithm to identify clusters of solutions in multimodal optimisation”

Lunch

Friday, May 28 - Afternoon:

Session FR3 - Chairperson: Abílio Lucena

14:30 - 15:00: A.C. Santos, A.P. Lucena, and C.C. Ribeiro, “Solving diameter constrained minimum spanning trees in dense graphs”

15:00 - 15:30: H.G. Santos, L.S. Ochi, and M.J.F. Souza, “An efficient tabu search heuristic for the school timetabling problem”

15:30 - 16:00: R. Aringhieri, “Solving chance-constrained programs combining tabu search and simulation”

Coffee break

Session FR4 - Chairperson: Nelson Maculan

16:30 - 17:00: H.L. Bodlaender, C.M.H. Figueiredo, M. Gutierrez, T. Kloks, and R. Niedermeier, “Simple max-cut for split-indifference graphs and graphs with few P4’s”

17:00 - 17:30: J.M. Boyer, C.G. Fernandes, A. Noma, and J.C. de Pina, “Lempel, Even, and Cederbaum planarity method”

17:30 - 18:00: P.E.D. Pinto, F. Protti, and J.L. Szwarcfiter, “A Huffman-based error detecting code”

Coach to Rio de Janeiro departs at 19:00