

Curriculum Vitae

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May 8, 2009

PERSONAL

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Marital Status: Married, two children

Citizenship: Brazil and United States

RESEARCH INTERESTS

Optimization, Heuristics and Metaheuristics, Networks and Graph Theory, Optimization in Telecommunications, Network Design, Routing, Location, Interior Point Methods, Parallel Computing, Operations Research Modeling, Massive Data Sets.

EDUCATION

- 09/1982 — **Ph.D.**
- 08/1987 University of California, Berkeley
 - Major: Operations Research
 - Minors: Computer Science and Information Systems
 - Ph.D. Thesis Advisor: C.R. Glassey
 - Ph.D. Thesis: “Shop floor scheduling of semiconductor wafer manufacturing”
- 09/1978 — **M.S.** in Operations Research
- 08/1979 Georgia Institute of Technology, Atlanta, GA
- 03/1974 — **Electrical Engineer**, concentration in Systems Engineering
- 06/1978 Catholic University (PUC), Rio de Janeiro, Brazil
- 08/1969 — **High School**, American School of Rio de Janeiro (EARJ)
- 06/1973 Rio de Janeiro, Brazil

EXPERIENCE AND JOB HISTORY

- 05/1999 — **Lead Member of Technical Staff**, Algorithms and Optimization Research Department, present
Information Sciences Research Center, renamed Internet and Network Systems Research Center in 01/2003, AT&T Labs Research, Florham Park, NJ
- 07/1996 — **Principal Research Staff Member**, Algorithms and Optimization Research Department,
04/1999 Information Sciences Research Center, AT&T Labs Research, Florham Park, NJ
- 01/1996 — **Senior Research Staff Member**, Algorithms and Optimization Research Department,
06/1996 Information Sciences Research Center, AT&T Research, Murray Hill, NJ

- 08/1988 — **Member of Technical Staff**, Mathematical Foundations of Computing Department,
01/1996 Mathematical Sciences Research Center, AT&T Bell Laboratories, Murray Hill, NJ
- 09/1987 — **Full-Time Consultant**, AT&T Advanced Decision Support Systems, Whippany, NJ
08/1988
- 08/1985 — **Post Graduate Research Engineer**, Operations Research Center, University of California,
08/1987 Berkeley, CA
- 12/1986 — **Part-Time Consultant**, AT&T Advanced Decision Support Systems, Whippany, NJ
08/1987
- 09/1985 — **Part-Time Consultant**, Schlumberger Palo Alto Research – Fairchild, Palo Alto, CA
08/1987
- 06/1985 — **Research Staff**, Fairchild Advanced Research & Development Laboratory, Palo Alto, CA
08/1985
- 02/1984 — **Post Graduate Researcher**, Electronics Research Laboratory, University of California,
07/1985 Berkeley, CA
- 06/1983 — **Research Assistant**, Operations Research Center, University of California, Berkeley, CA
08/1983
- 10/1979 — **Senior Engineer**, Methods & Models Department, Furnas Power Company, Rio de
08/1982 Janeiro, Brazil
- 06/1981 — **Lecturer**, Department of Economics, Catholic University, Rio de Janeiro, Brazil
08/1982
- 01/1978 — **Trainee**, Methods & Models Department, Furnas Power Company, Rio de Janeiro, Brazil
07/1978

PROFESSIONAL ACTIVITIES

- 2008 – **Editorial Board** of Optimization and Engineering.
present
- 2007 – **Editorial Board** of International Transactions in Operational Research.
present
- 2006 – **Editorial Board** of Statistical Analysis of Networks.
present
- 2006 – **Editorial Board** of The Operations Research Journal of the Spanish Society of Statistics
present and Operations Research (SEIO).
- 2006 – **Editorial Board** of Networks.
present
- 2003 – **Editorial Board** of Investigaç o Operacional, the journal of the Portuguese Operations
present Research Association (APDIO).
- 2002 – **Member** of National Science Foundation Operations Research and Optimization Review
2007 Panels.
- 2001 – **Editor** of *Massive Computing* book series (with J. Abello and P.M. Pardalos), Kluwer
present Academic Publishers.
- 2001 – **Editorial Board** of book series *New Dimensions in Networks*, Anna Nagurney (Ed.), Ed-
present ward Elgar Publishing Inc.

- 2001 – present **External Member** of the Computational Optimization Research Center (CORC), Columbia University.
- 1998 – present **Editorial Board** of Pesquisa Operacional, the journal of the Brazilian Operations Research Society.
- 1998 – present **Editorial Board** of Combinatorial Algorithms Test Sets (CATS): The ACM/EATCS Platform for Experimental Research.
- 1998 – present **Editorial Board** of Computational Optimization and Applications.
- 1995 – present **Editorial Board** of J. of Combinatorial Optimization.
- 1995 – 2001 **Editorial Board** of Investigación Operativa.
- 1995 – present **Editorial Board** of J. of Global Optimization.
- 1994 – present **Editorial Board** of J. of Heuristics.
- 1994 – present **Permanent Member** of the Center for Discrete Mathematics and Theoretical Computer Science (DIMACS), Rutgers University.
- 1993 – 1994 **Editorial Board** of IIE Transactions on Research.
- 1994 **Chairman and Workshop Organizer** for the Workshop on “Parallel Processing of Discrete Optimization Problems” (with P.M. Pardalos and K. G. Ramakrishnan), Center for Discrete Mathematics and Theoretical Computer Science (DIMACS)
- 1994 **Committee Member** of ORSA Nicholson Student Paper Competition
- 1985 – present **Member** of INFORMS, Mathematical Programming Society, and SIAM.
- 1986 – present **Referee** of ACM J. of Experimental Algorithmics, ACM-SIAM Symposium on Discrete Algorithms (SODA), Algorithmica, Annals of Discrete Mathematics, Annals of Mathematics and Artificial Intelligence, Annals of Operations Research, Applied Artificial Intelligence, Canadian National Science and Engineering Research Council, Computational Optimization and Applications, Computers and Industrial Engineering, Computers and Operations Research, DIMACS Series on Discrete Mathematics and Theoretical Computer Science, Discrete Applied Mathematics, Dutch Research Council, European J. of Operational Research, European Symposium on Algorithms, Graph Drawing’96, Hong Kong Research Grants Council, IEEE/ACM Transactions on Networking, IEEE Symposium on Parallel and Distributed Processing, IEEE Symposium on Theory of Computer Science, IEEE Transactions on Semiconductor Manufacturing, IIE Transactions on Research, IMA J. of Mathematics Applied in Business and Industry, Indian J. of Pure and Applied Mathematics, INFOR, INFORMS J. on Computing, Innovations in Financial and Economic Networks, International Conference on Complementarity Problems, International Transactions in Operational Research, Investigación Operativa, J. of Global Optimization, J. of Heuristics, J. of Optimization Theory and Applications, J. of the Operational Research Society, Latin American Theoretical Informatics (LATIN), Management Science, Mathematical Modelling and Algorithms, Mathematical Programming, Mathematics of Industrial Systems, Metaheuristics International Conference (MIC), National Science and Engineering Research Council of Canada, National Science Foundation, Networks, Operations Research, Operations Research Letters, Optimization Methods and Software, Pesquisa Operacional, Public Transport: Planning and Operations, R.A.I.R.O. – Operations Research, Science, SIAM J. on Computing, SIAM J. on Optimization, SIAM J. on Scientific Computing,

Referee continued Swedish Research Council, Swiss National Science Foundation, Theoretical Computer Science J., Viewpoints on Optimization, Workshop on Efficient and Experimental Algorithms (WEA). Workshop on Randomization and Computation (RANDOM).

ACADEMIC AWARDS

- 01/2003 **Outstanding Professional and Scholarly Titles of 2002**, *Handbook of Applied Optimization*, Honorable Mention, Association of American Publishers.
- 08/1994 **Obermann Fellowship**, Center for Advanced Studies, University of Iowa
- 09/1982 — **Ph.D. Fellowship**, Brazilian Science and Technology Council (CNPq)
- 12/1986

MOST CITED AUTHORS IN COMPUTER SCIENCE

01/2000 — Ranked in the NEC ResearchIndex list of 10,000 most cited authors in Computer Science present (<http://citeseer.nj.nec.com/allcited.html>). This list does not include citations where one or more authors of the citing and cited articles match, or citations where the relevant author is an editor.

MEDIA CITATIONS

4. American Scientist (September–October 2006, Volume 94, Pages 400–404), “Connecting the Dots,” by Brian Hayes (<http://www.americanscientist.org/template/AssetDetail/assetid/53062>)
3. American Scientist (January–February 2000, Volume 88, No. 1), “Computing Science Graph Theory in Practice: Part I,” by Brian Hayes (<http://www.americanscientist.org/template/AssetDetail/assetid/14708>)
2. SIAM NEWS (Vol. 23, No. 3 April 1999), “Massive Graphs Pose Big Problems (by B. Cipra)”
1. The Economist (January 30th – February 5th 1999, page 74), “Needles in giant haystacks.”

TEN MOST CITED PAPERS – ISI WEB OF SCIENCE (January 8, 2009)

1. T.A. Feo and M.G.C. Resende, “*Greedy randomized adaptive search procedures*,” **J. of Global Optimization**, vol. 6, pp. 109–133, 1995 – **228 citations**: 2009 (3), 2008 (26), 2007 (24), 2006 (20), 2005 (29), 2004 (18), 2003 (23), 2002 (20), 2001 (23), 2000 (8), 1999 (11), 1998 (12), 1997 (6), 1996 (2).
2. I. Adler, M.G.C. Resende, G. Veiga, and N.K. Karmarkar, “*An implementation of Karmarkar’s algorithm for linear programming*,” **Mathematical Programming**, vol. 44, pp. 297–335, 1989. Also Technical Report ORC 86-8, Operations Research Center, University of California, Berkeley, 1986 – **168 citations**: 2008 (3), 2007 (5), 2006 (3), 2005 (3), 2004 (3), 2003 (3), 2002 (6), 2001 (6), 2000 (9), 1999 (4), 1998 (7), 1997 (7), 1996 (16), 1995 (10), 1994 (11), 1993 (16), 1992 (8), 1991 (20), 1990 (9), 1989 (13), 1988 (2), 1987 (3), 1986 (1).
3. C.R. Glassey and M.G.C. Resende, “*Closed-loop job release control for VLSI circuit manufacturing*,” **IEEE Transactions on Semiconductor Manufacturing**, vol. 1, pp. 36–46, 1988 – **120 citations**: 2009 (2), 2008 (8), 2007 (6), 2006 (7), 2005 (5), 2004 (8), 2003 (9), 2002 (14), 2001 (8), 2000 (1), 1999 (6), 1998 (10), 1997 (8), 1996 (11), 1995 (1), 1994 (7), 1993 (1), 1992 (6), 1990 (2), 1989 (1).
4. T.A. Feo and M.G.C. Resende, “*A probabilistic heuristic for a computationally difficult set covering problem*,” **Operations Research Letters**, vol. 8, pp. 67–71, 1989 – **112 citations**: 2009 (1), 2008 (11), 2007 (10), 2006 (7), 2005 (14), 2004 (7), 2003 (8), 2002 (12), 2001 (8), 2000 (4), 1999 (4), 1998 (6), 1997 (1), 1996 (6), 1995 (5), 1994 (3), 1993 (1), 1991 (3).

5. R.D.C. Monteiro, I. Adler, and M.G.C. Resende, "A polynomial-time primal-dual affine scaling algorithm for linear and convex quadratic programming and its power series extension," **Mathematics of Operations Research**, vol. 15, pp. 191–214, 1990 – **73 citations:** 2008 (1), 2007 (5), 2006 (3), 2005 (3), 2004 (3), 2003 (1), 2002 (4), 2001 (2), 2000 (1), 1999 (7), 1998 (6), 1997 (6), 1996 (7), 1995 (1), 1994 (3), 1993 (8), 1992 (6), 1991 (6).
6. R.S. Barr, B.L. Golden, J.P. Kelly, M.G.C. Resende, and W.R. Stewart, "Designing and reporting on computational experiments with heuristic methods," **J. of Heuristics**, vol. 1, pp. 9–32, 1995 – **71 citations:** 2009 (1), 2008 (6), 2007(5), 2006 (6), 2005 (5), 2004 (6), 2003 (9), 2002 (12), 2001 (7), 2000 (6), 1999 (3), 1998 (2), 1997 (1), 1996 (1).
7. T.A. Feo, M.G.C. Resende, and S.H. Smith, "A greedy randomized adaptive search procedure for maximum independent set," **Operations Research**, vol. 42, pp. 860–878, 1994 – **52 citations:** 2008 (4), 2007 (3), 2006 (4), 2005 (6), 2004 (6), 2003 (3), 2002 (4), 2001 (4), 2000 (1), 1999 (4), 1998 (6), 1997 (4), 1996 (1), 1995 (1), 1994 (2).
8. P.M. Pardalos and M.G.C. Resende, "Handbook of Applied Optimization," Oxford University Press, New York, 2002 – **45 citations:** 2008 (9), 2007 (8), 2006 (9), 2005 (7), 2004 (5), 2003 (4), 2002 (3).
9. Y. Li, P.M. Pardalos, and M.G.C. Resende, "A greedy randomized adaptive search procedure for the quadratic assignment problem," **Quadratic assignment and related problems**, P.M. Pardalos and H. Wolkowicz, eds., **DIMACS Series on Discrete Mathematics and Theoretical Computer Science**, vol. 16, pp. 237–261, 1994 – **44 citations:** 2008 (2), 2007 (6), 2006 (1), 2005 (3), 2004 (3), 2003 (4), 2002 (3), 2001 (4), 2000 (1), 1999 (5), 1998 (5), 1997 (6), 1996 (1).
10. M.G.C. Resende and C.C. Ribeiro, "Greedy randomized adaptive search procedures," in "Handbook of Metaheuristics," F. Glover and G. Kochenberger (Eds.), Kluwer Academic Publishers, pp. 219–248, 2003 – **41 citations:** 2009 (1), 2008 (9), 2007 (9), 2006 (9), 2005 (7), 2004 (4).

PUBLICATIONS CONTRIBUTING TO H-INDEX OF 45 – GOOGLE SCHOLAR (March 18, 2009)

1. 826 Google Scholar citations: T.A. Feo and M.G.C. Resende, *Greedy randomized adaptive search procedures*, J. of Global Optimization, vol. 6, pp. 109–133, 1995.
2. 340 Google Scholar citations: T.A. Feo and M.G.C. Resende, *A probabilistic heuristic for a computationally difficult set covering problem*, Operations Research Letters, vol. 8, pp. 67–71, 1989.
3. 338 Google Scholar citations: M.G.C. Resende and C.C. Ribeiro, *Greedy randomized adaptive search procedures*, in "Handbook of Metaheuristics", F. Glover and G. Kochenberger, eds., Kluwer Academic Publishers, pp. 219–249, 2003.
4. 303 Google Scholar citations: I. Adler, M.G.C. Resende, G. Veiga, and N.K. Karmarkar, *An implementation of Karmarkar's algorithm for linear programming*, Mathematical Programming, vol. 44, pp. 297–335, 1989; Also Technical Report ORC 86-8, Operations Research Center, University of California, Berkeley, 1986.
5. 227 Google Scholar citations: R.S. Barr, B.L. Golden, J.P. Kelly, M.G.C. Resende, and W.R. Stewart, *Designing and reporting on computational experiments with heuristic methods*, J. of Heuristics, vol. 1, pp. 9–32, 1995.
6. 221 Google Scholar citations: C.R. Glassey and M.G.C. Resende, *Closed-loop job release control for VLSI circuit manufacturing*, IEEE Transactions on Semiconductor Manufacturing, vol. 1, pp. 36–46, 1988.
7. 164 Google Scholar citations: T.A. Feo, M.G.C. Resende, and S.H. Smith, *A greedy randomized adaptive search procedure for maximum independent set*, Operations Research, vol. 42, pp. 860–878, 1994.
8. 159 Google Scholar citations: P.M. Pardalos and M.G.C. Resende (eds.), *Handbook of Applied Optimization*, Oxford University Press, 2002.

9. 156 Google Scholar citations: P. Festa and M.G.C. Resende, *GRASP: An annotated bibliography*, Essays and Surveys on Metaheuristics, C.C. Ribeiro and P. Hansen, Eds., Kluwer Academic Publishers, pp. 325–367, 2002.
10. 139 Google Scholar citations: M. Ericsson, M.G.C. Resende and P.M. Pardalos, *A genetic algorithm for the weight setting problem in OSPF routing*, J. of Combinatorial Optimization, vol. 6, pp. 299–333, 2002.
11. 136 Google Scholar citations: R.D.C. Monteiro, I. Adler, and M.G.C. Resende, *A polynomial-time primal-dual affine scaling algorithm for linear and convex quadratic programming and its power series extension*, Mathematics of Operations Research, vol. 15, pp. 191–214, 1990.
12. 133 Google Scholar citations: Y. Li, P.M. Pardalos, and M.G.C. Resende, *A greedy randomized adaptive search procedure for the quadratic assignment problem*, Quadratic assignment and related problems, P.M. Pardalos and H. Wolkowicz, eds., DIMACS Series on Discrete Mathematics and Theoretical Computer Science, vol. 16, pp. 237–261, 1994.
13. 110 Google Scholar citations: J.F. Goncalves, J.J.M.Mendes, and M. G. C. Resende, *A hybrid genetic algorithm for job shop scheduling*, European J. of Operacional Research, vol. 167, pp. 77–95, 2005.
14. 94 Google Scholar citations: J. Abello, P.M. Pardalos, and M.G.C. Resende, *On maximum cliques in very large graphs*, in "External memory algorithms," J. Abello and J. Vitter (eds.), DIMACS Series on Discrete Mathematics and Theoretical Computer Science, vol. 50, pp. 119–130, American Mathematical Society, 1999.
15. 90 Google Scholar citations: S.A. Canuto, M.G.C. Resende, and C.C. Ribeiro, *Local search with perturbations for the prize-collecting Steiner tree problem in graphs*, Networks, vol. 38, pp. 50–58, 2001.
16. 90 Google Scholar citations: R.M. Aiex, S. Binato, and M.G.C. Resende, *Parallel GRASP with path-relinking for job shop scheduling*, Parallel Computing, vol. 29, pp. 393–430, 2003.
17. 79 Google Scholar citations: A.P. Kamath, N.K. Karmarkar, K.G. Ramakrishnan, and M.G.C. Resende, *Computational experience with an interior point algorithm on the satisfiability problem*, Annals of Operations Research, vol. 25, pp. 43–58, 1990.
18. 79 Google Scholar citations: I. Adler, N.K. Karmarkar, M.G.C. Resende, and G. Veiga, *Data structures and programming techniques for the implementation of Karmarkar's algorithm*, ORSA J. on Computing, vol. 1, pp. 84–106, 1989; Also Technical Report, Department of Industrial Engineering and Operations Research, University of California, Berkeley, 1987.
19. 79 Google Scholar citations: A.P. Kamath, N.K. Karmarkar, K.G. Ramakrishnan, and M.G.C. Resende, *A continuous approach to inductive inference*, Mathematical Programming, vol. 57, pp. 215–238, 1992.
20. 76 Google Scholar citations: R.M. Aiex, M.G.C. Resende, and C.C. Ribeiro, *Probability distribution of solution time in GRASP: An experimental investigation*, J. of Heuristics, vol. 8, pp. 343–373, 2002.
21. 75 Google Scholar citations: R.A. Murphey, P.M. Pardalos, and M.G.C. Resende, *Frequency assignment problems*, in "Handbook of Combinatorial Optimization", D.-Z. Du and P.M. Pardalos, Eds., Kluwer Academic Publishers, Supplement vol. A, pp. 295–377, 2000.
22. 72 Google Scholar citations: M.G.C. Resende and C.C. Ribeiro, *GRASP with path-relinking: Recent advances and applications*, in "Metaheuristics: Progress as Real Problem Solvers," T. Ibaraki, K. Nonobe and M. Yagiura, (Eds.), Springer, pp. 29–63, 2005.
23. 71 Google Scholar citations: R.M. Aiex, M.G.C. Resende, P.M. Pardalos, and G. Toraldo, *GRASP with path relinking for three-index assignment*, INFORMS J. on Computing, vol. 17, no. 2, pp. 224–247, 2005.
24. 70 Google Scholar citations: M.G.C. Resende, K.G. Ramakrishnan and Z. Drezner, *Computing lower bounds for the quadratic assignment problem with an interior point algorithm for linear programming*, Operations Research, vol. 43, pp. 781–791, 1995.

25. 64 Google Scholar citations: N.K. Karmarkar, M.G.C. Resende, and K.G. Ramakrishnan, *An interior point algorithm to solve computationally difficult set covering problems*, Mathematical Programming, vol. 52, pp. 597–618, 1991.
26. 63 Google Scholar citations: C.R. Glassey and M.G.C. Resende, *A scheduling rule for job release in semiconductor fabrication*, Operations Research Letters, vol. 7, pp. 213–217, 1988.
27. 62 Google Scholar citations: M.G.C. Resende and T.A. Feo, *A GRASP for Satisfiability*, in "Cliques, Coloring, and Satisfiability: Second DIMACS Implementation Challenge", David S. Johnson and Michael A. Trick ,Eds., DIMACS Series on Discrete Mathematics and Theoretical Computer Science, vol. 26, pp. 499–520, American Mathematical Society, 1996.
28. 62 Google Scholar citations: M.G.C. Resende, L.S. Pitsoulis, and P.M. Pardalos, *Approximate Solution of Weighted MAX-SAT Problems using GRASP*, DIMACS Series on Discrete Mathematics and Theoretical Computer Science, vol. 35, pp. 393–405, 1997.
29. 62 Google Scholar citations: P. Festa, P.M. Pardalos, and M. G. C. Resende, *Feedback set problems*, in Handbook of Combinatorial Optimization, D.-Z. Du and P.M. Pardalos (Eds.), Kluwer Academic Publishers, Supplement vol. A, pp. 209–259, 1999.
30. 60 Google Scholar citations: J. Abello, P.M. Pardalos and M.G.C. Resende (eds.), *Handbook of Massive Data Sets*, Kluwer Academic Publishers, May 2002.
31. 61 Google Scholar citations: L. S. Pitsoulis and M. G. C. Resende, *Greedy randomized adaptive search procedures*, Handbook of Applied Optimization, P.M. Pardalos and M.G.C. Resende, Eds., Oxford University Press, pp. 168–183, 2002.
32. 58 Google Scholar citations: M. G. C. Resende and C. C. Ribeiro, *A GRASP with path-relinking for private virtual circuit routing*, Networks, vol. 41, pp. 104–114, 2003.
33. 55 Google Scholar citations: S.L. Martins, M.G.C. Resende, C.C. Ribeiro, and P.M. Pardalos, *A parallel GRASP for the Steiner tree problem in graphs using a hybrid local search strategy*, J. of Global Optimization, vol. 17, pp. 267–283, 2000.
34. 55 Google Scholar citations: L.S. Buriol, M.G.C. Resende, C.C. Ribeiro, and M. Thorup, *A hybrid genetic algorithm for the weight setting problem in OSPF/IS-IS routing*, Networks, vol. 46, no. 1, pp. 36–56, 2005
35. 54 Google Scholar citations: M.G.C. Resende and G. Veiga, *An efficient implementation of a network interior point method*, Network Flows and Matching: First DIMACS Implementation Challenge, D.S. Johnson and C.C. McGeoch, eds., DIMACS Series on Discrete Mathematics and Theoretical Computer Science, vol. 12, pp. 299–348, 1993.
36. 54 Google Scholar citations: M.G.C. Resende and C.C. Ribeiro, *A GRASP for graph planarization*, Networks, vol. 29, pp. 173–189, 1997.
37. 53 Google Scholar citations: M. G. C. Resende and G. Veiga, *An implementation of the dual affine scaling algorithm for minimum cost flow on bipartite uncapacitated networks*, SIAM J. on Optimization, vol. 3, pp. 516–537, 1993.
38. 53 Google Scholar citations: M.G.C. Resende and R.F. Werneck, *A hybrid heuristic for the p-median problem*, J. of Heuristics, vol. 10, pp. 59–88, 2004
39. 52 Google Scholar citations: T. Mavridou, P.M. Pardalos, L.S. Pitsoulis, and M.G.C. Resende, *Parallel search for combinatorial optimization: Genetic algorithms, simulated annealing, tabu search and GRASP*, Parallel Algorithms for Irregularly Structured Problems, Proceedings of the Second International Workshop – Irregular’95, A. Ferreira and J. Rolim, eds., **Lecture Notes in Computer Science**, Springer-Verlag, vol. 980, pp. 317–331, 1995
40. 50 Google Scholar citations: P. Festa, P.M. Pardalos, M.G.C. Resende, and C.C. Ribeiro, *Randomized heuristics for the MAX-CUT problem*, Optimization Methods and Software, vol. 7, pp. 1033–1058, 2002

41. 48 Google Scholar citations: M.G.C. Resende, P.M. Pardalos, and Y. Li, *Algorithm 754: Fortran subroutines for approximate solution of dense quadratic assignment problems using GRASP*, ACM Transactions on Mathematical Software, vol. 22, pp. 104–118, 1996
42. 48 Google Scholar citations: P.M. Pardalos, L.S. Pitsoulis, and M.G.C. Resende, *A parallel GRASP implementation for the Quadratic Assignment Problem*, Parallel Algorithms for Irregular Problems, A. Ferreira and J. Rolim, eds, Kluwer Academic Publishers, pages 111-130, 1995
43. 47 Google Scholar citations: M.G.C. Resende, *Computing approximate solutions of the maximum covering problem using GRASP*, Journal of Heuristics, vol. 4, pp. 161–171, 1998
44. 47 Google Scholar citations: J. Abello, M.G.C. Resende and S. Sudarsky, *Massive quasi-clique detection*, in LATIN 2002: Theoretical Informatics, S. Rajsbaum (Ed.), Lecture Notes in Computer Science, vol. 2286, pp. 598-612, Springer Verlag, 2002.
45. 47 Google Scholar citations: L.F. Portugal, M.G.C. Resende, G. Veiga, and J.J. Jdice, *A truncated primal-infeasible dual-feasible network interior point method*, Networks, vol. 35, pp. 91–108, 2000

BOOKS

5. *Handbook of Optimization in Telecommunications*, Co-edited with P.M. Pardalos, **Springer**, April 2006.
4. *Metaheuristics: Computer Decision-Making*, Co-edited with J.P. de Sousa, **Kluwer Academic Publishers**, December 2003.
3. *Handbook of Massive Data Sets*, Co-edited with J. Abello and P.M. Pardalos, **Kluwer Academic Publishers**, May 2002.
2. *Handbook of Applied Optimization*, Co-edited with P.M. Pardalos, **Oxford University Press**, March 2002. **Outstanding Professional and Scholarly Titles of 2002**, Honorable Mention, Association of American Publishers.
1. *Parallel Processing of Discrete Optimization Problems*, Co-edited with P.M. Pardalos and K.G. Ramakrishnan, volume 22 of **DIMACS Series in Discrete Mathematics and Theoretical Computer Science**, **AMS**, 1995.

RESEARCH PAPERS SUBMITTED TO PEER REVIEWED CONFERENCES, JOURNALS AND BOOKS

14. “*Continuous GRASP with a local active-set method for bound-constrained global optimization*,” (with E.G. Birgin, E.M. Gozzi, and R.M.A. Silva), submitted to **J. of Global Optimization**, 2009.
13. “*Revised GRASP with path-relinking for the linear ordering problem*,” (with W.A. Chaovalitwongse, P.M. Pardalos, and D.A. Grundel), submitted to **J. of Combinatorial Optimization**, 2009.
12. “*Effective application of GRASP*,” (with P. Festa), submitted to **Encyclopedia of Operations Research and Management Sciences**, 2009.
11. “*A biased random-key genetic algorithm with forward-backward improvement for the resource constrained project scheduling problem*,” (with J.F. Gonçalves and J.J.M. Mendes), submitted to **J. of Heuristics**, 2009.
10. “*GRASP; Greedy randomized adaptive search procedures*,” (with R.M.A. Silva), submitted to **Encyclopedia of Operations Research and Management Sciences**, 2009.
9. “*Solving multi-objective network flow problems with an interior point method*,” (with M. Fonseca and J.R. Figueira), submitted to **International Transactions in Operational Research**, 2009.
8. “*GRASP with path-relinking for the generalized quadratic assignment problem*,” (with G.R. Mateus and R.M.A. Silva), submitted to **J. of Heuristics**, 2009.

7. “A memetic algorithm for OSPF and DEFT routing to minimize network congestion,” (with R. Reis, M. Ritt, and L.S. Buriol), submitted to **International Transactions in Operational Research**, 2008.
6. “A multi-population genetic algorithm for a constrained two-dimensional orthogonal packing problem,” (with J.F. Gonçalves), submitted to **Computational Optimization and Applications**, 2008.
5. “GRASP,” (with C.C. Ribeiro), submitted to **Search Methodologies, 2nd Edition**, E.K. Burke and G. Kendall (Eds.), Springer, 2008.
4. “Greedy randomized adaptive search procedures: Advances and applications,” (with C.C. Ribeiro), submitted to **Handbook of Metaheuristics, 2nd Edition**, J.-Y. Potvin and M. Gendreau (Eds.), Springer, 2008.
3. “A genetic algorithm with random keys for routing and wavelength assignment,” (with T. F. Noronha and C.C. Ribeiro), submitted to **Networks**, 2008.
2. “Speeding up continuous GRASP,” (with M. J. Hirsch and P. M. Pardalos), submitted to **European J. of Operational Research**, 2006.
1. “A novel integer programming formulation for the K-SONET ring assignment problem,” (with E.M. Macambira, C.N. Meneses, and P.M. Pardalos), **European J. of Operational Research**, 2006.

RESEARCH PAPERS ACCEPTED TO APPEAR IN PEER REVIEWED JOURNALS AND BOOKS

2. “GRASP: Basic components and enhancements,” (with P. Festa), to appear in **Global Optimization: Theoretical Foundations and Applications**, A. Abraham, A.-E. Hassanien, and P. Siarry (Eds.), in “Studies in Computational Intelligence,” Springer-Verlag, 2009.
1. “Hybrid GRASP heuristics,” (with P. Festa), to appear in **Global Optimization: Theoretical Foundations and Applications**, A. Abraham, A.-E. Hassanien, and P. Siarry (Eds.), in “Studies in Computational Intelligence,” Springer-Verlag, 2009.

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7. “*Identifying the optimal face of a network linear program with a globally convergent interior point method*,” (with T. Tsuchiya and G. Veiga), in **NETFLOW93**, Technical Report TR-21/93, Dipartimento di Informatica, Università di Pisa, pp. 196–206, October 3–7, 1993.

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5. "Computational experience with an interior point algorithm on the Satisfiability problem," (with A.P. Kamath, N. Karmarkar, and K.G. Ramakrishnan), **Proceedings of the MPS Conference on Integer Programming and Combinatorial Optimization**, Waterloo, pp. 333–349, May 1990.
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3. "Beyond the spreadsheet— Wafer production planning with start demand rate calculation through simulation models," (with R.A. Zuanich and D.F. Ruffcorn), **J. Electrochemical Society**, vol. 135, pp. C371–C371, 1988.
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1. "Implementation and testing of a primal-dual algorithm for the assignment problem," **Proceedings of the XIII Brazilian Operations Research Symposium**, pp. 284–299, October 1980, *in Portuguese*.

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16. "Hybrid heuristics for the permutation flow shop problem," (with M.G. Ravetti, F.G. Nakamura, C.N. Meneses, G.R. Mateus, and P.M. Pardalos), AT&T Labs Technical Report, Florham Park, NJ, 2006.
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14. "An updated bibliography of GRASP," (with P. Festa), Technical Report TD-5SB7BK, AT&T Labs Research, Florham Park, NJ, October 2003.
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12. "WINGS: WorldNet Information Gargantuan Store," (with R. Caceres, E. Cary-Brown, H. Drucker, N. Duffield, T. Eckberg, A. Feldmann, R. Greer, J. Friedmann, A. Greenberg, H.V. Jagadish, D. Lavelle, T. Johnson, P. Mishra, J. Mocenigo, K.K. Ramakrishnan, B. Rao, J. Rexford, and C. Sorensen), Technical Memorandum AT&T Labs Research, Florham Park, NJ, December 1997.
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10. "A Multicommodity Flow Approach to Global Facility Planning," (with L. Fossett, D.N. Lee, and L. Resende), Technical Memorandum HA6144000-970910-26TM, AT&T Labs Research, Florham Park, NJ, September 1997.
9. "PoP placement to maximize coverage using GRASP," Technical Memorandum HA6144000-970310-17TM, AT&T Labs – Research, Murray Hill, NJ, March 1997.
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5. “*Continuous approaches for solving discrete problems in computing*,” (with N. Karmarkar and K.G. Ramakrishnan), Technical Memorandum BL011216-921130-27TM, AT&T Bell Laboratories, Murray Hill, NJ, November 1992.
4. “*An interior point approach to global routing in VLSI design*,” (with N.K. Karmarkar, R.R. Pai, K.G. Ramakrishnan, and S.S.S.P. Rao), AT&T Bell Laboratories, Murray Hill, NJ, April 1989.
3. “*Shop floor scheduling of semiconductor wafer manufacturing*,” Ph.D. Thesis, Department of Industrial Engineering and Operations Research, University of California, Berkeley, CA, August 1987.
2. “*Shop floor scheduling of semiconductor wafer manufacturing*,” Report ESRC 87-1, Engineering Systems Research Center, University of California, Berkeley, CA, September 1987.
1. “*Computer simulation of semiconductor wafer fabrication*,” Report ORC 86-14, Operations Research Center, University of California, Berkeley, CA, December 1985 (revised September 1986).

BOOK REVIEWS

2. Peng-Jun Wan, Ding-Zhu Du, and P.M. Pardalos (eds.), *Multichannel Optical Networks: Theory and Practice*, **AMS DIMACS**, vol. 46, 1998. Review published in *J. of Combinatorial Optimization*, vol. 5, pp. 495–496, 2001.
1. Sanguthevar Rajasekaran, P.M. Pardalos, and D. Frank Hsu (eds.), *Mobile Networks and Computing*, **AMS DIMACS**, vol. 52, 2000. Review published in *J. of Combinatorial Optimization*, vol. 5, pp. 497–498, 2001.

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1. *Computational Aspects of Combinatorial Optimization*, co-editors: P.M. Pardalos and M.G.C. Resende. **COAL Bulletin, Mathematical Programming Society**, No. 21 (1992).

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14. “Designing networks with redundant points of presence using approximation methods and systems,” with Luciana S. Pessoa and Celso C. Ribeiro. Filed with United States Patent Office in April 2009.
13. “Method for network design to maximize difference of revenue and network cost,” with Abilio Lucena, Alexandre Cunha, and Nelson Maculan. Filed with United States Patent Office on February 23, 2009.
12. “System for routing and wavelength assignment in wavelength division multiplexing optical networks,” with Thiago F. Noronha and Celso C. Ribeiro. Filed with United States Patent Office in December 2008.
11. “Maximizing diversity in a subset of elements utilizing GRASP with path relinking,” with Abraham Duarte, Micael Gallego, and Rafael Martí. Filed with United States Patent Office in December 2008.
10. “Determining a minimum cost solution for resolving covering-by-pairs problem.” Filed with United States Patent Office in November 2008.
9. “Method and system for network migration scheduling,” with Diogo Andrade. Filed with United States Patent Office in December 2007.

8. "Sensor registration by global optimization," with Michael Hirsch, and Panos Pardalos. Filed with United States Patent Office in June 2007.
7. "Global optimization by continuous greedy randomized adaptive search procedure," with Michael Hirsch, Claudio Meneses, and Panos Pardalos. Filed with United States Patent Office in June 2007.
6. "Method and apparatus for providing composite link assignment in network design," with Diogo Andrade, Luciana Buriol and Mikkel Thorup. Filed with United States Patent Office in June 2006.
5. "Method and apparatus for providing a survivable network design," with Luciana Buriol and Mikkel Thorup. Filed with United States Patent Office in June 2006.
4. "Method and apparatus for updating a shortest path graph," with Luciana Buriol and Mikkel Thorup. Filed with United States Patent Office in June 2006.
3. "Devices, systems, and methods for migration scheduling," with Diogo Andrade. Filed with United States Patent Office in May 2006.
2. "Method for tunable inter-domain egress selection," with Renata Teixeira, Timmothy Griffin, and Jennifer Rexford. Filed with United States Patent Office in December 2005.
1. "Traffic engineering method with tunable inter-domain egress selection," with Renata Teixeira, Timmothy Griffin, and Jennifer Rexford. Filed with United States Patent Office on December 2005.

CONFERENCE PROGRAM COMMITTEES

50. XLI Symposium of the Brazilian Operational Research Society (XLI SBPO), Porto Seguro, Brazil, September 1–4, 2009.
49. 20th International Symposium on Mathematical Programming (ISMP 2009), Telecommunications and Networks Cluster Co-chair, Chicago, USA, August 23-28, 2009.
48. VIII Metaheuristics International Conference (MIC 2009), Hamburg, Germany, July 13-16, 2009.
47. The Eighth International Symposium on Experimental Algorithms (SEA 2009), Dortmund, Germany, June 3-6, 2009.
46. The Sixth International Conference on Integration of AI and OR Techniques in Constraint Programming for Combinatorial Optimization (CPAIOR 2009), Pittsburgh, USA, May 27–31, 2009.
45. International Network Optimization Conference (INOC 2009), Pisa, Italy, April 27–29, 2009.
44. ACM-SIAM Symposium on Discrete Algorithms (SODA 2009) New York City, USA, January 4–6, 2009.
43. International Conference on Metaheuristics and Nature Inspired Computing (META 2008), Hammamet, Tunisia, October – November, 2008.
42. 8th International Conference on Hybrid Intelligent Systems (HIS 2008), Barcelona, Spain, September 10–12, 2008.
41. XL Symposium of the Brazilian Operational Research Society (XL SBPO), João Pessoa, Brazil, September 2–5, 2008.
40. Workshop on Heuristic Methods for the Design, Deployment, and Reliability of Networks and Network Applications (HEUNET 2008), Turku, Finland, July 28-August 1, 2008.
39. Matheuristics2008: Second International Workshop on Model Based Metaheuristic Bertinoro (Forlì-Cesena), Italy, June 16–28, 2008.
38. The Seventh International Workshop on Efficient and Experimental Algorithms (WEA 2008), Provincetown, Cape Cod, Massachusetts, USA, May 30 - June 2, 2008.

37. IFIP/ACM Latin America Networking Conference 2007 (LANC'2007), San José, Costa Rica, October 10–11, 2007.
36. XXXIX Symposium of the Brazilian Operational Research Society (XXXIX SBPO), Fortaleza, Brazil, August 28–31, 2007.
35. The First Annual International Conference on Combinatorial Optimization and Applications (COCOA 2007), Xi'an, Shaanxi, China, August 12–15, 2007.
34. The Seventh Metaheuristics International Conference (MIC 2007), Montréal, Canada, June 25–29, 2007.
33. The Third International Conference on Networking and Services (ICNS 2007), Athens, Greece, June 19–25, 2007.
32. International Network Optimization Conference (INOC 2007), Spa, Belgium, April 22–25, 2007.
31. Seventh European Conference on Evolutionary Computing in Combinatorial Optimization (EvoCOP 2007), Valencia, Spain, April 11–13, 2007.
30. XXXVIII Symposium of the Brazilian Operational Research Society (XXXVIII SBPO), Goiania, Brazil, September 12–15, 2006.
29. 19th International Symposium on Mathematical Programming (ISMP 2006), Rio de Janeiro, Brazil, July 30 – August 4, 2006.
28. International Conference on Systems Automation (ICSA'06), Silicon Valley, USA, July 19–21, 2006
27. International Conference on Applied Optimization and Metaheuristic Innovations, Yalta, Ukraine, July 19–21, 2006.
26. International Conference on Networking and Services (ICNS'06), Silicon Valley, USA, July 16–18, 2006.
25. Genetic and Evolutionary Computation Conference (GECCO 2006), Seattle, USA, July 8–12, 2006.
24. Dimacs Workshop on Computational Optimization and Logistics Challenges in the Enterprise, Annandale, New Jersey, USA, April 19–20, 2006.
23. European Conference on Evolutionary Computation in Combinatorial Optimization (EvoCOP 2006), Budapest, Hungary, April 10–12, 2006.
22. XVIII Mini EURO Conference on VNS, Tenerife, Canary Islands, Spain, November 23–25, 2005.
21. Conference on Applied Practice and Theory on Computation and Control (APTCC 2005), Tahiti, French Polynesia, October 23–28, 2005.
20. First Workshop on Frequency Assignment Problems (W-FAP 05), Siena, Italy, October 12–14, 2005.
19. XXXVII Symposium of the Brazilian Operational Research Society (XXXVII SBPO), Gramado, Brazil, September 27–30, 2005.
18. Industrial Conference on Multi-Provider QoS/SLA Internetworking (MPQSI 2005), Silicon Valley, USA, September 25–30, 2005.
17. The Sixth Metaheuristics International Conference (MIC 2005), Vienna, Austria, August 11–16, 2005.
16. Service Assurance with Partial and Intermittent Resources (SAPIR 2005), Lisbon, Portugal, July 17–22, 2005.
15. Fourth International Workshop on Experimental and Efficient Algorithms (WEA'2005), Santorini Island (Greece), May 10–13, 2005.
14. XXXVI Symposium of the Brazilian Operational Research Society (XXXVI SBPO), São João del-Rei, Brazil, November 23–26, 2004.

13. Third International Workshop on Experimental and Efficient Algorithms (WEA'2004), Angra dos Reis (Brazil), May 25–28, 2004.
12. The Fifth Metaheuristics International Conference (MIC 2003), Kyoto, Japan, August 25–28, 2003.
11. Third meeting of the PAREO Euro working group on Parallel Processing in Operations Research (PAREO 2002), Guadeloupe, France, May 20–24 2002.
10. 4th Metaheuristics International Conference (MIC 2001), Porto, Portugal, July 16–20, 2001.
9. X Latin American Operations Research Conference (X CLAIO), Mexico City, Mexico, September 4–8, 2000.
8. 7th INFORMS Computing Society Conference on Computing and Optimization Tools for the New Millennium (CSTS 2000), Cancun, Mexico, January 5–7, 2000.
7. III Metaheuristics International Conference (MIC99), Angra dos Reis, Brazil, July 18–22, 1999.
6. International Workshop on Global Optimization (GO.99), Firenze, Italy, September 28 – October 3rd, 1999.
5. IX Latin American Operations Research Conference (IX CLAIO), Buenos Aires, Argentina, August 31 – September 4, 1998.
4. Second Workshop on Solving Combinatorial Optimization Problems in Parallel (SCOOP), Orlando, Florida, USA, April 3, 1998.
3. INFORMS Computer Science Technical Session (CSTS 98), Monterrey, CA, USA, January 7–9, 1998.
2. 2nd Metaheuristics International Conference (MIC97), Sophia Antipolis, France, July 21–24, 1997.
1. 4th International Symposium on Artificial Intelligence and Mathematics, Fort Lauderdale, Florida, USA, January 3–5, 1996.

CONFERENCE & UNIVERSITY TALKS

227. “*Algorithms for node placement in path-disjoint network monitoring*,” Invited lecture, **Artificial Intelligence and Data Analysis Lab, U. of Porto**, Porto, Portugal, March 16, 2009.
226. “*Algorithms for node placement in path-disjoint network monitoring*,” Invited lecture, **Industrial and Systems Engineering Department, University of Florida**, Gainesville, FL, November 13, 2008.
225. “*Algorithms for node placement in path-disjoint network monitoring*,” Invited lecture, **Industrial and Systems Engineering Department, University of Florida**, Gainesville, FL, November 13, 2008.
224. “*Metaheuristic hybridization with GRASP*,” Invited lecture, **Industrial and Systems Engineering Department, University of Florida**, Gainesville, FL, November 11, 2008.
223. “*Metaheuristic hybridization with GRASP*,” Invited tutorial talk, **INFORMS Annual Meeting**, Washington, D.C., USA, October 12-15, 2008.
222. “*Algorithms for node placement in path-disjoint network monitoring*,” Invited plenary talk, **XXXIX Annual Conference of the Italian Operational Research Society (AIRO 2009)**, Ischia, Italy, September 8-11, 2008.
221. “*A memetic algorithm for optimizing routing using exponential flow splitting*,” **18th Triennial Conference of the International Federation of Operational Research Societies (IFORS 2009)**, Standton, Johannesburg, South Africa, July 13-18, 2008.
220. “*Metaheuristics in network design*,” Invited plenary lecture, **7th International Workshop on Experimental Algorithms (WEA2008)**, Provincetown, Cape Cod, MA, May 31, 2008.

219. “*Efficient implementations of heuristics for routing and wavelength assignment*,” **7th International Workshop on Experimental Algorithms (WEA2008)**, Provincetown, Cape Cod, MA, June 1, 2008.
218. “*A genetic algorithm with random keys for node placement in path-disjoint network monitoring*,” Invited lecture, **DIMACS/DyDAn Workshop on Internet Tomography**, DIMACS, Rutgers University, Piscataway, NJ, May 15, 2008.
217. “*Metaheuristics in network design*,” Invited lecture, **Management Sciences Seminar**, Management Science Department, University of Iowa, Iowa City, Iowa, May 9, 2008.
216. “*Metaheuristics and network design*,” Invited tutorial lecture, **Network design workshop, Ninth INFORMS Telecommunications Conference**, University of Maryland, College Park, Maryland, March 29, 2008.
215. “*A memetic algorithm for routing optimization using exponential flow splitting*,” **Ninth INFORMS Telecommunications Conference**, University of Maryland, College Park, Maryland, March 27-29, 2008.
214. “*Some combinatorial optimization problems arising in telecommunications*,” Invited lecture, **Seminar in Industrial and Systems Engineering**, Department of Industrial and Systems Engineering, Rutgers University, Piscataway, New Jersey, March 4, 2008.
213. “*Some combinatorial optimization problems arising in telecommunications*,” Invited lecture, **Fields Industrial Optimization Seminar**, Fields Institute for Research in Mathematical Sciences, Toronto, Canada, February 5, 2008.
212. “*Optimization with random-key genetic algorithms*,” **Florham Park Mathematics Research Colloquium and Informal Seminar**, AT&T Labs Research, Florham Park, NJ, December 14, 2007.
211. “*GRASP with path-relinking for network migration scheduling*,” **INFORMS Annual Meeting (INFORMS 2007)**, Seattle, WA, November 4–7, 2007.
210. “*A hybrid heuristic for the p -median problem*,” **INFORMS Annual Meeting (INFORMS 2007)**, Seattle, WA, November 4–7, 2007.
209. “*A short course on greedy randomized adaptive search procedures*,” **XXXIX Symposium of the Brazilian Operational Research Society (XXXIX SBPO)**, Fortaleza, Brazil, August 28–31, 2007.
208. “*GRASP with evolutionary path-relinking*,” **Seventh Metaheuristics International Conference (MIC 2007)**, Montréal, Canada, June 25–29, 2007.
207. “*Network migration scheduling*,” Cookie talk, Internet and Network Systems Research Center, AT&T Labs Research, Florham Park, NJ, June 2007.
206. “*GRASP with path-relinking for network migration scheduling*,” **International Network Optimization Conference (INOC 2007)**, Spa, Belgium, April 2007.
205. “*Some issues in the optimization of Internet traffic*,” Invited lecture, Informatics Institute, Federal University of Rio Grande do Sul, Porto Alegre, Brazil, March 2007.
204. “*Metaheuristics for combinatorial optimization problems arising in telecommunications*,” 12-hour course, CIMPA-UNESCO-URUGUAY School on “Mathematics for the Internet and New-Generation Networks,” La Pedrera, Uruguay, March 2007.
203. “*GRASP for continuous global optimization*,” in **Second International Conference on Complementarity, Duality, and Global Optimization in Science and Engineering (CDGO 2007)**, U. of Florida, Gainesville, FL March 2007.
202. “*Some issues in the optimization of Internet traffic*,” Invited lecture, Department of Production Engineering, University of São Paulo, São Paulo, Brazil, August 2006.

201. “*Some new optimization problems in telecommunications*,” Invited lecture, Computer Science Department, Federal Fluminense University, Niterói, Brazil, August 2006.
200. “*Global optimization by continuous GRASP*,” in **19th International Symposium on Mathematical Programming (ISMP 2006)**, Rio de Janeiro, Brazil, July 31 – August 4, 2006.
199. “*Global optimization by continuous GRASP*,” in **21st European Conference on Operational Research (EURO 2006)**, Reykjavik, Iceland, July 2 – 5, 2006.
198. “*Some issues in the optimization of Internet traffic*,” Plenary lecture in **DIMACS Workshop on Computational Optimization and Logistics Challenges in the Enterprise (COLCE)**, ExxonMobil Research & Engineering (EMRE) Annandale, New Jersey, April 19 – 20, 2006.
197. “*Survivable composite-link IP network design with OSPF routing*,” in **Eighth INFORMS Telecommunications Conference**, Dallas, Texas, March 30 – April 1, 2006.
196. “*A GRASP for PBX telephone migration scheduling*,” in **Eighth INFORMS Telecommunications Conference**, Dallas, Texas, March 30 – April 1, 2006.
195. “*Combinatorial optimization for design and operations of telecommunication systems*,” Invited lecture, **Computer Science Department, Federal University of Minas Gerais**, Belo Horizonte, MG, Brazil, December 2005.
194. “*Combinatorial optimization for design and operations of telecommunication systems*,” Invited lecture, **Industrial and Systems Engineering Department, University of Florida**, Gainesville, FL, October 2005.
193. “*Solving covering problems with a heuristic for the p -median problem*,” Invited talk, **XXXVI Conference of the Italian Operational Research Society**, Camerino, Italy, September 2005.
192. “*Combinatorial optimization for design and operations of telecommunication systems*,” Opening plenary talk, **XXXVI Conference of the Italian Operational Research Society**, Camerino, Italy, September 2005.
191. “*A GRASP heuristic for the cooperative communication problem in ad hoc networks*,” **VI Metaheuristics International Conference (MIC2005)**, Vienna, Austria, August 2005.
190. “*Computational mathematics and operations research in telecommunication*,” **First North/Northeast Meeting on Operations Research and Computational Mathematics**, invited plenary talk, Macaíó, Brazil, July 2005.
189. “*Optimal design and operations of telecommunication systems*,” **International Conference on Industrial Logistics (ICIL’05)**, invited plenary talk, Montevideo, Uruguay, February 2005.
188. “*A hybrid multistart heuristic for the uncapacitated facility location problem*,” **9th INFORMS Computing Society Conference**, Annapolis, Maryland, January 2005.
187. “*Combinatorial Optimization in Telecommunications*,” **XXXVI Symposium of the Brazilian Operational Research Society (SBPO XXXVI)**, invited plenary talk, São João del Rei, Brazil, November 2004.
186. “*GRASP with path-relinking for the quadratic assignment problem*,” **III International Workshop on Efficient and Experimental Algorithms (WEA2004)**, Angra dos Reis, Brazil, May 2004.
185. “*A hybrid multistart heuristic for the uncapacitated facility location problem*,” invited talk, **Multiscale Optimization: Methods and Applications**, University of Florida, Gainesville, Florida, February 2004.
184. “*A hybrid heuristic for the p -median problem*,” invited talk, **Mathematical Programming in Rio – A conference in honor of Nelson Maculan**, Búzios, Brazil, November 2003.

183. “*Some applications of combinatorial optimization in telecommunications*,” invited short course, **Advanced School and Workshop on Mathematical Techniques and Problems in Telecommunications – MTPT 2003**, Tomar, Portugal, September 2003.
182. “*GRASP and path-relinking: Advances and applications*,” tutorial lecture, **V Metaheuristics International Conference (MIC2003)**, Kyoto, Japan, August 2003.
181. “*GRASP with path-relinking for the quadratic assignment problem*,” **V Metaheuristics International Conference (MIC2003)**, Kyoto, Japan, August 2003.
180. “*Finding approximate solutions for the p-median problem*,” invited seminar, **Systems Engineering Department, COPPE, Federal University of Rio de Janeiro**, Brazil, August 2003.
179. “*Combinatorial optimization in telecommunications*,” invited seminar, **Systems Engineering Department, COPPE, Federal University of Rio de Janeiro**, Brazil, August 2003.
178. “*Finding approximate solutions for the p-median problem*,” invited seminar, **Computer Science Department, Catholic University of Rio de Janeiro**, Brazil, July 2003.
177. “*Combinatorial optimization in telecommunications*,” invited talk, **Federal Fluminense University (UFF)**, Niterói, Brazil, June 2003.
176. “*Finding approximate solutions for the p-median problem*,” invited lecture, **Industrial and Systems Engineering Department, University of Florida**, Gainesville, FL, April 2003.
175. “*A genetic algorithm with optimized crossover for OSPF routing on the Internet*,” invited talk, **INFORMS Annual Meeting San José**, San José, California, November 2002.
174. “*Randomized heuristics for the MAX-CUT problem*,” **INFORMS Annual Meeting San José**, San José, California, November 2002.
173. “*A genetic algorithm with optimized crossover for the weight setting problem in OSPF routing*,” invited talk, **XXXIII Annual Conference of the Operational Research Society of Italy – AIRO2002**, L’Aquila, Italy, September 2002.
172. “*Evolutionary computing and the weight setting problem in open shortest path first (OSPF) routing*,” invited seminar, **Computer Science Department, Catholic University of Rio de Janeiro**, Brazil, August 2002.
171. “*Evolutionary computing and the weight setting problem in open shortest path first (OSPF) routing*,” **Florham Park Mathematics Research Colloquium & Informal Seminar**, AT&T Labs Research, Florham Park, New Jersey, July 2002.
170. “*A memetic algorithm for OSPF routing*,” **Sixth INFORMS Telecom**, Boca Raton, Florida, March 2002.
169. “*A genetic algorithm for the weight setting problem in OSPF routing*,” invited lecture, **Mathematics Department, Federal University of Rio de Janeiro**, Rio de Janeiro, Brazil, August 2001.
168. “*A genetic algorithm for the weight setting problem in OSPF routing*,” **Optimization 2001**, Aveiro, Portugal, July 2001.
167. “*GRASP with path-relinking and VNS for MAXCUT*,” **IV Metaheuristics International Conference**, Porto, Portugal, July 2001.
166. “*Combinatorial optimization in telecommunications*,” **Optimization and Industry Conference**, invited plenary talk, Great Keppel Island, Queensland, Australia, July 2001.
165. “*GRASP with path-relinking for the 3-index assignment problem*,” **Workshop on Novel Approaches to Hard Discrete Optimization Problems**, invited plenary talk, U. of Waterloo, Waterloo, Canada, April 2001.

164. “*Local search with perturbations for the prize-collecting Steiner tree problem in graphs,*” **INFORMS Fall Meeting**, San Antonio, TX, November 2000.
163. “*The prize collecting Steiner tree problem in graphs: Heuristics and lower bounds,*” invited lecture, **Industrial and Systems Engineering Department, University of Florida**, Gainesville, FL, October 2000.
162. “*Detecting dense subgraphs in massive graphs,*” **XVII International Symposium on Mathematical Programming**, Atlanta, USA, August 2000.
161. “*The prize collecting Steiner tree problem in graphs: Heuristics and lower bounds,*” invited lecture, **Mathematics Department, Federal University of Rio de Janeiro**, Rio de Janeiro, Brazil, July 2000.
160. “*The prize collecting Steiner tree problem in graphs: Heuristics and lower bounds,*” invited lecture, **Dipartimento di Informatica e Sistemistica, Università di Roma “La Sapienza”**, Rome, Italy, May 2000.
159. “*The prize collecting Steiner tree problem in graphs: Heuristics and lower bounds,*” invited lecture, **Dipartimento di Elettronica Informatica e Sistemistica, Università della Calabria**, Rende, Italy, May 2000.
158. “*Greedy randomized adaptive search procedures,*” plenary lecture, **ECCO XIII - 13th Meeting of the European Chapter in Combinatorial Optimization**, Capri, Italy, May 2000.
157. “*Applied combinatorial optimization in telecommunications,*” plenary lecture, **IO’2000 - 9th Conference of the Portuguese Operations Research Association**, Setúbal, Portugal, April 2000.
156. “*A parallel GRASP for the Steiner problem in graphs using a hybrid local search,*” **INFORMS Fall Meeting**, Philadelphia, PA, November 1999.
155. “*Combinatorial optimization in telecommunications,*” invited lecture, **III Joint ALIO-EURO Meeting on Applied Combinatorial Optimization**, International School of Mathematics “G. Stampacchia,” Erice, Sicily, Italy, November 1999.
154. “*Metaheuristics for combinatorial optimization,*” tutorial lecture, **CIMPA International School on Advanced Algorithmic Techniques for Parallel Computation with Applications**, Natal, Brazil, September 1999.
153. “*GRASP: Greedy randomized adaptive search procedures,*” tutorial lecture, **III Metaheuristics International Conference (MIC99)**, Angra dos Reis, Brazil, July 1999.
152. “*GRASP: Greedy randomized adaptive search procedures,*” invited lecture, **Center for Applied Optimization, Department of Industrial and Systems Engineering**, University of Florida, Gainesville, Florida, May 1999.
151. “*GRASP: Greedy randomized adaptive search procedures,*” invited lecture, **IBM T.J. Watson Research Center**, Yorktown Heights, NY, April 1999.
150. “*GRASP: Greedy randomized adaptive search procedures,*” invited lecture, **DIMACS workshop on Large Scale Discrete Optimization in Logistics**, Center for Discrete Mathematics and Theoretical Computer Science, Rutgers University, New Jersey, USA, February 1999.
149. “*Applied optimization in telecommunications,*” invited lecture, **Center for Applied Optimization, Department of Industrial and Systems Engineering**, University of Florida, Gainesville, Florida, February 1999.
148. “*Greedy randomized adaptive search procedures,*” invited lecture, **VI Latin American Summer School in Operations Research**, Mendes, Brazil, January 1999.
147. “*Applied optimization in telecommunications,*” invited lecture, **VI Latin American Summer School in Operations Research**, Mendes, Brazil, January 1999.

146. “*GRASP and an application in telecommunications*,” invited conference, **XXX Symposium of the Brazilian Operations Research Society**, Curitiba, Brazil, November 1998.
145. “*On preconditioners for network interior point methods*,” **INFORMS Fall Meeting**, Seattle, Washington, October 1998.
144. “*On cliques in very large graphs: An application in telecommunications*,” **INFORMS Fall Meeting**, Seattle, Washington, October 1998.
143. “*GRASP: Greedy randomized adaptive search procedures. A meta-heuristic for combinatorial optimization*,” Invited tutorial, **IX Latin-Iberian-American Conference on Operations Research**, Buenos Aires, Argentina, September 1998.
142. “*On cliques in very large graphs: An application in telecommunications*,” **invited seminar**, Institute of Mathematics, Federal University of Rio de Janeiro, Brazil, August 1998.
141. “*On cliques in very large graphs: An application in telecommunications*,” **invited seminar**, Computer Science Department, Catholic University of Rio de Janeiro, Brazil, August 1998.
140. “*Ten years of GRASP: A survey*,” **Optimization 98**, Coimbra, Portugal, July 1998.
139. “*On cliques in very large graphs*,” **International Conference on Combinatorial and Global Optimization**, Crete, Greece, May 1998.
138. “*On cliques in very large graphs*,” **DIMACS Workshop on External Memory Algorithms and/or Visualization (EMA&VIS)**, Center for Discrete Mathematics and Theoretical Computer Science, Rutgers University, New Jersey, USA, May 1998.
137. “*On large maximum clique problems*,” **Algorithms and Experiments (ALEX98)**, Trento, Italy, February 1998.
136. “*A GRASP for job shop scheduling*,” **INFORMS CSTS Meeting**, Carmel, California, January 1998.
135. “*Greedy randomized adaptive search procedure for the Steiner problem in graphs*,” **DIMACS Workshop on Randomization Methods in Algorithm Design**, Princeton, New Jersey, December 1997.
134. “*A GRASP for the feedback vertex set problem*,” **Invited Seminar, Systems Design Engineering Seminar Series**, University of Waterloo, Waterloo, Canada, December 1997.
133. “*Approximate solution of MAX-SAT problems using GRASP*,” **XVI International Symposium on Mathematical Programming**, Lausanne, Switzerland, August 1997.
132. “*A branch and bound algorithm for the quadratic assignment problem using lower bounds based on linear programming*,” **XVI International Symposium on Mathematical Programming**, Lausanne, Switzerland, August 1997.
131. “*An efficient implementation of an interior point method for multicommodity network flows*,” **XVI International Symposium on Mathematical Programming**, Lausanne, Switzerland, August 1997.
130. “*A GRASP for job shop scheduling*,” **From local to global optimization: Workshop in honor of the 70th birthday of Hoang Tuy**, Linkoping, Sweden, August 1997.
129. “*A GRASP for the maximum covering problem*,” **invited seminar**, Department of Electrical Engineering, University of Campinas, Campinas, Brazil, July 1997.
128. “*A GRASP for the maximum covering problem*,” **invited seminar**, Computer Science Department, Catholic University of Rio de Janeiro, Brazil, July 1997.
127. “*An LP-based branch and bound algorithm for the QAP*,” **invited seminar**, Institut Galilée, University of Paris XIII, Paris, France, June 1997.
126. “*An LP-based branch and bound algorithm for the QAP*,” **invited seminar**, CNET, France Telecom, Paris, France, June 1997.

125. "An LP-based branch and bound algorithm for the QAP," **invited speaker**, Conference on High Performance Software for Nonlinear Optimization (HPSNO'97), Ischia, Italy, June 1997.
124. "A GRASP for the maximum covering problem," **INFORMS Meeting**, San Diego, California, May 1997.
123. "A GRASP for job shop scheduling," **INFORMS Meeting**, San Diego, California, May 1997.
122. "A multicommodity flow approach for global network planning," **INFORMS Meeting**, San Diego, California, May 1997.
121. "An interior point method for multicommodity flows," **INFORMS Meeting**, San Diego, California, May 1997.
120. "A GRASP for the maximum covering problem," **DIMACS Workshop on Network Design and Facility Location**, Princeton, New Jersey, April 1997.
119. "A GRASP for the maximum covering problem," **invited seminar**, Department of Operations Research and Statistics, University of Catalunya, Barcelona, Spain, December 1996.
118. "Solving network flow problems with interior point methods," Department of Operations Research and Statistics, University of Catalunya, Barcelona, Spain, December 1996.
117. "A GRASP for the maximum covering problem," **invited seminar**, Institute of Telecommunications, University of Coimbra, Coimbra, Portugal, December 1996.
116. "A GRASP for the biquadratic assignment problem," **INFORMS**, Atlanta, USA, November 1996.
115. "Designing and reporting on computational experiments with heuristic methods," **invited seminar**, Department of Computer Science, Catholic University, Rio de Janeiro, Brazil, September 1996.
114. "Tutorial on Combinatorial Optimization," **Three day invited tutorial**, Department of Mathematics, Federal University of Ceará, Fortaleza, Brazil, September 1996.
113. "Interior point methods for network flows," **Invited Seminar**, Centro de Pesquisas em Energia Elétrica (CEPEL), Rio de Janeiro, Brazil, August 1996.
112. "Recent advances in mathematical programming," **VIII Latin-Iberian-American Conference on Operations Research**, Rio de Janeiro, Brazil, August 1996.
111. "Solving network flow problems with interior point methods," **International Symposium on Optimization and Computation**, Hayama, Japan, August 1996.
110. "A GRASP for graph planarization," **IFORS'96**, Vancouver, B.C., Canada, July 1996.
109. "An LP-based branch and bound algorithm for the QAP," **8th SIAM Conference on Discrete Mathematics**, Baltimore, MD, USA, June 1996.
108. "A GRASP for graph planarization," **8th SIAM Conference on Discrete Mathematics**, Baltimore, MD, USA, June 1996.
107. "A truncated primal-infeasible dual-feasible network interior point method," **5th SIAM Conference on Optimization**, Victoria, B.C., Canada, May 1996.
106. "Using linear programming to help solve quadratic assignment problems," **Workshop on Semidefinite Programming and Interior-Point Approaches for Combinatorial Optimization Problems**, Fields Institute, Toronto, Canada, May 1996.
105. "Tutorial on Optimization," **Tyecin Systems User's Group Meeting**, San Jose, USA, May 1996.
104. "Using linear programming to help solve quadratic assignment problems," **Combinatorial optimization - CO96**, London, U.K., March 1996.

103. “A parallel GRASP for MAXSAT,” **Parallel optimization colloquium - POC96**, Versailles, France, March 1996.
102. “A parallel GRASP for MAXSAT,” **DIMACS Workshop on SATISFIABILITY PROBLEM: THEORY AND APPLICATIONS**, Center for Discrete Mathematics and Theoretical Computer Science, Rutgers University, New Jersey, USA, March 1996.
101. “Interior Point Algorithm for Approximate Solution of Maximum Satisfiability Problem,” **DIMACS Workshop on SATISFIABILITY PROBLEM: THEORY AND APPLICATIONS**, Center for Discrete Mathematics and Theoretical Computer Science, Rutgers University, New Jersey, USA, March 1996.
100. “A GRASP for graph planarization,” **INFORMS**, New Orleans, USA, November 1995.
99. “A GRASP for the biquadratic assignment problem,” **INFORMS**, New Orleans, USA, November 1995.
98. “A LP-based branch and bound algorithm for the quadratic assignment problem,” **INFORMS**, New Orleans, USA, October 1995.
97. “A truncated primal-infeasible dual-feasible network interior point method,” **INFORMS**, New Orleans, USA, October 1995.
96. “A GRASP for graph planarization,” **Systems and Industrial Engineering Seminar Series**, University of Florida, Gainesville, USA, September 1995.
95. “Using interior point methods to solve large scale network optimization,” **III International Conference on Industrial and Applied Mathematics**, Hamburg, Germany, July 1995.
94. “A branch and bound algorithm for the quadratic assignment problem using a lower bound based on linear programming,” **INFORMS International Meeting**, Singapore, July 1995.
93. “A GRASP for graph planarization,” **INFORMS International Meeting**, Singapore, July 1995.
92. “Computing lower bounds for the quadratic assignment problem with an interior point method for linear programming,” **INFORMS International Meeting**, Singapore, July 1995.
91. “A branch and bound algorithm for the quadratic assignment problem using a lower bound based on linear programming,” **Conference on State of the Art in Global Optimization: Computational Methods and Applications**, Princeton University, April 1995.
90. “Computational linear programming – A tutorial,” Two-day tutorial, **II Latin American Summer School in Operations Research**, Mendes, Brazil, January 1995.
89. “Greedy Randomized Adaptive Search Procedures,” Closing plenary session, **II Latin American Summer School in Operations Research**, Mendes, Brazil, January 1995.
88. “Computational linear programming,” Research seminar series, **National Laboratory for Scientific Computing – LNCC**, Rio de Janeiro, Brazil, January 1995.
87. “Computational linear programming – State of the art,” Closing plenary session, **XXVI Symposium of the Brazilian Operations Research Society**, Florianópolis, Brazil, December 1994.
86. “Recent results in linear programming,” Two-day tutorial, **XXVI Symposium of the Brazilian Operations Research Society**, Florianópolis, Brazil, December 1994.
85. “Recent advances in network optimization,” **International Symposium on Network Design and Management**, Viña del Mar, Chile, November 1994.
84. “Interior point methods for network optimization,” **Systems and Industrial Engineering Seminar Series**, University of Florida, Gainesville, USA, September 1994.
83. “Interior point methods for network optimization,” **XV International Symposium of the Mathematical Programming Society**, Ann Arbor, USA, August 1994.

82. "Computing lower bounds for the quadratic assignment problem with an interior point method for linear programming," **XV International Symposium of the Mathematical Programming Society**, Ann Arbor, USA, August 1994.
81. "A GRASP for Satisfiability," **XV International Symposium of the Mathematical Programming Society**, Ann Arbor, USA, August 1994.
80. "Interior point methods for network optimization," **Faculty Seminar on Optimization: Theory & Practice**, Center for Advanced Studies, University of Iowa, Iowa City, USA, August 1994.
79. "A GRASP for Satisfiability," **TIMS XXXII**, Anchorage (Alaska), USA, June 1994.
78. "A GRASP for Satisfiability," **TIMS / ORSA**, Boston, USA, April 1994.
77. "Interior point methods for network optimization," **ORSA CSTS Conference**, Williamsburg (Virginia), USA, January 1994.
76. "A GRASP for Satisfiability," **Third International Symposium on Artificial Intelligence and Mathematics**, Fort Lauderdale (Florida), USA, January 1994.
75. "Using GRASP for the quadratic assignment problem," **ORSA / TIMS**, Phoenix, USA, November 1993.
74. "A GRASP for Satisfiability," **ORSA / TIMS**, Phoenix, USA, November 1993.
73. "A GRASP for Satisfiability," **Second DIMACS Implementation Challenge: Clique, Coloring, and Satisfiability**, Center for Discrete Mathematics and Theoretical Computer Science, Rutgers University, New Jersey, USA, October 1993.
72. "Efficient implementation of a network interior point method," **Netflow'93**, San Miniato, Italy, October 1993.
71. "Integer and linear programming models of a ADCS network design problem," **Networks and Systems Performance Symposium**, AT&T Bell Laboratories, Holmdel (NJ), USA, September 1993.
70. "An interior point approach for Boolean vector function synthesis," **36th Midwest Conference on Circuits and Systems**, Detroit, USA, August 1993.
69. "Greedy randomized adaptive search procedures," **Electrical Engineering Seminar Series**, Imperial College of Science and Technology, London, England, July 1993.
68. "Efficient implementation of a network interior point method," **IFORS / 93**, Lisbon, Portugal, July 1993.
67. "GRASP for set covering and MAX-SAT," **IFORS / 93**, Lisbon, Portugal, July 1993.
66. "A greedy randomized adaptive search procedure for the quadratic assignment problem," **IFORS / 93**, Lisbon, Portugal, July 1993.
65. "A greedy randomized adaptive search procedure for the quadratic assignment problem," **DIMACS Workshop on the Quadratic Assignment Problem**, Center for Discrete Mathematics and Theoretical Computer Science, Rutgers University, New Jersey, USA, May 1993.
64. "A greedy randomized adaptive search procedure for the quadratic assignment problem," **TIMS / ORSA**, Chicago, USA, May 1993.
63. "A globally convergent interior point network flow method: Identifying the optimal primal-dual structure," **TIMS / ORSA**, Chicago, USA, May 1993.
62. "Greedy randomized adaptive search procedures," **DIMACS Workshop on Solving Hard Combinatorial Optimization Problems**, Center for Discrete Mathematics and Theoretical Computer Science, Rutgers University, New Jersey, March 1993.

61. "A globally convergent interior point network flow method: Identifying the optimal primal-dual structure," **Workshop on Large Scale Optimization**, University of Florida, Gainesville, USA, February 1993.
60. "Advances in an implementation of a network interior point method," **ORSA / TIMS**, San Francisco, USA, November 1992.
59. "Treating free variables in dual form interior point algorithms," **ORSA / TIMS**, San Francisco, USA, November 1992.
58. "Advances in an implementation of a network interior point method," **Operations Research Seminar Series**, Operations Research Group, Dept. of Mechanical Engineering, The University of Texas, Austin, USA, October 1992.
57. "A interior point approach to Boolean vector function synthesis," **VI Latin-Iberian-American Conference on Operations Research**, Mexico City, Mexico, October 1992.
56. "Efficient implementation of a network interior point method," **Electrical Engineering Seminar Series**, Imperial College of Science and Technology, London, England, July 1992.
55. "A interior point approach to Boolean vector function synthesis," **TIMS XXXI**, Helsinki, Finland, June 1992.
54. "Advances in interior point approaches to integer programming," **TIMS XXXI**, Helsinki, Finland, June 1992.
53. "Efficient implementation of a network interior point method," **III Stockholm Optimization Days**, Royal Institute of Technology, Stockholm, Sweden, June 1992.
52. "Efficient implementation of a network interior point method," **Computer and Electrical Engineering Seminar Series**, University of Waterloo, Waterloo, Canada, June 1992.
51. "Efficient implementation of a network interior point method," **IV SIAM Conference on Optimization**, Chicago, USA, May 1992.
50. "Efficient implementation of a network interior point method," **TIMS / ORSA**, Orlando, USA, April 1992.
49. "A interior point approach to Boolean vector function synthesis," **TIMS / ORSA**, Orlando, USA, April 1992.
48. "Efficient implementation of a network interior point method," **Mathematical Sciences Seminar Series**, Rensselaer Polytechnic Institute, Troy, USA, March 1992.
47. "Efficient implementation of a network interior point method," **Operations Research and Statistics Seminar Series**, Princeton University, Princeton, USA, February 1992.
46. "Efficient implementation of a network interior point method," **Systems and Industrial Engineering Seminar Series**, University of Florida, Gainesville, USA, February 1992.
45. "Efficient implementation of a network interior point method," **Large Scale Systems Seminar**, Department of Industrial Engineering and Operations Research, University of California, Berkeley, USA, January 1992.
44. "A interior point approach to Boolean vector function synthesis," **TIMS / ORSA**, Anaheim, USA, November 1991.
43. "An efficient implementation of a network interior point method," **Operations Research Seminar Series**, Operations Research Department, George Washington University, Washington D.C., USA, October 1991.

42. “*Computational investigation of an interior point linear programming algorithm for minimum cost network flow*,” **The First DIMACS International Algorithm Implementation Challenge**, DIMACS, New Brunswick, USA, October 1991.
41. “*A dual affine scaling algorithm for network flow*,” **TIMS XXX**, Rio de Janeiro, Brazil, July 1991.
40. “*A interior point approach to Boolean function synthesis*,” **TIMS XXX**, Rio de Janeiro, Brazil, July 1991.
39. “*Acceleration techniques for interior point linear programming algorithms*,” **TIMS XXX**, Rio de Janeiro, Brazil, July 1991.
38. “*A interior point approach to Boolean function synthesis*,” **ORSA / TIMS**, Nashville, USA, May 1991.
37. “*A dual affine scaling algorithm for network flow*,” **ORSA / TIMS**, Nashville, USA, May 1991.
36. “*TUTORIAL: Greedy Randomized Adaptive Search Procedures*,” **ORSA / TIMS**, Nashville, USA, May 1991.
35. “*A interior point approach to Boolean function synthesis*,” **Operations Research Seminar Series**, Operations Research Group, Dept. of Mechanical Engineering, The University of Texas, Austin, USA, March 1991.
34. “*A dual affine scaling algorithm for network flow*,” **Systems and Industrial Engineering Seminar**, University of Arizona, Tucson, USA, November 1990.
33. “*Implementation of interior point algorithms: A tutorial*,” **Systems Engineering and Computer Science Seminar**, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil, September 1990.
32. “*Implementation of interior point algorithms: A tutorial*,” **V Latin-Iberian-American Conference on Operations Research**, Buenos Aires, Argentina, September 1990.
31. “*Implementation of interior point algorithms for network flows*,” **SIAM Conference**, Chicago, USA, July 1990.
30. “*An interior point approach to graph partitioning*,” **SIAM Conference**, Chicago, USA, July 1990.
29. “*An interior point algorithm for zero-one integer programming*,” **IFORS / 90**, Athens, Greece, June 1990.
28. “*An interior point algorithm for zero-one integer programming*,” **Management Sciences Seminar Series**, Imperial College of Science and Technology, London, England, July 1990.
27. “*Computational experience with an interior point algorithm on the Satisfiability problem*,” **MPS Conference on Integer Programming and Combinatorial Optimization**, Waterloo University, Canada, May 1990.
26. “*Implementation of interior point algorithms for network flows*,” **ORSA / TIMS**, Las Vegas, USA, April 1990.
25. “*An interior point algorithm for zero-one integer programming*,” **International Symposium on Interior Point Methods: Theory and Practice**, Schreveningen, Netherlands, January 1990.
24. “*An interior point algorithm for zero-one integer programming*,” **Operations Research Seminar Series**, Operations Research Group, Dept. of Mechanical Engineering, The University of Texas, Austin, USA, November 1989.
23. “*An interior point algorithm for zero-one integer programming*,” **Graduate School of Industrial Management Seminar Series**, Graduate School of Industrial Management, Carnegie-Mellon University, Pittsburgh, USA, October 1989.
22. “*Computational experience with an interior point algorithm on the Satisfiability problem*,” **TIMS / ORSA**, New York City, USA, October 1989.

21. "A greedy randomized adaptive search procedure for maximum independent set," **TIMS / ORSA**, New York City, USA, October 1989.
20. "Implementation and testing of Karmarkar's algorithm for linear programming," **Brazilian Mathematics Colloquium**, Instituto de Matemática Pura e Aplicada (IMPA), Rio de Janeiro, Brazil, July 1989.
19. "An interior point algorithm for zero-one integer programming," **Latin American Conference on Informatics**, Santiago, Chile, July 1989.
18. "An interior point algorithm for zero-one integer programming," **III SIAM Conference on Optimization**, Boston, USA, April 1989.
17. "An interior point algorithm for zero-one integer programming," **ORSA / TIMS**, Denver, USA, October 1988.
16. "A polynomial-time primal-dual affine scaling algorithm for linear and convex quadratic programming and its power series extension," **ORSA / TIMS**, Denver, USA, October 1988.
15. "An interior point algorithm for zero-one integer programming," **13th International Symposium of the Mathematical Programming Society**, Tokyo, Japan, September 1988.
14. "Implementation and testing of Karmarkar's algorithm for linear programming," **13th International Symposium of the Mathematical Programming Society**, Tokyo, Japan, September 1988.
13. "A polynomial-time primal-dual affine scaling algorithm for linear and convex quadratic programming and its power series extension," **ACM-AMS-SIAM Conference on the Progress of Mathematical Programming**, Bowdoin College, Brunswick (Maine), USA, May 1988.
12. "Shop floor scheduling of semiconductor wafer manufacturing," **Operations Research Seminar Series**, Operations Research Group, Dept. of Mechanical Engineering, The University of Texas, Austin, USA, March 1988.
11. "Testing interior point algorithms on randomly generated degenerate linear programs," **TIMS / ORSA**, Washington, D.C., USA, April 1988.
10. "A polynomial-time primal-dual affine scaling algorithm for linear and convex quadratic programming and its power series extension," **SIAM Conference on Discrete Mathematics**, San Francisco, USA, March 1988.
9. "Implementation and testing of Karmarkar's algorithm for linear programming," **Operations Research Seminar Series**, Operations Research Group, Dept. of Mechanical Engineering, The University of Texas, Austin, USA, November 1987.
8. "Preprocessing the input data for Karmarkar's algorithm for linear programming," **ORSA / TIMS**, St. Louis, USA, October 1987.
7. "Closed-loop job release control for VLSI circuit manufacturing," **SRC Conference on VLSI Manufacturing**, MIT, Cambridge (MA), USA, June 1987.
6. "Data structures for Karmarkar's algorithm for linear programming," **II SIAM Conference on Optimization**, Houston, USA, May 1987.
5. "Data structures for Karmarkar's algorithm for linear programming," **TIMS / ORSA**, New Orleans, USA, April 1987.
4. "Data structures for computing the search direction in Karmarkar's algorithm for linear programming," **ORSA / TIMS**, Miami, USA, October 1986.
3. "An implementation of Karmarkar's algorithm for linear programming," Talk given by Ilan Adler at **TIMS / ORSA**, Los Angeles, USA, April 1986.

2. "*Karmarkar's algorithm for linear programming*," **Invited Seminar**, Centro de Pesquisas em Energia Elétrica (CEPEL), Rio de Janeiro, Brazil, December 1984.
1. "*Implementation and testing of a primal-dual algorithm for the assignment problem*," **XIII Brazilian Operations Research Symposium**, Rio de Janeiro, Brazil, October 1980.

PH.D. STUDENTS

4. Luciana S. Pessôa, Department of Computer Science, Federal Fluminense University (UFF), Niterói, RJ, Brazil. Expected graduation: 2009.
3. Thiago F. Noronha, Department of Computer Science, Catholic University of Rio de Janeiro (PUC-Rio), Rio de Janeiro, RJ, Brazil. Graduation: September 5, 2008.
2. Luciana S. Buriol, Department of Electrical Engineering, State University of Campinas (UNICAMP), Campinas, São Paulo, Brazil, graduated November 14, 2003. Thesis title: *Traffic routing on the Internet: Algorithms for design and operation of networks using OSPF protocol*.
1. Renata M. Aiex, Department of Computer Science, Catholic University of Rio de Janeiro (PUC-Rio), Rio de Janeiro, RJ, Brazil, graduated August 5, 2002. Thesis title: *An experimental investigation of the probability distribution of solution time in GRASP heuristics and its application to the analysis of parallel implementations*.

PH.D. THESIS EXAMINATION BOARDS

12. Silvana Bocanegra, “Algoritmos de Newton-Krylov preconditionados para métodos de pontos interiores” (*Preconditioned Newton-Krylov algorithms for interior point methods*), Department of Computer Science, Federal University of Minas Gerais (UFMG), Belo Horizonte, MG, Brazil, December 15, 2005.
11. Zenilton K. G. do Patrocínio Jr., “Planejamento de topologia virtual com combinação de tráfego em redes óticas multiplexadas por divisão de comprimento de onda” (*Planning of virtual topology with combined traffic in WDM optical networks*), Department of Computer Science, Federal University of Minas Gerais (UFMG), Belo Horizonte, MG, Brazil, December 19, 2005.
10. Franco Robledo, “GRASP heuristics for wide area network design,” joint diploma by Universidad de la Republica (Montevideo, Uruguay) and Université de Rennes 1 (Rennes, France), February 15, 2005. Defense was at Computer Science Institute, Universidad de la Republica, Montevideo, Uruguay.
9. Luciana S. Buriol, “Roteamento do tráfego na Internet: Algoritmos para projeto e operações de redes com protocolo OSPF” (*Traffic routing on the Internet: Algorithms for design and operation of networks using OSPF protocol*), Department of Electrical Engineering, State University of Campinas (UNICAMP), Campinas, São Paulo, Brazil, November 14, 2003.
8. Isabel C. M. Rosseti, “Estratégias seqüenciais e paralelas de GRASP com reconexão por caminhos para o problema de síntese de redes a 2-caminhos” (*Sequential and parallel GRASP with path-relinking strategies for the 2-path network design problem*), Department of Computer Science, Catholic University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil, July 24, 2003.
7. Renata M. Aiex, “Uma investigação experimental da distribuição de probabilidade do tempo de solução em heurísticas GRASP e sua aplicação na análise de implementações paralelas” (*An experimental investigation of the probability distribution of solution time in GRASP heuristics and its application to the analysis of parallel implementations*), Department of Computer Science, Catholic University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil, August 5, 2002.
6. Pablo Moscato, “Problemas de Otimização NP, Aproximabilidade e Computação Evolutiva: Da Prática à Teoria” (*NP optimization problems, approximability and evolutionary computation: From practice to theory*), Department of Systems Engineering, State University of Campinas (UNICAMP), Campinas, SP, Brazil, March 26, 2001.
5. Marcelo Prais, “Estratégias de variação de parâmetros em procedimentos GRASP e aplicações” (*Parameter variation strategies in GRASP and applications*), Department of Computer Science, Catholic University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil, July 24, 2000.
4. Simone de Lima Martins, “Estratégias de Paralelização de metaheurísticas em ambientes de memória distribuída” (*Parallelization strategies for metaheuristics in distributed memory environments*), Department of Computer Science, Catholic University of Rio de Janeiro, Rio de Janeiro, RJ, Brazil, July 27, 1999.

3. Seyed Jafar Sadjadi, “Nonlinear programming using an Extended Lagrangean Function: A Water Resources Management Case Study”, Department of Systems Design Engineering, University of Waterloo, Waterloo, Ontario, Canada, December 11, 1997.
2. Geraldo Veiga, “Sur L’implantation des Méthodes de Points Intérieurs pour la Programmation Linéaire” (*On the implementation of interior point methods for linear programming*), Institut Galilée, Université Paris 13, Paris, France, June 13, 1997.
1. Paulina Chin, “Iterative Algorithms for Solving Linear Programs for Engineering Applications”, Department of Electrical and Computer Engineering, University of Waterloo, Waterloo, Ontario, Canada, April 17, 1995.

LANGUAGES

Portuguese: Speak, understand, read, write

English: Speak, understand, read, write

Spanish: Speak, understand, read

Italian: Understand, read

French: Read

REFERENCES

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