Curriculum Vitae

Mauricio G.C. Resende
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November 20, 2016

PERSONAL

Marital Status: Married, two children

Citizenship: Brazil and United States

RESEARCH INTERESTS

Network Science and Graph Theory, Optimization, Heuristics and Metaheuristics, Network Design, Routing, Location, Scheduling, Operations Research Modeling, Optimization in Telecommunications, Logistics, and Transportation.

EDUCATION

09/1982 — 08/1987	**Ph.D.** 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 — 08/1979	**M.S.** in Operations Research Georgia Institute of Technology, Atlanta, GA
03/1974 — 06/1978	**Electrical Engineer**, concentration in Systems Engineering Catholic University (PUC), Rio de Janeiro, Brazil
08/1969 — 06/1973	**High School**, American School of Rio de Janeiro (EARJ) Rio de Janeiro, Brazil

ACADEMIC AWARDS

09/2016	**Fellow**, *Institute for Operations Research and the Management Sciences – INFORMS, Class of 2016*, 2016 INFORMS Annual Meeting, Nashville, TN, U.S.A.
06/2012	**IFORS Invited Tutorial Lecturer (IFORS ITL)**, *International Federation of Operational Research Societies*, CLAIO/SBPO 2012 meeting, Rio de Janeiro, Brazil.
11/2010	**Doctor Honoris Causa**, *Universidad Nacional de San Agustín de Arequipa (UNSA)*, Arequipa, Peru.
09/2009	**Roberto D. Galvão Prize**, *XLI Symposium of the Brazilian Operational Research Society*, for best paper: *A hybrid genetic algorithm for road congestion minimization*, Porto Seguro, Brazil.
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

EXPERIENCE AND JOB HISTORY

12/2014 —   **Principal Research Scientist**, Modeling and Optimization Group, Logistics and Trans-
present   portation, Amazon.com, Seattle, WA

05/2013 —   **Lead Inventive Scientist**, Network Evolution Research Department, Internet and
11/2014   Network Systems Research Center, AT&T Labs Research, Middletown, NJ

05/1999 —   **Lead Member of Technical Staff**, Algorithms and Optimization Research Department,
05/2013   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 Califor-
08/1987   nia, 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

EDITORIAL ACTIVITY

2014 – present	**Editorial Board** of RAIRO Operations Research.
2012 – present	**Editorial Board** of Produção, the journal of the Brazilian Association of Production Engineering.
2007 – present	**Editorial Board** of International Transactions in Operational Research.
2006 – present	**Editorial Board** of Networks.
2001 – present	**Editor** of *Massive Computing* book series (with J. Abello and P.M. Pardalos), Kluwer Academic Publishers.
2001 – present	**Editorial Board** of book series *New Dimensions in Networks*, Anna Nagurney (Ed.), Edward Elgar Publishing Inc.
1998 – present	**Editorial Board** of Pesquisa Operacional, the journal of the Brazilian Operations Research Society.
1998 – present	**Editorial Board** of Computational Optimization and Applications.
1995 – present	**Editorial Board** of J. of Combinatorial Optimization.
1995 – present	**Editorial Board** of J. of Global Optimization.
2008 – 2013	**Editorial Board** of Optimization and Engineering.
2006 – 2010	**Editorial Board** of TOP – The Operations Research Journal of the Spanish Society of Statistics and Operations Research (SEIO).
2006 – 2014	**Editorial Board** of Statistical Analysis of Networks.
2003 – 2008	**Editorial Board** of Investigação Operacional, the journal of the Portuguese Operations Research Association (APDIO).
1998 – 2010	**Editorial Board** of Combinatorial Algorithms Test Sets (CATS): The ACM/EATCS Platform for Experimental Research.
1995 – 2001	**Editorial Board** of Investigación Operativa.
1994 – 2014	**Editorial Board** of J. of Heuristics.
1993 – 1994	**Editorial Board** of IIE Transactions on Research.

CONFERENCE AND WORKSHOP ORGANIZATION

2016	**Conference Co-Chair** of the *13th INFORMS Telecommunications Conference* (with M. Bartolacci), March 20–22, 2016, Boca Raton, Florida.
2014	**Program Co-Chair** of the *12th INFORMS Telecommunications Conference* (with L. Gouveia and Y. Lee), March 2–4, 2014, Lisbon, Portugal.
2014	**Conference Co-Chair** of *Learning and Intelligent OptimizatioN Conference – LION 8*, (with P.M. Pardalos), February 16–21, 2014, Gainesville, Florida, USA.

2012	**Program Co-Chair** of the *11th INFORMS Telecommunications Conference* (with E. Olinick and L. Gouveia), March 15–17, 2012, Boca Raton, Florida, USA.
2009	**Chair and Organizer** of the *Workshop on Designing Networks for Manageability* (with J. Rexford), November 12–13, 2009, Center for Discrete Mathematics and Theoretical Computer Science (DIMACS), Rutgers University, Piscataway, New Jersey, USA.
1994	**Chair and Organizer** of the *Workshop on Parallel Processing of Discrete Optimization Problems* (with P.M. Pardalos and K. G. Ramakrishnan), April 28–29, 1994, Center for Discrete Mathematics and Theoretical Computer Science (DIMACS), Rutgers University, Piscataway, New Jersey, USA.

OTHER PROFESSIONAL ACTIVITIES

2009 – present	**Secretary** (2009–10), **Treasurer** (2011-12), **Vice-Chair** (2013-14), and **Chair** (2015-16), of *INFORMS Technical Section on Telecommunications*.
2002 – present	**Affiliated Faculty** of *Center for Applied Optimization (CAO)*, University of Florida, Gainesville, Florida, USA.
2002 – 2007	**Member** of *National Science Foundation Operations Research and Optimization Review Panels*, Arlington, Virginia, USA.
2001 – present	**External Member** of the *Computational Optimization Research Center (CORC)*, Columbia University, New York, New York, USA.
1994 – present	**Permanent Member** of the *Center for Discrete Mathematics and Theoretical Computer Science (DIMACS)*, Rutgers University, Piscataway, New Jersey, USA.
1994	**Committee Member** of *ORSA Nicholson Student Paper Competition*.
1985 – present	**Member** of *ORSA, INFORMS, Mathematical Programming Society*, and *Mathematical Optimization Society*.
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 & Industrial Engineering, Computers & 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 Letters, Optimization Methods and Software, Pesquisa Operacional, Public Transport: Planning and Operations, R.A.I.R.O. – Operations Research, Science, Science Foundation Ireland, SIAM J. on Computing, SIAM J. on Optimization, SIAM J. on Scientific Computing, 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).

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."

PATENTS

15. United States Patent 8,730,817 B2, "*Methods and apparatus to determine network link weights*," with Luciana S. Buriol, Marcus Ritt, and Roger Reis, issued on May 20, 2014.

14. United States Patent 8,693,871, "*System for routing and wavelength assignment in wavelength division multiplexing optical networks*," with Thiago F. Noronha and Celso C. Ribeiro, issued on April 8, 2014.

13. United States Patent 8,468,043, "*Networks with redundant points of presence using approximation methods and systems*," with Luciana S. Pessoa and Celso C. Ribeiro, issued on June 18, 2013.

12. United States Patent 8,185,655, "*Maximizing diversity in a subset of elements utilizing GRASP with path relinking*," with Abraham Duarte, Micael Gallego, and Rafael Martí, issued on May 22, 2012.

11. United States Patent 8,139,502, "*Method and system for network migration scheduling*," (with Diogo Andrade), issued on March 20, 2012.

10. United States Patent 8,098,679, "*Method and apparatus for providing composite link assignment in network design*," (with Diogo Andrade, Luciana Buriol, and Mikkel Thorup), issued on January 17, 2012.

9. United States Patent 7,978,629, "*Method for network design to maximize difference of revenue and network cost*," (with Alexandre Salles da Cunha, Abilio Lucena, and Nelson Maculan), issued on July 12, 2011.

8. United States Patent 7,974,816, "*Sensor registration by global optimization procedures*," (with Michael Hirsch and Panos Pardalos), issued on July 5, 2011.

7. United States Patent 7,924,729, "*Determining a minimum cost solution for resolving covering-by-pairs problem*," issued on April 12, 2011.

6. United States Patent 7,904,586, "*Traffic engineering method with tunable inter-domain egress selection*," (with Renata Teixeira, Timmothy Griffin, and Jennifer Rexford), issued on March 8, 2011.

5. United States Patent 7,826,607, "*Devices, systems, and methods for migration scheduling*," (with Diogo Andrade), issued on November 2, 2010.

4. United States Patent 7,653,513, "*Sensor registration by global optimization*," (with Michael Hirsch and Panos Pardalos), issued on January 26, 2010.

3. United States Patent 7,599,385, "*Method and apparatus for providing composite link assignment in network design*," (with Diogo Andrade, Luciana Buriol, and Mikkel Thorup), issued on October 6, 2009.

2. United States Patent 7,593,341, "*Method and apparatus for updating a shortest path graph*," (with Luciana Buriol and Mikkel Thorup), issued on September 22, 2009.

1. United States Patent 7,581,022, "*Method for tunable inter-domain egress selection*," (with Renata Teixeira, Timmothy Griffin, and Jennifer Rexford), issued on August 25, 2009.

PATENTS PENDING

2. "*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.

1. "*Method and apparatus for providing a survivable network design,*" with Luciana Buriol and Mikkel Thorup. Filed with United States Patent Office in June 2006.

TEN MOST CITED PAPERS – ISI WEB OF SCIENCE (November 8, 2016)

1. T.A. Feo and M.G.C. Resende, "*Greedy randomized adaptive search procedures,*" **J. of Global Optimization**, vol. 6, pp. 109–133, 1995 – **822 citations**

2. 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 – **369 citations**

3. J.F. Gonçalves, J.J.D.M. Mendes, and M.G.C. Resende, "*A hybrid genetic algorithm for the job shop scheduling problem,*" **European J. of Operational Research**, vol. 167, pp. 77–95, 2005 – **192 citations**

4. 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 – **190 citations**

5. 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 – **163 citations**

6. 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 – **141 citations**

7. 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 –**121 citations**

8. 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 – **106 citations**

9. 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 – **105 citations**

10. J.F. Gonçalves and M.G.C. Resende, "*An evolutionary algorithm for manufacturing cell formation,*" **Computers & Industrial Engineering**, vol. 47, pp. 247–273, 2004 – **104 citations**

PUBLICATIONS CONTRIBUTING TO H-INDEX OF 66 – GOOGLE SCHOLAR (November 8, 2016)

1. 2736 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. 1093 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.

3. 1064 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.

4. 589 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.

5. 564 Google Scholar citations: P.M. Pardalos and M.G.C. Resende (eds.), *Handbook of Applied Optimization*, Oxford University Press, 2002.

6. 561 Google Scholar citations: J.F. Gonçalves, 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.

7. 533 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.

8. 432 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.

9. 410 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. 370 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.

11. 343 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.

12. 318 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

13. 278 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.

14. 274 Google Scholar citations: J.F. Gonçalves, J.J.M. Mendes, and M.G.C. Resende, *A genetic algorithm for the resource constrained multi-project scheduling problem*, European J. of Operational Research, vol. 189, pp. 1171-1190, 2008.

15. 270 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.

16. 267 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.

17. 266 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.

18. 262 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.

19. 261 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.

20. 237 Google Scholar citations: J.F. Gonçalves and M.G.C. Resende, *An evolutionary algorithm for manufacturing cell formation*, Computers and Industrial Engineering, vol. 47, pp. 247–273, 2004.

21. 223 Google Scholar citations: S. Binato, W.J. Hery, D.M. Loewenstern, and M.G.C. Resende, *A GRASP for job shop scheduling*, in *Essays and Surveys on Metaheuristics*, C.C. Ribeiro and P. Hansen, Eds., Kluwer Academic Publishers, pp. 58–79, 2002.

22. 204 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.

23. 202 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

24. 190 Google Scholar citations: J.J.M. Mendes, J.F. Gonçalves, and M.G.C Resende, *A random key based genetic algorithm for the resource constrained project scheduling problem*, Computers and Operations Research, vol. 36, pp. 92–109, 2009.

25. 186 Google Scholar citations: M. G. C. Resende and P. M. Pardalos (eds.), *Handbook of Optimization in Telecommunications*, Springer, April 2006. vol. A, pp. 209–259, 1999.

26. 179 Google Scholar citations: J.F. Gonçalves and M.G.C Resende, *Biased random-key genetic algorithms for combinatorial optimization*, J. of Heuristics, vol. 17, pp. 487–525, 2011.

27. 176 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.

28. 176 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.

29. 172 Google Scholar citations: M.G.C. Resende and C.C. Ribeiro, "*Greedy randomized adaptive search procedures: Advances, hybridizations,and applications*," Handbook of Metaheuristics, 2nd Edition, M. Gendreau and J.-Y. Potvin (Eds.), Springer, pp. 281–317, 2010.

30. 171 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

31. 155 Google Scholar citations: J. Abello, P.M. Pardalos and M.G.C. Resende (eds.), *Handbook of Massive Data Sets*, Kluwer Academic Publishers, May 2002.

32. 152 Google Scholar citations: P. Festa and M.G.C. Resende, "*An annotated bibliography of GRASP, Part I: Algorithms*," International Transactions in Operational Research, vol. 16, pp. 1–24, 2009.

33. 151 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.

34. 150 Google Scholar citations: R.M. Aiex, M.G.C. Resende, and C.C. Ribeiro, *TTTPLOTS: A perl program to create time-to-target plots*, Optimization Letters, vol. 1, pp. 355–366, 2007.

35. 146 Google Scholar citations: M.G.C. Resende, R. Martí, M. Gallego, and A. Duarte, *GRASP and path relinking for the max-min diversity problem*," Computers and Operations Research, vol. 37, pp. 498–508, 2010.

36. 140 Google Scholar citations: P. Festa and M.G.C. Resende, "*An annotated bibliography of GRASP, Part II: Applications*," International Transactions in Operational Research, vol. 16, pp. 131–172, 2009.

37. 139 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.

38. 130 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.

39. 121 Google Scholar citations: M.G.C. Resende and R.F. Werneck, "*A hybrid multistart heuristic for the uncapacitated facility location problem*," European J. of Operational Research, vol. 174, pp. 54-68, 2006.

40. 120 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.

41. 118 Google Scholar citations: M.J. Hirsch, C.N. Meneses, M.G.C. Resende, and P.M. Pardalos, *Global optimization by continuous GRASP,*" Optimization Letters, vol. 1, no. 2, pp. 201–212, 2007.

42. 117 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.

43. 116 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.

44. 116 Google Scholar citations: M.G.C. Resende, *Computing approximate solutions of the maximum covering problem using GRASP*, J. of Heuristics, vol. 4, pp. 161–171, 1998.

45. 116 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.

46. 114 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 2nd International Workshop – Irregular'95, A. Ferreira and J. Rolim, eds., Lecture Notes in Computer Science, Springer-Verlag, vol. 980, pp. 317-331, 1995.

47. 114 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.

48. 104 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.

49. 101 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.

50. 98 Google Scholar citations: M.G.C. Resende and T.A. Feo, *A GRASP for Satisfiability*, in "Cliques, Coloring, and Satisfiability: 2nd 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.

51. 95 Google Scholar citations: N. Karmarkar, K.G. Ramakrishnan, and M.G.C. Resende, "*An interior point algorithm to solve computationally difficult set covering problems,*" Mathematical Programming, vol. 52, pp. 597–618, 1991.

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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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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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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.

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4. *Learning and Intelligent Optimization, 8th International Conference (LION 8)*, co-editors: P.M. Pardalos, M.G.C. Resende, C. Vogiatzis, and J.L. Walteros, **Lecture Notes in Computer Science**, vol. 8426, 2014.

3. *GRASP with path relinking*, co-editors: R. Martí, M.G.C. Resende, and C.C. Ribeiro, **Computers & Operations Research**, vol. 40, pp. 3080–3229, 2013.

2. *Memetic Algorithms: Theory and applications in OR/MS*, co-editors: E. Alba, M.G.C. Resende, M.E. Urquhart, and M.-H. Lim, **Memetic Computing**, vol. 4(2), pp. 87–134, 2012.

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

CONFERENCE PROGRAM COMMITTEES

90. 29th ACM Symposium on Parallelism in Algorithms and Architectures (SPAA 2017), Washington D.C., U.S.A., July 23–27, 2017.

89. XII Metaheuristics International Conference (MIC 2017), Barcelona, Spain, July 4–7, 2017.

88. 2nd Amazon Supply Chain Optimization Summit, Seattle, Washington, USA, October 16–18, 2016.

87. International Conference on Metaheuristics and Nature Inspired Computing (META'2016), Marrakesh, Morocco, October 27–31, 2016.

86. XLVIII Symposium of the Brazilian Operational Research Society (XLVIII SBPO), Vitória, Espírito Santo, Brazil, September 27–30, 2016.

85. Matheuristics 2016 – Sixth International Workshop on Model-based Metaheuristics, Brussells, Belgium, September 4–7, 2016.

84. 15th International Symposium on Experimental Algorithms (SEA 2016), St. Petersburg, Russia, June 5–8, 2016.

83. 13th INFORMS Telecommunications Conference, Boca Raton, Florida, USA, March 20–22, 2016.

82. Amazon Supply Chain Optimization Summit, Seattle, Washington, USA, October 11–12, 2015.

81. XLVII Symposium of the Brazilian Operational Research Society (XLVII SBPO), Porto de Galinhas, Pernambuco, Brazil, August 26-28, 2015.

80. 22nd International Symposium on Mathematical Programming (ISMP 2015), Pittsburgh, USA, July 12-17, 2015.

79. XI Metaheuristics International Conference (MIC 2015), Agadir, Morocco, June 7–10, 2015.

78. XLVI Symposium of the Brazilian Operational Research Society (XLVI SBPO), Salvador, Brazil, September 16-19, 2014.

77. 9th International Workshop on Hybrid Metaheuristics (HM 2014), Hamburg, Germany, June 11-13, 2014.

76. 12th INFORMS Telecommunications Conference, Lisbon, Portugal, March 2-4, 2014.

75. Learning and Intelligent OptimizatioN Conference (LION 8), Gainesville, Florida, USA, February 16-21, 2014.

74. XLV Symposium of the Brazilian Operational Research Society (XLV SBPO), Natal, Brazil, September 16-19, 2013.

73. X Metaheuristics International Conference (MIC 2013), Singapore, August 6-8, 2013.

72. 8th International Workshop on Hybrid Metaheuristics (HM 2013), Ischia Island, Italy, May 23-25, 2013.

71. Learning and Intelligent OptimizatioN Conference (LION 7), Catania, Italy, January 7-11, 2013.

70. International Network Optimization Conference (INOC 2013), Tenerife, Spain, May 20-22, 2013.

69. XLIV Symposium of the Brazilian Operational Research Society (XLIV SBPO), Rio de Janeiro, RJ, Brazil, September 24-28, 2012.

68. Matheuristics 2012, Angra dos Reis, RJ, Brazil, September 17-20, 2012.

67. 21th International Symposium on Mathematical Programming (ISMP 2012), Berlin, Germany, August 2012.

66. The 11th International Symposium on Experimental Algorithms (SEA 2012), Bordeaux, France, June 7-9, 2012.

65. 11th INFORMS Telecommunications Conference, Boca Raton, Florida, USA, March 2012.

64. INFORMS Annual Meeting, Charlotte, North Carolina, November 2011.

63. International Conference on Data Envelopment Analysis and Applications to Management, Lima, Peru, September 14-16, 2011.

62. IX Metaheuristics International Conference (MIC 2011), Udine, Italy, July 25-29, 2011.

61. XLIII Symposium of the Brazilian Operational Research Society (XLIII SBPO), Ubatuba, SP, Brazil, August 16-19, 2011.

60. International Network Optimization Conference (INOC 2011), Hamburg, Germany, June 13-16, 2011.

59. The 10th International Symposium on Experimental Algorithms (SEA 2011), Crete, Greece, May 5-7, 2011.

58. International Conference on Metaheuristics and Nature Inspired Computing (META'10), Djerba Island, Tunisia, October 28-30, 2010

57. 2nd International Conference on Applied Operational Research (ICAOR'10), Turku, Finland, August 25-27, 2010

56. XLII Symposium of the Brazilian Operational Research Society (XLII SBPO), Bento Gonçalves, Brazil, September 1–4, 2010.

55. ALIO-INFORMS Joint International Meeting, Buenos Aires, Argentina, June 6-9, 2010

54. The Ninth International Symposium on Experimental Algorithms (SEA 2010), Ischia, Italy, May 20–22, 2010.

53. The 6th International Conference on Networking and Services (ICNS 2010), Cancun, Mexico, March 7-12, 2010

52. Workshop W8: Hybrid Metaheuristics and Their Applications (Part of ISDA'09), Pisa, Italy, November 20 – December 2, 2009

51. The 1st International Conferences on Advanced Service Computing (SERVICE COMPUTATION 2009), Athens, Greece, November 15–20, 2009

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 8th International Symposium on Experimental Algorithms (SEA 2009), Dortmund, Germany, June 3-6, 2009.

46. The 6th 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, Sapin, 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: 2nd International Workshop on Model Based Metaheuristics Bertinoro (Forlì-Cesena), Italy, June 16–28, 2008.

38. The 7th 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 1st Annual International Conference on Combinatorial Optimization and Applications (COCOA 2007), Xi'an, Shaanxi, China, August 12–15, 2007.

34. The 7th Metaheuristics International Conference (MIC 2007), Montréal, Canada, June 25–29, 2007.

33. The 3rd 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. 7th 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. 1st 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 6th 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. 4th 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. 3rd International Workshop on Experimental and Efficient Algorithms (WEA'2004), Angra dos Reis (Brazil), May 25–28, 2004.

12. The 5th Metaheuristics International Conference (MIC 2003), Kyoto, Japan, August 25–28, 2003.

11. 3rd 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. 2nd 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

307. *"Biased random-key genetic algorithms: An advanced tutorial,"* Tutorial Talk, with C.C. Ribeiro, **Genetic and Evolutionary Computation Conference (GECCO 2016)**, Denver, CO, U.S.A., July 20–24, 2016.

306. *"Logistics optimization at Amazon: Big data & operational research in action,"* Invited Keynote Talk, **28th European Conference on Operational Research**, Poznań, Poland, July 4, 2016.

305. *"Metaheuristic approaches to continuous global optimization,"* **2nd Brazilian Workshop on Interior Point Methods**, Invited Plenary Talk, Campinas, SP, Brazil, May 17–18, 2016.

304. *"A biased random-key genetic algorithm for the capacitated minimum spanning tree problem,"* **13th INFORMS Telecommunications Conference**, Boca Raton, FL, U.S.A., March 20, 2016.

303. *"Biased random-key genetic algorithms,"* Invited Talk, **Institute of Computing, Federal U. of Rio Grande do Sul (UFRGS)**, Porto Alegre, RS, Brazil, December 9, 2015.

302. *"A biased random-key genetic algorithm for the capacitated minimum spanning tree problem,"* Invited Talk, **2015 INFORMS Annual Meeting**, Philadelphia, PA, USA, November 1, 2015.

301. *"Biased random-key genetic algorithms,"* Invited Plenary Talk, **2nd Brazilian Conference on Industrial Applications of Mathematics (CNMAI 2015)**, Fortaleza, CE, Brazil, October 5, 2015.

300. *"Logistics optimization at Amazon: Big data & operations research in action,"* Invited Plenary Talk, **XLVII Symposium of the Brazilian Operations Research Society (XLVII SBPO)**, Porto de Galinhas, PE, Brazil, August 26, 2015.

299. *"Biased random-key genetic algorithms,"* Invited Talk, **Department of Industrial Engineering, Pontifical Catholic U. of Rio de Janeiro**, Rio de Janeiro, Brazil, August 24, 2015.

298. *"Biased random-key genetic algorithm for wireless backhaul network design,"* Contributed Talk, **11th Metaheuristics International Conference (MIC 2015)**, Agadir, Morocco, June 8, 2015.

297. *"Biased random-key genetic algorithms,"* Invited Plenary Talk, **11th Metaheuristics International Conference (MIC 2015)**, Agadir, Morocco, June 8, 2015.

296. *"Packing with biased random-key genetic algorithms,"* Invited Talk, **Computing Institute, State U. of Campinas (UNICAMP)**, Campinas, SP, Brazil, March 3, 2015.

295. *"Packing with biased random-key genetic algorithms,"* Invited Talk, **Mathematical Optimization Group, Amazon.com**, Seattle, WA, USA, February 10, 2015.

294. *"Packing with biased random-key genetic algorithms,"* Invited Talk, **Department of Industrial and Systems Engineering, U. of Washington**, Seattle, WA, USA, January 20, 2015.

293. *"A biased random-key genetic algorithm for the unequal area facility layout problem,"* Contributed Talk, **2014 INFORMS Annual Meeting**, San Francisco, CA, USA, November 10, 2014.

292. *"Packing with biased random-key genetic algorithms,"* Invited Talk, **Department of Information Sciences and Technology, Penn State U. – Berks**, Reading, PA, USA, October 1, 2014.

291. *"Packing with biased random-key genetic algorithms,"* Invited Talk, **Summer School on Operational Research & Applications**, Kstovsky District, Russia, May 15, 2014.

290. *"Some applications of biased random-key genetic algorithms in telecommunications,"* Invited Talk, **Summer School on Operational Research & Applications**, Kstovsky District, Russia, May 15, 2014.

289. *"GRASP: Advances and applications,"* Invited Talk, **Summer School on Operational Research & Applications**, Kstovsky District, Russia, May 14, 2014.

288. *"A biased random-key genetic algorithm for a prize-collecting directed Steiner forest network design problem,"* **Fourth International Conference on Network Analysis (NET 2014)**, Nizhny Novgorod, Russia, May 13, 2014.

287. *"Biased random-key genetic algorithms,"* Two-day short course, **Universidade Federal Fluminense (UFF)**, Niterói, RJ, Brazil, April 23 and 30, 2014.

286. *"GRASP heuristics for discrete and continuous global optimization,"* Invited Talk, **Amazon.com**, Seattle, WA, USA, April 11, 2014.

285. *"Packing with biased random-key genetic algorithms,"* INFORMS Student Chapter Invited Lecture, **Department of Industrial and Systems Engineering, Texas A&M University**, College Station, TX, USA, March 28, 2014.

284. *"Packing with biased random-key genetic algorithms,"* Invited Talk, **Department of Industrial and Systems Engineering, University of Florida**, Gainesville, FL, USA, March 19, 2014.

283. *"A biased random-key genetic algorithm for a prize-collecting directed Steiner forest network design problem,"* **2014 INFORMS Telecommunications Conference**, Lisbon, Portugal, March 3, 2014.

282. *"Packing with biased random-key genetic algorithms,"* Invited Talk, **Department of Production and Systems Engineering, University of Minho**, Braga, Portugal, February 28, 2014.

281. *"GRASP heuristics for discrete and continuous global optimization,"* Invited Tutorial, **Learning and Intelligent Optimization Conference (LION 8)**, Gainesville, FL, USA, February 19, 2014.

280. *"Randomized heuristics for handover minimization,"* Invited Talk, **2013 INFORMS Annual Meeting**, Minneapolis, MN, USA, October 6, 2013.

279. *"Packing with biased random-key genetic algorithms,"* Invited Talk, **GE Global Research**, Rio de Janeiro, Brazil, September 26, 2013.

278. *"Introduction to biased random-key genetic algorithms,"* Invited Talk, **XVL Symposium of the Brazilian Operations Research Society**, Natal, Brazil, September 18, 2013.

277. *"Hybridization of heuristics with biased random-key genetic algorithms: Application to 2-dim orthogonal packing and 3-dim bin packing,"* Invited Plenary Talk, **8th International Workshop on Hybrid Metaheuristics (HM 2013)**, Ischia Island, Italy, May 23, 2013.

276. *"Packing with biased random-key genetic algorithms,"* Invited Talk, **Monterrey Institute of Technology**, Monterrey, Mexico, May 7, 2013.

275. *"Biased random-key genetic algorithms with applications to optimization problems in telecommunications,"* Invited Talk, **Institute of Science and Technology, Federal U. of São Paulo (UNIFESP)**, São José dos Campos (SP), Brazil, March 27, 2013.

274. *"GRASP heuristics for discrete and continuous global optimization,"* Invited Talk, **Department of Production Engineering, Federal U. of São Carlos**, São Carlos (SP), Brazil, March 26, 2013.

273. *"Biased random-key genetic algorithms with applications to optimization problems in telecommunications,"* Invited Talk, **Institute of Mathematical Sciences and Computing, State U. of São Paulo**, São Carlos (SP), Brazil, March 25, 2013.

272. *"Packing with biased random-key genetic algorithms,"* Invited Plenary Talk, **XV Brazilian Workshop on Packing, Cutting, Lot Sizing, and Production Planning (XV ONPCE)**, São José do Rio Preto (SP), Brazil, March 22, 2013.

271. *"Biased random-key genetic algorithms,"* Invited Plenary Talk, **Learning and Intelligent Optimization Conference (LION 7)**, Catania, Sicily, Italy, January 8, 2013.

270. *"Randomized heuristics for handover minimization,"* **Annual Meeting of the Institute for Operations Research and the Management Sciences (INFORMS)**, Phoenix, Arizona, October 15, 2012.

269. *"Randomized heuristics for handover minimization,"* Invited Talk, **Joint Conference of the Brazilian Operational Research Society (SBPO 2012) and Latin-Iberian-American Conference on Operations Research (CLAIO 2012)**, Rio de Janeiro, Brazil, September 26, 2012.

268. *"Biased random-key genetic algorithms: A tutorial,"* IFORS Invited Tutorial Lecture, **Joint Conference of the Brazilian Operational Research Society (SBPO 2012) and Latin-Iberian-American Conference on Operations Research (CLAIO 2012)**, Rio de Janeiro, Brazil, September 25-26, 2012.

267. *"Packing rectangles with a biased random-key genetic algorithm,"* Invited Talk, **IBM Research - Brazil**, Rio de Janeiro, Brazil, September 17, 2012.

266. *"Randomized heuristics for handover minimization,"* Invited seminar, **Computer Science Institute, Federal U. of Rio Grande do Sul**, Porto Alegre, RS, Brazil July 6, 2012.

265. *"Randomized heuristics for handover minimization,"* Invited plenary talk, **2nd International Conference on Network Analysis (NET 2012)**, Nizhny Novgorod, Russia, May 9, 2012.

264. *"Solving handover minimization as a generalized quadratic assignment problem,"* **2012 INFORMS Telecommunications Conference**, Boca Raton, Florida, USA, March 16, 2012.

263. *"GRASP heuristics for discrete and continuous global optimization,"* Invited tutorial, **Latin American Summer School in Operations Research (ELAVIO 2012)**, Bento Gonçalves, RS, Brazil, February 6, 2012.

262. *"Biased random-key genetic algorithms with applications to optimization problems in telecommunications,"* Invited tutorial, **Latin American Summer School in Operations Research (ELAVIO 2012)**, Bento Gonçalves, RS, Brazil, February 6, 2012.

261. *"A Python/C library for bound-constrained global optimization with Continuous GRASP,"* Invited Talk, **INFORMS Annual Meeting**, Charlotte, N.C., USA, November 14, 2011.

260. *"Biased random-key genetic algorithms with applications to optimization problems in telecommunications,"* Invited Talk, **Computer Science Institute, U. Federal Fluminense**, Niterói, RJ, Brazil, September 21, 2011.

259. *"Analysis of social networks,"* Four-day short course, **Computer Science Institute, U. Federal Fluminense**, Niterói, RJ, Brazil, September 13-21, 2011.

258. *"A biased random-key genetic algorithm for the Steiner triple covering problem,"* **9th Metaheuristics International Conference (MIC 2011)**, Udine, Italy, July 28, 2011.

257. *"Biased random-key genetic algorithms with applications in telecommunications,"* Invited plenary talk, **Optimization 2011**, Lisbon, Portugal, July 25, 2011.

256. *"Restart strategies for GRASP with path-relinking heuristics,"* **10th International Symposium on Experimental Algorithms (SEA 2011)**, Chania, Crete, Greece, May 5, 2011.

255. *"GRASP heuristics for discrete and continuous global optimization,"* Invited lecture, **Spring School on Advances in Operations Research**, Higher School of Economics, Nizhny Novgorod, Russia, May 3, 2011.

254. *"Biased random-key genetic algorithms with applications to optimization problems in telecommunications,"* Invited lecture, **Spring School on Advances in Operations Research**, Higher School of Economics, Nizhny Novgorod, Russia, May 3, 2011.

253. *"GRASP heuristics for discrete & continuous global optimization,"* Invited lecture, **Department of Industrial and Systems Engineering**, University of Florida, Gainesville, FL, January 27, 2011.

252. *"Design of metro Ethernet networks,"* Invited Talk, **INFORMS Annual Meeting**, Austin, Texas, November 8, 2010.

251. "*Heuristics for the regenerator location problem,*" Invited Talk, **INFORMS Annual Meeting**, Austin, Texas, November 8, 2010.

250. "*GRASP with path-relinking,*" Invited short course, **II Peruvian Conference on Operations Research and Systems (COPIOS 2010)**, Arequipa, Peru, November 4-5, 2010.

249. "*Packing rectangles with a biased random-key genetic algorithm,*" Invited opening plenary talk, **II Peruvian Conference on Operations Research and Systems (COPIOS 2010)**, Arequipa, Peru, November 4, 2010.

248. "*Biased random-key genetic algorithms with applications to optimization problems in telecommunications,*" Invited Talk, **Industrial Engineering Department, U. Nacional San Agustín**, Arequipa, Peru, November 2, 2010.

247. "*Biased random-key genetic algorithms with applications to optimization problems in telecommunications,*" Invited plenary talk, **XXXII National Conference of Statistics and Operations Research (SEIO 2010)**, A Coruña, Spain, September 16, 2010.

246. "*Packing rectangles with a biased random-key genetic algorithm,*" Invited Talk, **Universitat Politècnica de Catalunya**, Barcelona, Spain, September 10, 2010.

245. "*Hybridizations of GRASP with path-relinking,*" Invited plenary talk, **VII Spanish Conference on Metaheuristics and Evolutionary & Bioinspired Algorithms (MAEB 2010)**, Valencia, Spain, September 8, 2010.

244. "*Packing rectangles with a genetic algorithm*", Invited Talk, **Florham Park Mathematics Research Colloquium and Informal Seminar**, AT&T Labs Research, Florham Park, New Jersey, August 6, 2010.

243. "*Automatic tuning of GRASP with path-relinking heuristics with a biased random-key genetic algorithm*", Invited Talk, **ALIO-INFORMS Joint International Meeting**, Buenos Aires, Argentina, June 6–9, 2010.

242. "*A parallel multi-population genetic algorithm for a constrained two-dimensional orthogonal packing problem*", Invited Talk, **ALIO-INFORMS Joint International Meeting**, Buenos Aires, Argentina, June 6–9, 2010.

241. "*Biased random-key genetic algorithms with applications in telecommunications*," Plenary speaker, **10th INFORMS Telecommunications Conference**, Montréal, Canada, May 6,2010.

240. "*Biased random-key genetic algorithms with applications in telecommunications,*" Invited Talk, **INESC – Instituto de Engenharia de Sistemas e Computadores do Porto**, Porto, Portugal, April 13, 2010.

239. "*Hospital layout optimization using GRASP with path-relinking,*" Invited plenary talk, **International Conference on System Analysis Tools for Better Health Care Delivery: A New Engineering / Health Care Partnership**, Gainesville, Florida, March 24–26, 2010.

238. "*Algorithms for node placement in path-disjoint network monitoring,*" Invited Talk, **Industrial Engineering Department, University of Pittsburgh**, Pittsburgh, PA, March 4, 2010.

237. "*GRASP with evolutionary path-relinking for the antibandwidth problem,*" Invited Talk, **2nd International Conference on the Dynamics of Information Systems**, Destin, Florida, February 3–5, 2010.

236. "*GRASP with path-relinking,*" Invited short course, **1st Brazil-Portugal School on Evolutionary Computing**, Belo Horizonte, Brazil, October 20–23, 2009.

235. "*A hybrid genetic algorithm for road congestion minimization,*" Contributed talk, **2009 INFORMS Annual Meeting**, San Diego, California, October 11–14, 2009.

234. "*A biased random-keys genetic algorithm for monitor placement in telecommunication networks,*" Invited Talk, **2009 INFORMS Annual Meeting**, San Diego, California, October 11–14, 2009.

233. "*GRASP with evolutionary path-relinking for the antibandwidth problem,*" Invited Talk, **2009 INFORMS Annual Meeting**, San Diego, California, October 11–14, 2009.

232. "*Optimization in the design and operations of telecommunication systems,*" Invited three-day short course, **Academic and Professional Operations Research School, Department of Mathematics, U. Nacional Mayor de San Marcos**, Lima, Peru, September 14–16, 2009.

231. "*GRASP with path-relinking for the generalized quadratic assignment problem,*" **VIII Metaheuristics International Conference (MIC 2009)**, Hamburg, Germany, July 16, 2009.

230. "*GRASP with evolutionary path-relinking for the antibandwidth problem,*" **VIII Metaheuristics International Conference (MIC 2009)**, Hamburg, Germany, July 14, 2009.

229. "*Algorithms for node placement in path-disjoint network monitoring,*" Invited lecture, **Computer Science Institute, U. Fed. Fluminense (UFF)**, Niterói, RJ, Brazil, May 14, 2009.

228. "*Metaheuristic hybridization with GRASP,*" Invited lecture, **Department of Applied Computer Science, Federal University of the State of Rio de Janeiro (UNIRIO)**, Rio de Janeiro, Brazil, May 11 & 13, 2009.

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,*" **7th 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 **2nd 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 **8th INFORMS Telecommunications Conference**, Dallas, Texas, March 30 – April 1, 2006.

196. *"A GRASP for PBX telephone migration scheduling,"* in **8th 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,"* **1st North/Northeast Meeting on Operations Research and Computational Mathematics**, invited plenary talk, Maceió, 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,*" **6th INFORMS Telecommunitcations Conference**, 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, Universitá 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, Universitá 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,*" **3rd 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,*" **2nd 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 1st 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.

POST-DOCTORAL SUPERVISION

4. Ricardo Martins de Abreu Silva, Federal U. of Lavras (UFLA), Fellowship from Brazilian National Science Foundation (CNPq), 2008–10. Currently: Associate Professors, Informatics Center, Federal U. of Pernambuco, Recife, Brazil.

3. Ana Viana, Computer Engineering and Systems Institute of Porto, 2007. Currently: Associate Professor at Computer Engineering and Systems Institute of Porto, Portugal.

2. Paola Festa, Università degli Studi di Napoli Federico II, 2003. Currently: Associate Professor at Department of Applied Mathematics, Università degli Studi di Napoli Federico II, Naples, Italy.

1. Celso Carneiro Ribeiro, Catholic U. of Rio de Janeiro. Fellowship from Brazilian National Science Foundation (CNPq), 2000–1. Currently: Professor at Computing Institute, U. Federal Fluminense (UFF), Niterói, RJ, Brazil.

PH.D. STUDENT SUPERVISION

9. Larissa Petroianu, Industrial and Systems Engineering, University of Washington, Seattle, WA, U.S.A.. Expected graduation: 2020.

8. Fernando Stefanello, Computing Institute, Federal U. of Rio Grande do Sul (UFRGS), Porto Alegre, RS, Brazil. Graduated: December 9, 2015. Thesis title: *Heuristic approaches for network problems.* Currently: Post-doctoral Researcher, Computing Institute, Federal U. of Rio Grande do Sul (UFRGS), Porto Alegre, RS, Brazil.

7. Carlos Eduardo de Andrade, Computing Institute, State U. of Campinas (UNICAMP), Campinas, SP, Brazil. Graduation: March 5, 2015. Thesis title: *Evolutionary algorithms for some problems in telecommunications.* Campinas, Brazil. Currently: Senior Inventive Scientist, AT&T Labs Research, Middletown, NJ, USA.

6. Luis F. Morán-Mirabal, Quality and Manufacturing Center, Tecnológico de Monterrey, Monterrey, Mexico. Graduation: May 6, 2013. Thesis title: *Automatic tuning of GRASP-evPR metaheuristics using a Biased Random-Key Genetic Algorithm.* Monterrey, Mexico. Currently: Head, Continuous Improvement, Larsa Proyectos y Construcciones, Monterrey, Mexico.

5. Cristian A. Martinez, Computer Science Department, University of Buenos Aires, Buenos Aires, Argentina. Graduated: December 5, 2011. Thesis title: *Hybrid metaheuristics applied to the capacitated arc routing problem.* Currently: Assistant Professor, Computer Science Department, University of Salta, Salta, Argentina.

4. Luciana S. Pessoa, Department of Computer Science, Federal Fluminense University (UFF), Niterói, RJ, Brazil. Graduation: December 22, 2009. Currently: Assistant Professor, Industrial Engineering Department, Pontifical Catholic U. of Rio de Janeiro - Brazil, Rio de Janeiro, Brazil.

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. Currently: Assistant Professor, Computer Science Department, Federal University of Minas Gerais, Belo Horizonte, Brazil.

2. Luciana S. Buriol, Department of Electrical Engineering, State University of Campinas (UNICAMP), Campinas, São Paulo, Brazil, Graduation: November 14, 2003. Thesis title: *Traffic routing on the Internet: Algorithms for design and operation of networks using OSPF protocol.* Currently: Associate Professor, Computer Science Department, Federal University of Rio Grande do Sul, Porto Alegre, Brazil.

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

18. Fernando Stefanello, "Heuristic approaches for network problems," Institute of Computing, Federal U. of Rio Grande do Sul (UFRGS), Porto Alegre, RS, Brazil, December 9, 2015.

17. Julliany Sales Brandão, "Algoritmos genéticos com chaves aleatórias tendenciosas para problemas de otimização em redes," Institute of Computing, U. Federal Fluminense (UFF), Niterói, RJ, Brazil, December 8, 2015.

16. Carlos Eduardo de Andrade, "Evolutionary algorithms for some problems in telecommunications," Institute of Computing, State U. of Campinas (UNICAMP), Campinas, SP, Brazil, March 5, 2015.

15. Claudio Risso Montaldo, "Using GRASP and GA to design resilient and cost-effective IP/MPLS networks," joint diploma by Universidad de la Republica (Montevideo, Uruguay) and INRIA Rennes (Rennes, France), May 5, 2014. Defense was at Computer Science Institute, Universidad de la Republica, Montevideo, Uruguay.

14. Luis F. Morán-Mirabal, *Automatic tuning of GRASP-evPR metaheuristics using a Biased Random-Key Genetic Algorithm*, Quality and Manufacturing Center, Tecnológico de Monterrey, Monterrey, Mexico, May 6, 2013.

13. Zhe Liang, "Column generation and network modelling in large-scale logistics networks," Department of Systems and Industrial Engineering, Rutgers University, Piscataway, NJ, USA, April 15, 2011.

12. Silvana Bocanegra, "Algoritmos de Newton-Krylov precondicionados 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. Zenílton 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: Algortimos 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, "Problems 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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