
Cesar Rego, Ph.D.

Professor of Production Operations Management

Academic Background

Ph.D. University of Versailles & INRIA, Versailles, France, Computer Science, 1996

Other HDR (Habilitation: <https://en.wikipedia.org/wiki/Habilitation>), University of Versailles, France, Computer Science, 2012

M.Sc. Graduate School of the Institute of Technology of the University of Lisbon, Lisbon, Portugal, Operations Research and Systems Engineering, 1993

B.S. Portucalense University, Porto, Portugal, Computer Science and Applied Mathematics, 1990

Academic Experience

Professor, University of Mississippi (July, 2011 - Present), Oxford, Mississippi.

Associate Professor, University of Mississippi (May, 2000 - June, 2011), Oxford, Mississippi. Granted Tenure in 2002.

Visiting Research Professor, Massachusetts Institute of Technology (MIT) (August, 2007 - December, 2007), Cambridge, Massachusetts. Sloan School of Management

Senior Researcher of the Hearing Center for Enterprise Science, University of Mississippi, School of Business (2000 - 2004), Oxford, Mississippi.

Visiting Professor, University of Mississippi, School of Business (October, 1999 - May, 2000), Oxford,, Mississippi.

Researcher Associate of the Operations Research Center (CIO), University of Lisbon (1999 - 2000), Lisbon, Portugal.

Assistant Professor, Faculty of Sciences, University of Lisbon (September, 1998 - September, 1999), Lisbon, Portugal.

Associate Professor, Portucalense University (1997 - 1998), Porto, Portugal.

Invited Professor, Technical School of the University of Lisbon (1997 - 1998), Lisbon, Portugal.

Senior Researcher at the Centre for Urban and Regional Systems, Technical School of the University of Lisbon (1997 - 1998), Lisbon, Portugal.

Assistant Professor, Portucalense University (April, 1996 - September, 1996), Oporto, Portugal.

Lecturer, Portucalense University (October, 1992 - March, 1996), Porto, Portugal.

Research Assistant, Portucalense University (1990 - 1992), Porto, Portugal.

Consulting

- 2014: Lusa Restaurant Group, Strategic and Operations Planning
- 2003: RAND Corporation via OptTek Systems, Inc, Development of a prototype for a Complex Pickup and Delivery Transportation application.
- 1998: Metro (Subway) of Lisbon, Decision Support System (DSS) for Crew Scheduling Management of the Lisbon Metro System
- 1994: MATRA Cap Systems, Optimization model and software prototype for a tank truck dispatching problem
- 1993: SOPONATA Petrol Port, Manpower planning optimization study: optimization of workforce size associated timetabling and work scheduling problem

Refereed Articles

- Rego, C., Gamboa, D., & Glover, F. (2016). Doubly-Rooted Stem-and-Cycle Ejection Chain Algorithm for the Asymmetric Traveling Salesman Problem. *Networks*, *68* (1), 23–33.
- Osterman, C. & Rego, C. (2016). A k-level data structure for large-scale traveling salesman problems. *Annals of Operations Research*, *244* (2), 583–601, doi: 10.1007/s10479-016-2159-7.
- Cao, B., Glover, F., & Rego, C. (2015). A Tabu Search Algorithm for Cohesive Clustering Problems. *Journal of Heuristics*, *21* (4), 457-477, doi: 10.1007/s10732-015-9285-2.
- Nakagawa, Y., James, R. J., Rego, C., & Edirisinghe, C. (2014). Entropy-based Optimization of Nonlinear Separable Discrete Decision Models. *Management Science*, *60* (3), 695-707.
- Glover, F., Lasdon, L., Plummer, J., Duarte, A., Marti, R., Manuel Laguna, Cesar Rego (2013). Pseudo-cut Strategies for Global Optimization. *International Journal of Applied Metaheuristic Computing*, *2* (4), 188-198, doi: 10.4018/978-1-4666-2145-9.ch012.
- Hardin, J., Beck, A., Furman, K., Hanna, A., Rader, D., C. Rego (2012). Recommendations for an Undergraduate Curriculum at the Interface of Operations Research and Computer Science. *INFORMS Transactions on Education*, *12* (3), 117-123, doi: <http://dx.doi.org/10.1287/ited.1110.0080>.
- Rego, C. & Mathew, F. (2011). A Filter and Fan Algorithm for the Capacitated Minimum Spanning Tree Problem. *Computers & Industrial Engineering*, *60* (2), 187-194.
- Rego, C., Glover, F., Gamboa, D., & Osterman, C. (2011). Traveling Salesman Problem Heuristics: Leading Methods, Implementations and Latest Advances. *European Journal of Operational Research*, *211* (3), 427-441.
- James, T. & Rego, C. (2011). Path Relinking with Multi-Start Tabu Search for the Quadratic Assignment Problem. *International Journal of Swarm Intelligence Research*, *2* (2), 52-70.
- H. Ablenado-Rosas, J. & Rego, C. (2010). Surrogate Constraint Normalization for the Set Covering Problem. *European Journal of Operational Research*, *205* (3), 540-551.
- Rego, C., Mathew, F., & Glover, F. (2010). RAMP for the Capacitated Minimum Spanning Tree. *Annals of Operations Research*, *181* (1), 661-681.
- James, T., Rego, C., & Glover, F. (2009). Multi-Start Tabu Search and Diversification Strategies for the Quadratic Assignment Problem. *IEEE Transactions on Man, Machines, and Cybernetics*, *39* (3), 579-596.
- James, T., Rego, C., & Glover, F. (2009). A Cooperative Parallel Tabu Search Algorithm for the Quadratic Assignment Problem. *European Journal of Operational Research*, *195* (3), 810-826.
- Rego, C. & Duarte, R. (2009). A Filter and Fan Shifting Bottleneck Algorithm for the Job Shop Scheduling Problem. *European Journal of Operational Research*, *194* (3), 650-662.
- Rego, C. & Glover, F. (2009). Ejection Chain and Filter-and-Fan Methods in Combinatorial Optimization. *Annals of Operations Research*, *175* (1), 77-105.
- Rego, C., Li, H., & Glover, F. (2009). A Filter-and-Fan Approach to the 2D HP Model of the Protein Folding

Problem. *Annals of Operations Research*.

Rego, C., James, T., & Glover, F. (2009). An ejection chain algorithm for the quadratic assignment problem. *Networks*.

Hou, J. & Rego, C. (2007). A Classification of Online Bidders in a Private Value Auction: Evidence from eBay. *International Journal of Electronic Marketing and Retailing*, 1 (4), 322–338, doi: <http://dx.doi.org/10.1504/IJEMR.2007.014847>.

Glover, F. & Rego, C. (2006). Ejection Chain and Filter-and-Fan Methods in Combinatorial Optimization. *4OR: A Quarterly Journal of Operations Research*, 4 (4), 263-296.

Greistorfer, P. & Rego, C. (2006). A Simple Filter-and-Fan Approach to the Facility Location Problem. *Computer & Operations Research*, 33 (9), 2590–2601.

Gamboa, D., Rego, C., & Glover, F. (2006). Implementation Analysis of Efficient Heuristic Algorithms for the Traveling Salesman Problem. *Computer & Operations Research*, 33 (4), 1161-1179.

James, T., Rego, C., & Glover, F. (2005). Sequential and Parallel Path-Relinking Algorithms for the Quadratic Assignment Problem. *IEEE Intelligent Systems*, 20 (4), 58-65.

Alidaee, B., Glover, F., Kochenberger, G., & Rego, C. (2005). A New Modeling and Solution Approach for the Number Partitioning Problem. *Journal of Applied Mathematics and Decision Sciences*, 2 (9), 113-121.

Gamboa, D., Rego, C., & Glover, F. (2005). Data Structures and Ejection Chains for Solving Large Scale Traveling Salesman Problems. *European Journal of Operational Research*, 160 (1), 154-171.

Kochenberger, G., Alidaee, B., Glover, F., & Rego, C. (2005). An Unconstrained Quadratic Binary Programming Approach to the Vertex Coloring Problem. *Annals of Operations Research*, 139 (1), 229-241.

Kochenberger, G., Glover, F., Alidaee, B., & Rego, C. (2004). A unified modeling and solution framework for combinatorial optimization problems. *OR-Spectrum*, 26 (2), 237-250.

Rego, C., Glover, F., Alidaee, B., & Kochenberger, G. (2002). One-Pass Heuristics for Large-Scale Unconstrained Binary Quadratic Problems. *European Journal of Operational Research*, 137, 272-287.

Rego, C. (2002). Neighborhood Structures and Tabu Search for the Maximum Clique Problem. *Investigacao Operacional*, 1-18.

Rego, C. (2001). Node Ejection Chains for the Vehicle Routing Problem: Sequential and Parallel Algorithms. *Parallel Computing*, 27, 201-222.

Rego, C. (2001). Technical Note on the Paper An Empirical Study of a New Metaheuristic for the Traveling Salesman Problem. *European Journal of Operational Research*, 129 (2), 456-459.

Rego, C. & Cavique, L. (1999). Subgraph Ejection Chains and Tabu Search for the Crew Scheduling Problem. *Journal of Operational Research Society*, 50, 608-616.

Rego, C. (1998). A Subpath Ejection Method for the Vehicle Routing Problem. *Management Science*, 44 (10), 1447-1459.

Rego, C. (1998). Relaxed Tours and Path Ejections for the Traveling Salesman Problem. *European Journal of Operational Research*, 106 (522-538).

Rego, C. & Roucairol, C. (1995). Using Tabu Search for solving a Dynamic Multi-Terminal Truck Dispatching Problem. *European Journal of Operational Research*, 83 (411-429).

Rego, C., Bjorndal, M. H., Caparara, A., Cowling, P. I., Croce, F. D., H. Lourenco, F. Malucelli, A. J. Orman, D. Pisinger, J.J. Salazar (1995). Some Thoughts on Combinatorial Optimization. *European Journal of Operational Research*, 83 (253-270).

Rego, C. (1994). Uma Heurística Tabu para a Determinação de Rotas de Veículos. *Investigacao Operacional*, 14 (207-232).

Invited Articles/Reviews

Rego, C. (2006). Scatter Search: Methodology and Implementations in C. *Interfaces*, 36 (6), 608615.

Papers Under Review

Glover, F. & Rego, C. (2017). "New Assignment-Based Neighborhoods for Traveling Salesman and Routing Problems," Initial submission.

Ablanedo-Rosas, J. H. & Rego, C. (2017). "Assessing Algorithmic Performance by Frontier Analysis: A DEA Approach," Revised and resubmitted.

Riley, C. & Rego, C. (2017). "A Lagrangian RAMP Algorithm for the Resource Constrained Project Scheduling Problem," Initial submission.

Glover, F. & Rego, C. (2017). "New Relationships for Multi-Neighborhood Search for the Minimum Linear Arrangement Problem," Initial submission.

Book

Rego, C. & Alidaee, B. (2005). *Metaheuristic Optimization via Memory and Evolution: Tabu Search and Scatter Search* Kluwer Academic Publishers [B].

Book Chapters

Refereed

Cao, B., Rego, C., & Glover, F. (2017). Hotel classification using meta-analytics: a case study with cohesive clustering. *Business and Consumer Analytics: New Directions*.

Rego, C. & Leão, P. (2005). A Scatter Search Tutorial for Graph-Based Permutation Problems. In C. Rego and B. Alidaee (Eds.), *Metaheuristic Optimization via Memory and Evolution: Tabu Search and Scatter Search* (pp. 1-24). Kluwer Academic Publishers [B].

Rego, C. (2005). RAMP: A New Metaheuristic Framework for Combinatorial Optimization. In C. Rego and B. Alidaee (Eds.), *Metaheuristic Optimization via Memory and Evolution: Tabu Search and Scatter Search* (pp. 441-460). Kluwer Academic Publishers [B].

Rego, C., Kochenberger, G., Glover, F., & Alidaee, B. (2004). Solving Combinatorial Optimization Problems via Reformulation and Adaptive Memory Metaheuristics. In A. Menon (Ed.), *Frontiers of Evolutionary Computation* (pp. 103-110). Boston, MA: Kluwer Academic Publishers [B].

Rego, C., Kochenberger, G., Glover, F., & Alidaee, B. (2003). Solving Combinatorial Optimization Problems via Reformulation and Adaptive Memory Metaheuristics. In A. Menon and D. Doldbert (Eds.), *Revolutionary Visions in Evolutionary Computation*,. Kluwer Academic Publishers [B].

Rego, C. (2003). Classical Vehicle Routing. In G. Onwubolu (Ed.), *Vignette in the paper New Ideas and Applications of Scatter Search and Path Relinking, by Fred Glover, Manuel Laguna, and Rafael Marti, to appear in New Optimization Techniques in Engineering*,. Springer-Verlag.

Rego, C. (2003). Scatter Search for the Maximum Clique Problem. In F. Glover and G. Kochenberger (Eds.), *In the paper 'Scatter Search and Path Relinking: Advances and Applications,' by Fred Glover, Manuel Laguna, and Rafael Marti, to appear In Handbook of Metaheuristics*,. Kluwer Academic Publishers [B].

Rego, C. & Glover, F. (2002). Local Search and Metaheuristics for the Traveling Salesman Problem. In G. Gutting and A. Punnen (Eds.), *The Traveling Salesman Problem and its Variations* (pp. 309-368). Kluwer Academic Publishers [B].

Rego, C., Cavique, L., & Themido, I. (2001). A Scatter Search Algorithm for the Maximum Clique Problem. *Essays and Surveys in Metaheuristics* (pp. 227-244). Kluwer Academic Publishers [B].

Rego, C., Cavique, L., & Themido, I. (1999). New Heuristic Algorithms for the Crew Scheduling Problem. *Metaheuristics: Advances and Trends in Local Search Paradigms for Optimization* (pp. 37-47). Kluwer Academic Publishers [B].

Rego, C. & Roucairol, C. (1996). Parallel Tabu Search Algorithm using Ejection Chains for the Vehicle Routing Problem. *Metaheuristics: Theory and Applications* (pp. 661-675). Kluwer Academic Publishers [B].

Compilation of Articles or Readings

Rego, C. (2011). *Adaptive Memory Programming: Methods and Algorithms for Hard Combinatorial Problems* Springer [B].

Refereed Proceedings

Full Paper

Veloso, J., Gamboa, D., & Rego, C. (2015). RAMP Algorithms for the P-Median Problem. *Metaheuristics International Conference*.

Matos, T., Gamboa, D., & Rego, C. (2015). Dual RAMP for the Capacitated Facility Location Problem. *Metaheuristics International Conference*.

Veloso, J., Gamboa, D., & Rego, C. (2015). Decision Support for Facility Location: A Ramp Approach. *Managing Intellectual Capital and Innovation for Sustainable and Inclusive Society: Managing Intellectual Capital and Innovation*, 1319-1320.

Riley, C. & Rego, C. (2011). A Simple Dual-RAMP Algorithm for Resource Constraint Project Scheduling. *Proceedings of the 48th ACM Southeast Conference*, ACM New York.

Mathew, F. & Rego, C. (2006). Recent Advances in Heuristics for the Capacitated Minimum Spanning Tree Problem. *Decision Sciences Institute Meeting*, Decision Sciences Institute, 31021-31028.

Rego, C., Osterman, C., & Gamboa, D. (2005). The Satellite List: A Reversible Doubly-Linked List. *ICANNGA International Conference*, Springer-Verlag, 542-546.

Gamboa, D., Osterman, C., Rego, C., & Glover, F. (2005). Ejection Chain Algorithms for the Traveling Salesman Problem. *EURO ORP3*, 403-412.

Rego, C., Gamboa, D., & Osterman, C. (2004). Advances on Data Structures for Very-Large-Scale Traveling Salesman Problems. *International Conference on Knowledge Engineering and Decision Support*.

Rego, C., Gamboa, D., & Duarte, R. (2004). Heuristic Approaches for the Job Shop Scheduling Problem. *International Conference on Knowledge Engineering and Decision Support*.

Rego, C., Pearson, K., Alidaee, B., & Kochenberger, G. (2003). Managerial Issues in Complex Planning procedures: A case Study of QFD. *International Conference on Concurrent Engineering: Research and Applications*.

Abstract Only

Gamboa, D., Rego, C., & Glover, F. (2006). A Relax-and-Cut RAMP Approach for the Linear Ordering Problem. *ECCO VII (European Conference on Combinatorial Optimization, ECCO XIX/CO2006)*.

Sagbansua, L., Rego, C., & Glover, F. (in press, 2006). RAMP for Very Large Multi-Resource Generalized Assignment Problems. *EURO, European Conference on Operational Research*.

James, T., Rego, C., & Glover, F. (in press, 2006). Parallel Search Strategies for the Quadratic Assignment Problem. *EURO, European Conference on Operational Research*.

James, T., Rego, C., & Glover, F. (in press, 2006). An Ejection Chain Algorithm for the Quadratic Assignment Problem. *EURO, European Conference on Operational Research*.

Sontrop, H., Van der Horn, P., Rego, C., & Glover, F. (in press, 2006). An Ejection Chain Algorithm for the Vehicle Routing Problem with Time Windows. *EURO*, European Conference on Operational Research.

James, T., Rego, C., & Glover, F. (in press, 2006). An Ejection Chain Algorithm for the Quadratic Assignment Problem. *EURO*, European Conference on Operational Research.

Gamboa, D., Rego, C., & Glover, F. (in press, 2006). A Relax-and-Cut Primal-Dual RAMP Algorithm for the Linear Ordering Problem. *EURO*, European Conference on Operational Research.

Nakagawa, Y., Ross, J., & Rego, C. (in press, 2006). A RAMP approach for Large Scale Multidimensional Nonlinear Knapsack Problems. *EURO*, European Conference on Operational Research.

Greistorfer, P. & Gamboa, D. (in press, 2006). A RAMP Approach for the Facility Location Problem. *EURO*, European Conference on Operational Research.

Mathew, F., Rego, C., & Glover, F. (in press, 2005). A Relaxation Adaptive Memory Programming (RAMP) approach for the Capacitated Minimum Spanning Tree. *Decision Sciences Institute Annual meeting track - MS/OR*, 36th Annual Meeting of the Decision Sciences Institute.

Gamboa, D., Osterman, C., Rego, C., & Glover, F. (in press, 2005). Experiments with the Doubly Rooted Stem-and-Cycle Reference Structure for the Asymmetric TSP. *Metaheuristics International Conference*, 6th Metaheuristics International Conference (MIC 2).

Mathew, F., Rego, C., & Glover, F. (2005). A RAMP Algorithm for the Capacitated Minimum Spanning Tree. *Computer Science and Statistics, Mississippi Academy of Sciences*, Mississippi Academy of Sciences (MAS).

Gamboa, D., Osterman, C., Rego, C., & Glover, F. (in press, 2005). Ejection Chain Algorithms for the Traveling Salesman Problem. *EURO ORP3*, EURO Conference for Young OR researchers and Pract.

Gamboa, D., Rego, C., & Glover, F. (in press, 2005). A RAMP Algorithm for the Linear Ordering Problem. *Congreso Galego de Estatística e Investigación de Operacións*, Congresso de Estatística e Investigação Operacional.

Li, H., Rego, C., & Glover, F. (2005). RAMP for Resource Constrained Project Scheduling. *INFORMS*, INFORMS (Institute for Operations Research and the).

Ablanedo, J. & Rego, C. (in press, 2005). A RAMP Algorithm for the Set Covering Problem, division of Mathematics. *Computer Science and Statistics, Mississippi Academy of Sciences*, Computer Science, and Statistics, Mississippi Acad.

Gamboa, D., Duarte, R., & Rego, C. (2004). Heuristic Approaches for the Job Shop Scheduling Problem. *International Conference on Knowledge Engineering and Decision Support*, International Conference on Knowledge Engineering.

Rego, C., Duarte, R., & Gamboa, D. (2004). A Filter and Fan Approach for the Job Shop Scheduling Problem: A Preliminary Study. *International Conference on Knowledge Engineering and Decision Support*.

Greistorfer, P., Rego, C., & Alidaee, B. (2004). An Enhanced Filter-and-Fan Algorithm for the Facility Location Problem. *CORS/INFORMS Joint International Conference (Canadian Operations Research Society/Institute for Operations Research and the Management Sciences)*.

Rego, C. (2004). Surrogate Constraints for Several Classes of Combinatorial Problems. *International Conference on Knowledge Engineering and Decision Support*, International Conference on Knowledge Engineering.

James, T., Rego, C., & Glover, F. (in press, 2004). Ejection Chain/Path Relinking Method for the Quadratic Assignment Problem. *INFORMS*, INFORMS.

Duarte, R., Gamboa, D., & Rego, C. (in press, 2004). Advances on Filter-and-Fan Search for Job Shop Scheduling. *INFORMS*, INFORMS.

Osterman, C. & Rego, C. (2004). Advances on the Implementation of TSP Algorithms. *INFORMS*, INFORMS.

- Li, H., Rego, C., & Glover, F. (2004). An Ejection Chain Approach for Protein Folding. *INFORMS*, INFORMS (Institute for Operations Research and the).
- Li, H., Rego, C., & Glover, F. (2004). New Advances on Solving the Protein Folding Problem. *INFORMS*, INFORMS (Institute for Operations Research and the).
- Rego, C. (2004). Primal-Dual RAMP: A New Approach for Combinatorial Optimization. *INFORMS*, INFORMS (Institute for Operations Research and the).
- James, T. & Rego, C. (2004). A Scatter Search Algorithm for the Quadratic Assignment Problem. *CORS/INFORMS Joint International Conference (Canadian Operations Research Society/Institute for Operations Research and the Management Sciences)*, Canadian Operations Research Society/Institute for.
- Womer, K., Glover, F., Kochenberger, G., Rego, C., & Alidaee, B. (2003). Managerial Issues in Complex Planning Procedures. *MAS-6 (Military Personnel Research)*, MAS-6 (Military Personnel Research).
- S. Yuehua, S., Rego, C., & Glover, F. (2003). Adaptive Search Multi-Start Heuristics for the Set Covering Problem. *INFORMS*, INFORMS.
- Zhang, J., Rego, C., & Glover, F. (2003). An Adaptive Surrogate Constraint Algorithm for the Set Covering Problem. *INFORMS*, INFORMS.
- Li, H., Rego, C., & Glover, F. (2003). An Enhanced Tabu Search Algorithm for the Protein-Folding Problem. *INFORMS*, INFORMS.
- Sagbansua, L., Rego, C., & Alidaee, B. (2003). Surrogate Constraints for the Multi-Resource Generalized Assignment Problem. *INFORMS*, INFORMS.
- Osterman, C. & Rego, C. (2003). The Satellite List and New Data Structures for Traveling Salesman Problems. *INFORMS*, INFORMS.
- Kochenberger, G., Glover, F., Alidaee, B., & Rego, C. (2003). The Unconstrained Quadratic Binary Programming Approach to Combinatorial Optimization. *INFORMS*, INFORMS.
- Greistorfer, Peter., Rego, C., & Alidaee, B. (2003). A Filter-and-Fan Approach for the Uncapacitated Warehouse Location Problem. *Metaheuristics International Conference*, International Conference on Metaheuristics.
- Gamboa, D., Osterman, C., & Rego, C. (2003). On the Performance of Data Structures for the Traveling Salesman Problem. *International Conference on Concurrent Engineering: Research and Applications*, International Conference on Concurrent Engineering.
- Duarte, R. & Rego, C. (2003). An Effective Metaheuristic Approach for Production Scheduling. *International Conference on Information Resource Management Association*, International Conference, Information Resources Ma.
- Hou, J. & Rego, C. (2003). A Classification of Online Bidders in a Private Value Auction: Evidence from eBay. *International Conference on Electronic Commerce Research*, The Sixth International Conference on Electronic C.
- Gamboa, D., Rego, C., & Glover, F. (2002). Algorithmic Issues on the Implementation of Large-Scale Traveling Salesman Problems. *Metaheuristics International Conference*, Metaheuristics International Conference.
- Glover, F., Kochenberger, G., Alidaee, B., & Rego, C. (2002). Improved Solution of Binary Quadratic Programs, OR'2002: International Conference on Operations Research. *International Conference on Operations Research*, International Conference on Operations Research.
- Glover, F., Punnen, A., & Rego, C. (2002). Advances in Ejection Chain Methods for the Traveling Salesman Problem. *INFORMS*, INFORMS.
- Gamboa, D. & Rego, C. (2002). A Stem-and-Cycle Ejection Chain Algorithm for the Asymmetric TSP.

International Federation of Operational Research Societies, International Federation of Operational Research S.

Pedroso, J., Rego, C., & Glover, F. (2002). Scatter Search for General MIP Problems. *International Federation of Operational Research Societies*, International Federation of Operational Research S.

Glover, F., Amini, M., Kochenberger, G., Alidaee, B., & Rego, C. (2002). Scatter Search for Unconstrained Binary Quadratic Programming. *International Federation of Operational Research Societies*, International Federation of Operational Research S.

Alidaee, B., Person, K., & Rego, C. (2002). Using Quality Function Deployment in NAVY Manpower Planning: A Supply Chain Management Approach. *MAS-6 (Military Personnel Research)*, *MAS-5 (Military Personnel Research)*.

Glover, F., Kochenberger, G., Alidaee, B., & Rego, C. (2002). A Unified Modeling and Solution Approach Capturing 0-1 IP Problems as Binary Quadratic Programs. *Decision Sciences Institute Annual meeting track - MS/OR*, 33rd Annual Meeting of the Decision Sciences Inst.

Rego, C. (2001). Advanced Methods for Stochastic Routing and Scheduling Models for Real-World Applications. *Military Personnel Research Science*, Military Personnel Research Science.

Rego, C. (2001). Scatter Search for the Vehicle Routing Problem. *IEEE International Conference on Systems, Man, and Cybernetics*, IEEE Systems, Man and Cybernetics Meeting.

Rego, C. & Glover, F. (2001). Filter & Fan Methods for Combinatorial Optimization. *INFORMS*, INFORMS.

Johnson, David S., Glover, F., McGeoch, Lyle A., & Rego, C. (2000). The DIMACS TSP Challenge: Preliminary Results. *International Symposium on Mathematical Programming*, International Symposium on Mathematical Programming.

Rego, C. (2000). Using Scatter Search for Solving Vehicle Routing Problems. *International Colloquium on Graphs and Optimization (GO IV)*, International Colloquium on Graphs and Optimization.

Rego, C. (2000). Scatter Search for the Vehicle Routing Problem. *INFORMS*, INFORMS.

Cavique, L., Themido, I., & Rego, C. (2000). Scatter Search for the Maximum Clique Problem. *Metaheuristics International Conference*, The Metaheuristics International Conference.

Gamboa, D. & Rego, C. (1998). Data Structures and Implementation Techniques of Ejection Chains. *IO 98*, IO.

Cavique, L., Themido, I., & Rego, C. (1998). Scatter Search/Path Relinking based Algorithms for the Max Clique Problem. *IO 98*, IO.

Leao, P. & Rego, C. (1998). A Combined Strategy of Ejection Chains / Path Relinking for the Vehicle Routing Problem. *IO 98*, IO.

Rego, C. (1998). Recent Advances in Evolutionary Methods Based on Adaptive Memory Principles of Tabu Search. *IO 98*, IO.

Gomes, M., Themido, I., Cavique, L., & Rego, C. (1998). Tabu Search based on a Resource Smoothing Formulation for Optimizing Cover Time in Crew Scheduling. *ECCO VII (European Conference on Combinatorial Optimization)*, EURO VII.

Teixeira, P. & Rego, C. (1998). Parallel Processing of Compound Neighborhood Structures for the Traveling Salesman Problem. *IO 98*, IO.

Cavique, L., Rego, C., & Themido, I. (1997). Subgraph Ejection Chains for the Crew Scheduling Problem. *INFORMS*, INFORMS.

Gomes, M., Themido, I., Rego, C., & Cavique, L. (1997). A Decomposition Algorithm for the Complete Crew Scheduling Problem. *International Symposium on Mathematical Programming*, International Symposium on Mathematical Programming.

- Rego, C., Cavique, L., & Themido, I. (1997). New Heuristic Algorithms for the Crew Scheduling Problem. *Metaheuristics International Conference*, The Metaheuristics International Conference.
- Rego, C. (1996). Utilização de uma Estrutura de Referência em Métodos de Pesquisa Local para Problemas de Rotas de Veículos. *Congresso de Investigação Operacional*, Congresso de Investigação Operacional.
- Rego, C. (1996). Um Algoritmo em Duas Fases para a Gestão Dinâmica de uma Frota de Camiões Cisterna. *Congresso de Investigação Operacional*, Um Algoritmo em Duas Fases para a Gestão Dinâmica .
- Rego, C. (1996). Some Experiments on Parallel Local Search for Routing Problems. *Parallel Optimization Colloquium (POC)*, Parallel Optimization Colloquium.
- Rego, C. (1996). A Subpath Ejection Chain Algorithm for the Traveling Salesman. *International Federation of Operational Research Societies*, The International Federation of Operational Research.
- Cavique, L., Rego, C., & Themido, I. (1996). A Tabu Search Heuristic for the Crew Scheduling Problem. *IFORS*, IFORS 96 (The International Federation of Operations).
- Rego, C. (1995). Parallel Tabu Search Algorithm using Ejection Chains for the Vehicle Routing Problem. *Metaheuristics International Conference*, Metaheuristics International Conference.
- Rego, C. (1995). Une Méthode en Deux Phases pour l'Optimisation d'une Flotte de Camions Citerne. *Rencontres Francophones de Recherche Operationnelle*, Rencontres Francophones de Recherche Operationnell.
- Rego, C. (1995). Utilisation d'une Structure de Référence dans une Méthode Tabu pour les Tournées de Véhicules. *Rencontres Francophones de Recherche Operationnelle*, Rencontres Francophones de Recherche Operationnell.
- Rego, C. (1995). Parallel Ejection Chains Applications for Routing Problems. *INFORMS*, INFORMS.
- Rego, C. (1994). A Decomposition Algorithm for a Real-Life Vehicle Scheduling Problem. *EURO Summer Institute*, EURO Summer Institute.
- Rego, C. (in press, 1994). An Efficient Implementation of Ejection Chain Procedures for the Vehicle Routing Problem. *CORS 94 (Canadian Operation Research Society) - Optimization Days*, CORS 94 (Canadian Operation Research Society) - Op.
- Rego, C. (1994). Tabu Search Heuristic integrating Embedded Neighborhood Structures for the Vehicle Routing Problem. *ECCO VII (European Conference on Combinatorial Optimization)*.
- Rego, C. (1994). Uma Heurística Tabu para a Determinação de Rotas de Veículos. *APDIO (Associação Portuguesa de Investigação Operacional)*, APDIO (Associação Portuguesa de Investigação Opera.
- Rego, C. (1993). Une Méthode Tabou avec Structures de Voisinage Composé pour le Problème de Tournées de Véhicules. *Association Française pour la Cybernetique, Economique et Technique*, Association Française pour la Cybernetique, Econom.

Non-Refereed Proceedings

Abstract Only

- Li, H., Rego, C., & Glover, F. (2006). New Advances on Solving the Protein Folding Problem in 3D HP Lattice Model. *INFORMS*, INFORMS (Institute for Operations Research and the.
- Ablanedo, J., Rego, C., & Glover, F. (in press, 2006). A Primal-Dual RAMP Algorithm for Very Large Set Covering Problems. *EURO*, European Conference on Operational Research.
- Mathew, F. & Rego, C. (in press, 2005). RAMP for the Capacitated Minimum Spanning Tree. *INFORMS*, INFORMS (Institute for Operations Research and the.
- Ablanedo, J., Rego, C., & Glover, F. (2005). RAMP for Very Large Set Covering Problems. *INFORMS*,

INFORMS (Institute for Operations Research and the.

Gamboa, D., Rego, C., & Glover, F. (2005). A RAMP Approach for Large Scale Linear Ordering Problems . *INFORMS*, INFORMS (Institute for Operations Research and the.

Li, H. & Rego, C. (2004). A Filter-and-Fan Approach for Protein Folding. *INFORMS*, InformS.

Working Papers

Rego, C. & Gamboa, D. (2013). "A Relax-and-Cut RAMP Algorithm for the Linear Ordering Problem."

Presentation of Refereed Papers

International

Matos, T., Gamboa, D., & Rego, C. (2015). *Dual RAMP for the Capacitated Facility Location Problem*.

Metaheuristics International Conference, Agadir, Morocco.

Rego, C., Gamboa, D., & Glover, F. (2015). *Doubly-Rooted Stem-and-Cycle Ejection Chain Algorithm for the Asymmetric Traveling Salesman Problem*. Metaheuristics International Conference, Agadir, Morocco.

Rego, C. (2006, November). *Experiments with the RAMP Approach on Solving the Capacitated Minimum Spanning Tree Problem*. INFORMS, San Francisco, California.

Rego, C., Gamboa, D., Osterman, C., & Glover, F. (2005). *Ejection Chain Algorithms for the Travelling Salesman Problem*. EURO, Unknown, Unknown.

Rego, C., Osterman, C., & Gamboa, D. (2005). *The Satellite List: A Reversible Doubly-Linked List*. ICANNGA International Conference, Vienna, Austria.

Rego, C. (2005, March). *New Advances on Solving Large Scale Combinatorial Optimization Problems: New Approaches, Neighborhoods and Data Structures*. International Conference on Knowledge Engineering and Decision Support, Porto, Portugal.

Rego, C. (2005, March). *Adaptive Memory Programming (Tutorial)*. ICANNGA International Conference, Coimbra, Portugal.

Rego, C., Osterman, C., & Gamboa, D. (2005, March). *The Satellite List: A Reversible Doubly-Linked List*. ICANNGA International Conference, Coimbra, Portugal.

Rego, C., Duarte, R., & Gamboa, D. (2004). *A Filter and Fan Approach for the Job Shop Scheduling Problem: A Preliminary Study*. International Conference on Knowledge Engineering and Decision Support, Unknown, Unknown.

Rego, C., Duarte, R., & Gamboa, D. (2004, October). *Advances on Filter-and-Fan Search for Job Shop Scheduling*. INFORMS, Denver, Colorado.

Rego, C., James, T., & Glover, F. (2004, October). *Ejection Chain/Path Relinking Method for the Quadratic Assignment Problem*. INFORMS, Denver, Colorado.

Rego, C., Li, H., & Glover, F. (2004, October). *A Filter-and-Fan Approach for Protein Folding*. INFORMS, Denver, Colorado.

Rego, C., Li, H., & Glover, F. (2004, October). *An Ejection Chain Approach for Protein Folding*. INFORMS, Denver, Colorado.

Rego, C. & Osterman, C. (2004, October). *Advances on the Implementation of TSP Algorithms*. INFORMS, Denver, Colorado.

Rego, C., Li, H., & Glover, F. (2004, October). *New Advances on Solving the Protein Folding Problems*. INFORMS, Denver, Colorado.

Rego, C. (2004, October). *Primal-Dual RAMP: A New Approach for Combinational Optimization*.

INFORMS, Denver, Colorado.

Rego, C., Gamboa, D., & Duarte, R. (2004, July). *Heuristic Approaches for the Job Shop Scheduling Problem*. International Conference on Knowledge Engineering and Decision Support, Porto, Portugal.

Rego, C. (2004, July). *Surrogate Constraints for Several Classes of Combinatorial Problems*. International Conference on Knowledge Engineering and Decision Support, Porto, Portugal.

Rego, C., Greistorfer, P., & Alidaee, B. (2004, May). *An Enhanced Filter-and-Fan Algorithm for the Facility Location Problem*. INFORMS, Banff, Canada.

Rego, C., James, T. , & Glover, F. (2004, May). *A Scatter Search Algorithm for the Quadratic Assignment Problem*. INFORMS, Banff, Canada.

Rego, C., Gamboa, D., & Osterman, C. (2004, January). *Advances on Data Structures for Very-Large-Scale Traveling Salesman Problems*. International Conference on Knowledge Engineering and Decision Support, Porto, Portugal.

Rego, C., Glover, F., & Punnen, A. (2002, November). *Advances in Ejection Chain Methods for the Traveling Salesman Problem*. INFORMS, San Jose, California.

Rego, C., Glover, F., Kochenberger, G., & Alidaee, B. (2002, September). *Improved Solution of Binary Quadratic Programs*. International Conference on Operations Research, Klagenfurt, Austria.

Rego, C. & Gamboa, D. (2002, July). *A Stem-and-Cycle Ejection Chain Algorithm for the Asymmetric TSP*. IFORS, Unknown, Unknown.

Rego, C., Glover, F., & Pedroso, J. P. (2002, July). *Scatter Search for General MIP Problems*. IFORS, Unknown, Unknown.

Rego, C. & Glover, F. (2001, November). *Filter and Fan Methods for Combinatorial Optimization Invited Talk*. INFORMS, Miami, Florida.

Rego, C., Glover, F. , & Kochenberger, G. (2001, July). *Advances in Metaheuristics for Classical and Real World Problems* . Metaheuristics International Conference, Porto, Portugal.

Rego, C., Gamboa, D., & Glover, F. (2001, July). *Algorithmic Issues on the Implementation of Large-Scale Traveling Salesman Problems*. Metaheuristics International Conference, Porto, Portugal.

Rego, C. (2000). *Scatter Search for the Vehicle Routing Problem*. INFORMS, Salt Lake City, Utah.

Rego, C. (2000). *Using Scatter Search for Solving Vehicle Routing Problems*. International Colloquium on Graphs and Optimization (GO IV), Leukerbad, Switzerland.

Rego, C., Johnson, D. S., & Glover, F. (2000). *The DIMACS TSP Challenge: Preliminary Results*. International Symposium on Mathematical Programming, Atlanta, Georgia.

Rego, C., Cavique, L., & Themido, I. (1999). *Scatter Search for the Maximum Clique Problem*. Metaheuristics International Conference, Angra dos Reis, Brazil.

Rego, C., Cavique, L., & Themido, I. (1998). *Scatter Search / Path Relinking based Algorithms for the Max Clique Problem* . IO 98, Faro, Portugal.

Rego, C. & Gamboa, D. (1998). *Data Structures and Implementation Techniques of Ejection Chains* . IO 98, Faro, Portugal.

Rego, C., Themido, I., Gomes, M., & Cavique, L. (1998). *Tabu Search based on a Resource Smoothing Formulation for Optimizing Cover Time in Crew Scheduling*. EURO, Unknown, Belgium.

Rego, C. & Gamboa, D. (1998). *Parallel Processing of Compound Neighborhood Structures for the Traveling Salesman Problem* . IO 98, Faro, Portugal.

Rego, C. & Leão, P. (1998). *A Combined Strategy of Ejection Chains / Path Relinking for the Vehicle Routing Problem* . IO 98, Faro, Portugal.

- Rego, C. & Glover, F. (1998). *Scatter Search for the Maximum Clique Problem*. IEEE International Conference on Systems, Man, and Cybernetics, San Diego, California.
- Rego, C. (1998). *Recent Advances in Evolutionary Methods Based on Adaptive Memory Principles of Tabu Search*. IO 98, Faro, Portugal.
- Rego, C., Cavique, L., & Themido, I. (1997). *New Heuristic Algorithms for the Crew Scheduling Problem*. Metaheuristics International Conference, Sophia Antipolis, France.
- Rego, C., Cavique, L., Gomes, M., & Themido, I. (1997). *A Decomposition Algorithm for the Complete Crew Scheduling Problem*. International Symposium on Mathematical Programming, Lausanne, Switzerland.
- Rego, C., Cavique, L., Gomes, M., & Themido, I. (1997). *Tabu Search for the Complete Crew Scheduling Problem*. INFORMS, Dallas, Texas.
- Rego, C., Cavique, L., & Themido, I. (1997). *Subgraph Ejection Chains for the Crew Scheduling Problem*. INFORMS, Dallas, Texas.
- Rego, C. (1996). *UM Algoritmo em Duas Fases para a Gestão Dinâmica de uma Frota de Camiões Cisterna*. Congresso de Investigação Operacional, Aveiro, Portugal.
- Rego, C. (1996). *Some Experiments on Parallel Local Search for Routing Problems*. Parallel Optimization Colloquium (POC), Versailles, France.
- Rego, C. (1996). *A Subpath Ejection Chain Algorithm for the Traveling Salesman*. IFORS, Vancouver, Canada.
- Rego, C., Cavique, L., & Themido, I. (1996). *A Tabu Search Heuristic for the Crew Scheduling Problem*. IFORS, Vancouver, Canada.
- Rego, C. (1995). *Parallel Ejection Chains Applications for Routing Problems*. INFORMS, New Orleans, Louisiana.
- Rego, C. (1995). *Parallel Tabu Search Algorithm using Ejection Chains for the Vehicle Routing Problem*. Metaheuristics International Conference, Breckenridge, Colorado.
- Rego, C. (1995). *Une Méthode en Deux Phases pour l'Optimisation d'une Flotte de Camions Citerne*. FRANCORO (Rencontres Francophones de Recherche Operationnelle, Mons, Belgium).
- Rego, C. (1995). *Utilisation d'une Structure de Référence dans une Méthode Tabu pour les Tournées de Véhicules*. FRANCORO (Rencontres Francophones de Recherche Operationnelle, Mons, Belgium).
- Rego, C. (1994). *An Efficient Implementation of Ejection Chain Procedures for the Vehicle Routing Problem*. INFORMS, Montreal, Canada.
- Rego, C. (1994). *Tabu Search Heuristic integrating Embedded Neighbourhood Structures for the Vehicle Routing Problem*. ECCO VII (European Conference on Combinatorial Optimization, Milan, Italy).
- Rego, C. (1994). *An Efficient Implementation of Ejection Chain Procedures for the Vehicle Routing Problem*. Metaheuristics International Conference, Breckenridge, California.
- Rego, C. (1994). *A Decomposition Algorithm for a Real-Life Vehicle Scheduling Problem*. EURO Summer Institute, Jouy-en-Josas, France.
- Rego, C. (1994). *Uma Heurística Tabu para a Determinação de Rotas de Veículos*. APDIO (Associação Portuguesa de Investigação Operacional), Braga, Portugal.
- Rego, C. (1993). *Une Méthode Tabou avec Structures de Voisinage Composé pour le Problème de Tournées de Véhicules*. AFCET (Association Française pour la Cybernetique, Economique et Technique, Paris, France).

Local

- Rego, C. (2005, February). *The Satellite List and k-Level Satellite Tree: New Data Structures Useful for Finding Hamiltonian Cycles*. MAS, Oxford, Mississippi.

National

Rego, C., Li, H., & Glover, F. (2004). *New Advances on Solving the Protein Folding Problem*. Butcher Symposium on Genetics and Biotechnology, Broomfield, Colorado.

Rego, C., Glover, F., Kochenberger, G., & Alidaee, B. (2002, November). *A Unified Modeling and Solution Approach Capturing 0-1 IP Problems as Binary Quadratic Programs*. Decision Sciences Institute Meeting, San Diego, California.

Rego, C. (2001, October). *Scatter Search for the Vehicle Routing Problems*. SMC, Tucson, Arizona.

Rego, C. (2001, June). *Advanced Methods for Stochastic Routing and Scheduling Models for Real-World Application*. Military Personnel Research Conference, Memphis, Tennessee.

Regional

Rego, C. (2005). *Memory and Evolution: Recent Advances in Metaheuristics Optimization*. Mayo Clinic, College of Medicine, Rochester, Minnesota.

Rego, C. & Li, H. (2005, April). *A Computational Approach for Solving the HP Lattice Protein Folding Problem*. Mid-South College Computing Conference, University, Mississippi.

Rego, C. & Ablanedo, J. (2005, February). *A RAMP Algorithm for the Set Covering Problem*. MAS, Oxford, Mississippi.

Rego, C., Mathew, F., & Glover, F. (2005, February). *A RAMP Algorithm for the Capacitated Minimum Spanning Tree*. MAS, Oxford, Mississippi.

Rego, C., Li, H., & Glover, F. (2005, February). *Tree Search Neighborhoods for the Protein Folding Problem in the HP Lattice Model*. MAS, Oxford, Mississippi.

Rego, C. & Osterman, C. (2004). *The Satellite List and k-Level Satellite Tree: New Data Structures Useful for Finding Hamiltonian Cycles*. MAS, University, Mississippi.

Rego, C. & Li, H. (2004). *New Advances on Solving the Protein Folding Problems in a 2D HP Lattice Model: New Neighborhood Structures for Dynamic and Adaptive Search*. Sigma-Xi Poster Competition in Chemical Sciences, University, Mississippi.

Rego, C. & Ablanedo, J. (2004). *New Data Structures for Graph Optimization Problems*. MAS, University, Mississippi.

Rego, C. (2004). *Recent Advances on Metaheuristics and Applications*. University of Colorado, Boulder, Colorado.

Presentation of Non-Refereed Papers

International

Matos, T., Gamboa, D., & Rego, C. (2015). *A Dual RAMP Algorithm for the Capacitated Facility Location Problem*. European Conference on Operational Research, EURO XXI, Glasgow, Scotland.

Rego, C. (2015). *Recent Advances in Relaxation Adaptive Memory Programming*. INFORMS Annual International Meeting, Philadelphia, United States of America.

Riley, C. & Rego, C. (2015). *A Lagrangian RAMP Algorithm for the Resource Constrained Project Scheduling Problem*. INFORMS Annual International Meeting, Philadelphia, United States of America.

Gamboa, D., Maia, F., & Rego, C. (2012, July). *A PD-RAMP Algorithm for the UFLP*. EURO, Vilnius, Lithuania.

James, T., Rego, C., & Ablanedo, J. (2012, July). *A Parallel RAMP Algorithm for the Set Covering Problem*.

EURO, Vilnius, Lithuania.

Matos, T., Gamboa, D., & Rego, C. (2012, July). *RAMP for the Capacitated Facility Location Problem*. EURO, Vilnius, Lithuania.

Gamboa, D., Rego, C., Glover, F., & James, T. (2010, November). *Embedding Classical TSP Neighborhoods in a Single Ejection Chain Framework*. INFORMS Annual International Meeting, Austin, Texas.

Riley, C., Rego, C., & Li, H. (2010, November). *Dual-RAMP Algorithm for Resource Constrained Project Scheduling*. INFORMS Annual International Meeting, Austin, Texas.

Ablanedo, J. & Rego, C. (2009, October). *A Primal-dual RAMP Algorithm for Large-scale Set Covering Problems*. INFORMS Annual International Meeting, San Diego, United States of America.

Gamboa, D. & Rego, C. (2009, October). *New Advances on RAMP Algorithms for Facility Location*. INFORMS Annual International Meeting, San Diego, United States of America.

James, T., Rego, C., & Gamboa, D. (2009, October). *An Enhanced Ejection Chain Algorithm for Hard Asymmetric Traveling Salesman Problems*. INFORMS Annual International Meeting, San Diego, United States of America.

Riley, C., Rego, C., & Li, H. (2009, October). *A RAMP Approach to the Resource Constrained Project Scheduling Problem*. INFORMS Annual International Meeting, San Diego, United States of America.

James, T., Rego, C., & Glover, F. (2007, November). *A Path Relinking Algorithm with Ejection Chains for the Quadratic Assignment Problem*. INFORMS Annual International Meeting, Seattle, United States of America.

Gamboa, D., Rego, C., & Glover, F. (2006, November). *RAMP for the Linear Ordering Problem*. INFORMS, Pittsburgh, Pennsylvania.

James, T., Rego, C., & Glover, F. (2006, November). *Multi-Start Tabu Search and Diversification Strategies for the Quadratic Assignment Problem*. INFORMS, Pittsburgh, Pennsylvania.

Rego, C. (2006, July). *Advances and Prospects in Adaptive Memory Metaheuristics (Tutorial)*. EURO, Reykjavik, Iceland.

Gamboa, D., Rego, C., & Glover, F. (2006, May). *A Relax-and-Cut RAMP Approach for the Linear Ordering Problem*. ECCO VII (European Conference on Combinatorial Optimization, Porto, Portugal).

Rego, C. (2005, November). *Adaptive Memory Programming: A Key to Breakthroughs for Solving Hard Problems (Tutorial)*. INFORMS, San Francisco, California.

Rego, C., Amini, M., Alidaee, B., Glover, F., & Kochenberger, G. (2002, July). *Scatter Search for Unconstrained Binary Quadratic Program*. IFORS, Edinburgh, Scotland.

Local

Rego, C. (2007, December). *Towards the Design of Effective Solutions of Complex Engineering Systems*. Massachusetts Institute of Technology (MIT), Cambridge, Massachusetts.

Mathew, F. & Rego, C. (2006, May). *A Relaxation Adaptive Memory Programming (RAMP) approach to address the Capacitated Minimum Spanning Tree (CMST) problem*. Sigma-Xi Poster Competition in Mathematics and Computer Science, Oxford, Mississippi.

Rego, C. (2000). *Programming Techniques, Data Structures and Algorithms for Solving Complex and Large Scale Optimization Problems*. University of Mississippi HCES Seminar, University, Mississippi.

National

Pearson, K., Alidaee, B., & Rego, C. (2002, June). *Using Quality Function Deployment in NAVY Manpower Planning: A Supply Chain Management Approach*. Military Personnel Research Conference, Memphis, Tennessee.

Research Grants

Funded

2015 [Year 3 of 3]: Gamboa, D., Rego, C., James, T., & Meireles, J., Parallel Adaptive Memory Algorithms for Complex Optimization (PARMACO), Co-Investigator, Portuguese Foundation for Science and Technology (FCT). The PAMACO project aims to contribute to the effective solution of complex optimization problems by designing, implementing and testing new parallel metaheuristic algorithms capable of efficiently handling several classic combinatorial optimization problems with recognized complexity and fundamental in a wide range of applications. In this vein, the research will focus on parallel applications of a new metaheuristic called RAMP (Relaxation Adaptive Memory Programming).

2012 [Year 3 of 3]: Gamboa, D., Rego, C., & Meireles, J., Effective Solutions for Hard Optimization Problems (ESHOP), Portuguese Foundation for Science and Technology (FCT). The ESHOP project is aimed to investigate the application of the RAMP approach to a variety of fundamental combinatorial optimization problems for which current state of the art optimization algorithms struggle to find high quality solutions. In this vein, our primary focus is to extend our previous research to other and more complex facility location problems that are central in logistics, distribution, and supply chain management. As a consequence, we expect that our findings in solving such problems more effectively and efficiently will prove useful to the solution of other classes of problems sharing a similar structure.

2003: Rego, C., Womer, K., & Lewis, K., Guided Design Search for Manpower Planning, Principal Investigator, Office Naval Research.

2003: Rego, C., Alidaee, B., Womer, K., Glover, F., & Kochenberger, G. An Expanded QFD Model for Complex Planning with Application of Manpower Planning, Principal Investigator, Office Naval Research.

2003: Rego, C., Womer, K., Alidaee, B., Glover, F., & Kochenberger, G. Solution of Satisfiability Problems by Unconstrained Quadratic Programming, Principal Investigator, Office Naval Research.

2001: Rego, C. A Network Based Integer Programming Approach to the Sailor Assignment Problem, Principal Investigator, Office Naval Research. Under the grant for research in Innovations in Optimization Methodologies.

2000: Rego, C. Advanced Methods for Stochastic Routing and Scheduling Models in Real-World Applications, Principal Investigator, Office Naval Research.

2000: Rego, C. Effective Solutions of Very-Large-Scale Optimization Problems for Personnel Planning and Management, Principal Investigator, Office Naval Research.

Not Funded

2006: Rego, C. & Osterman, C., New Data Structures and a Software Library for Large Scale Graph-Based Optimization Problems, Co-Investigator, NSF. National Science Foundation.

Research Honors and Awards

Award

2006: , University of Mississippi. Best research poster in the Sigma-Xi Poster Competition in Mathematics (with Frank Mathew). .

2004: , University of Mississippi. Best research poster in the Sigma-Xi Poster Competition in Chemical Sciences .

2004: , University of Mississippi. Researcher/Scholar of the Year in the Schools of Business, MIS/POM areas.

1996: , National Portuguese Foundation for Research (JNICT) . PhD Fellowship.

1994: , National Portuguese Foundation for Research (JNICT) . PhD Fellowship.

1993: , SOPONATA Petrol Port. Portugal - contract for "A study and developing a model for the staff dimension and time tabling problem".

Other Research Activities

Basic or Discovery Scholarship

2006: Rego, C., Scatter Search: Methodology and Implementations in C, by M. Laguna and R. Martí, Kluwer Academic Publishers, OR/CS Interface Series, 2003. Invited Review, Interfaces.

Service to the University

University Assignments

Member:

1997-1998: Portucalense University.: Organizing committee of the DIUP-97 and DIUP-98 Technical Sessions

Other Institutional Service Activities:

2004-2005: University of Mississippi, Hearin Center: Design, Development, and Maintenance of the HC Web Page

2000-2001 – 2004-2005: University of Mississippi, School of Business Administration: Manager of Hearin Center for Enterprise Science web site

Portucalense University

University Assignments

Chair:

1997-1998: Portucalense University: Web Master of the Portucalense University web site.

Technical School of the University of Lisbon

Dissertation Assignments

Chair:

2008: Dorabela Gamboa

University of Mississippi

College Assignments

Member:

2009-2010 – 2016-2017: Strategic Planning Committee

2009-2010 – 2016-2017: MBA Committee

2013-2014: Strategic Planning Committee

2013-2014: MBA Committee
2009-2010: Tenure and Promotion
2008-2009: Dean Search Committee
2008-2009: Clinical Asst Professor of POM Search
2005-2006: MIS Search Committee
2005-2006: Tenure and Promotion

University Assignments

Member:

2016-2017: Sabbatical Leave Review Committee
2016-2017: Research Council: Alternate Committee Member. Attended several meetings in the Fall.
2012-2013 – 2015-2016: Research Council
2010-2011 – 2015-2016: Sabbatical Leave Review Committee
2012-2013 – 2014-2015: Tenure and Promotion Review Committee
2013-2014: Faculty Senate
2013-2014: Research Council
2013-2014: Sabbatical Leave Review Committee
2013-2014: Tenure and Promotion Review Committee

Dissertation Assignments

Chair:

2014-2015: Chris Riley
2009: Frank Mathew
2007: Jose Ablanedo
2005: Colin Osterman
2004: Lutfu Sagnbansua

Member:

2014-2015: Vijay Ramalingam

Service to the Profession

Academic Conference: Discussant

2005: INFORMS . Member of the "OR and the New Biomedical Research Profession Discussion Group

Board Member: Advisory Board

2012: NASA Postdoctoral Program (NPP).

Board Member: PRJ Editorial Review Board

2007 – 2015: International Journal of Computational Intelligence Research (IJ CIR), Research India

Publications.

Chair: Committee / Task Force

2005: EU/ME working group. Chair of the Special Interest Group on Tabu Search and Scatter Search, in The European Chapter on Metaheuristics of EURO (Association of European Operational Research Societies)

2004: EURO. EU/ME Special Interest Group on Tabu Search and Scatter Search, in The European Chapter on Metaheuristics

2002 – 2004: The European Chapter on Metaheuristic of EURO Working Group. EU/ME Special Interest Group on Tabu Search and Scatter Search

Chair: Conference / Track / Program

2015: European Conference on Operational Research, EURO XXI, Glasgow, Scotland. Chaired Session "Adaptive Search"

2015: INFORMS Annual International Meeting, Philadelphia, United States of America. Chair of Session Primal-Dual Metaheuristics

2006: European Conference on Operational Research, EURO XXI, Reykjavik, Iceland. Chair of the Cluster "Adaptive Memory Programming", July 2-5

2006: ICKEDS 2006, Lisbon, Portugal. Member of the Program Committee of the 2nd International Conference on Knowledge Engineering and Decision Support, May 9-12, 2006

2005: International Conference on Advanced Data Mining and Applications, Wuhan, China. Member of the Program Committee 1st (ADMA'05), July 22-24

2005: Metaheuristics International Conference, Vienna, Austria. Member of the Program Committee in the 6th International (MIC'06) August 22-26

2005: INFORMS, San Francisco, California. Chair of the session "Relaxation Adaptive Memory Programming (RAMP) for Combinatorial Optimization," Annual International Meeting, November 13-16

2004: International Conference on Knowledge Engineering and Decision Support. Chair (with D. Gamboa) of the session "Optimization Models and Algorithms"

2004: INFORMS. "Biocomputing: Recent Advances on Modeling, Algorithms and Applications"

2004: INFORMS. New Advances in Algorithm Design and Search Strategies

Reviewer - Article / Manuscript

2015: Networks. Reviewed article for Networks journal

2015: Parallel Computing. Reviewed article for Parallel Computing journal

Reviewer - Grant Proposal Related to Expertise

2015: Oak Ridge Associated Universities (ORAU). Reviewer for Ralph E. Powe Junior Faculty Awards to Oak Ridge Associated Universities (ORAU)

2006: NSERC (National Sciences and Engineering Research Council of Canada). Serve the NSERC (National Sciences and Engineering Research Council of Canada) in Review Panel

Editor: Associate Editor

2007 – 2014: Journal of Heuristics (JoH), Kluwer Academic Publishers..

2007: Operational Research: An International Journal, Hellenic Operational Research Society (ORIJ).

2007: Algorithmic Operations Research (AOR).
2006: Research India Publications. International Journal of Computational Intelligence Research (IJCIR)
2006: Hellenic Operational Research Society.. Operational Research: An International Journal
2006: Facets. Algorithmic Operations Research
2005: Kluwer Academic Publishers. Journal of Heuristics
2000 – 2004: Tabu Search Web Site. Editor with Fred Glover

Editor: Book / Textbook

2005: Kluwer Academic Publishers. Editing (with B. Alidaee) a book entitled "Memory and Evolution: Tabu Search and Scatter Search"

Invited Lecture

2005: Mayo Clinic, College of Medicine, Rochester, Minnesota. Recent Advances in Metaheuristics Optimization with Applications to Health Care, Division of Health Care Policy & Research
2005: Texas A&M University. Memory and Evolution: Recent Advances in Metaheuristics Optimization, Seminar Sponsored by PARSONS

Member: Committee/Task Force

2013: Metaheuristics International Conference, Singapore.
2011: 9th Metaheuristics International Conference, Udine, Italy.
2010: INFORMS Computing Society (ICS).
2003: ISPE International Conference in Concurrent Engineering: Research and Applications, Madeira Island, Portugal. Member of the Invited Session Organizers Board for the International Scientific Committee
2003: International Conference on Metaheuristics, Kyoto, Japan. Program Committee
2002: International Federation of Operational Research Societies. Organizer of the session, Metaheuristics for ILP and MIP Problems.
2002: International Federation of Operational Research Societies. Organizer of the session, Metaheuristics for Combinatorial Optimization.
2001: International Conference on Metaheuristics, Porto, Portugal. Program Committee
1999: International Conference on Metaheuristics, Angra dos Reis, Brazil. Program Committee

Other Professional Service Activities

2005: OptTek Inc.. Consulting: Development of a prototype study for RAND Corporation
2005: Graduate Students. Recommendation Letters (Frank Mathew, Jie Zhang, Haitao Li, Jose Ablanedo)
2005: MIS/POM. Coordinator of MGMT 372
2005: UM - B-School. Editor with Fred Glover of the Tabu Search Web Site
2001: Conference on Optimization. Co-organizer with G. Kochenberger, F. Glover, and B. Alidaee, focusing on recent developments in Tabu Search and Scatter Search methods.
2001: INFORMS International Conference, Miami Beach, Florida. Organizer and Co-Chair (with F. Glover) of a Combinatorial Optimization Cluster
2000: DIMACS Implementation Challenge: The Traveling Salesman Problem. Organizer with D. Johnson, L. McGeogh, and F. Glover

Reviewer: Ad Hoc Reviewer for a Journal

2005: INFORMS. Operations Research Journal

2004: INFORMS Journal on Computing and Journal of Heuristics.

2004: Transportation Science.

2004: IEEE Transactions on Evolutionary Computation.

Reviewer: Book / Textbook

1999: Kluwer Academic Publishers. Essays and Surveys on Metaheuristics, book edited by C. Ribeiro and P. Hansen

Reviewer: Conference Paper

2005: ORP3 , Valencia, Spain. EURO Conference for Young OR researchers and Practitioners: OR Peripatetic Post-Graduate Program

Service Honors and Awards

2002: , Portuguese Operations Research Society. Portuguese Who's Who.

1999: , IFORS-Lisbon Award. The best international paper published by members of APDIO, an investigation over a four-year period, 1996-1999.

Faculty Development

Instructional-Related Conference

2003: Kyoto, Japan. Member of the Program Committee in the 5th International Conference on Metaheuristics (MIC'03),

2003: Madeira Island, Portugal. Member of the "Invited Session Organizers' board for the International Scientific Committee of CE2003: The 10th ISPE International Conference in Concurrent Engineering: Research and Applications (CE'03), 26-30 July, 2003.

2002: Unknown, Unknown. Organizer of the session "Metaheuristics for Combinatorial Optimization' for the 16th triennial conference, 8 - 12 July, 2002

2002: Unknown, Unknown. Organizer of the session "Metaheuristics for ILP and MIP Problems' for the 16th triennial conference, 8 - 12 July, 2002.

2001: Miami Beach, Florida. Organizer and Co-Chair (with Fred Glover) of a Combinatorial Optimization Cluster, 8-12 July

2001: Porto, Portugal. Member of the Program Committee in the 4th International Conference on Metaheuristics (MIC'01

1999: Angra dos Reis, Brazil. Member of the Program Committee in the Third International Conference on Metaheuristics (MIC'99)

1997: Dallas, Texas. Organizer and Chair of a session on "Vehicle Routing and Crew Scheduling" in the Cluster on Combinatorial Optimization of INFORMS International Conference, October, 1997

Research-Related Conference/Seminar

2012: MathLab Seminar at the University of Mississippi, Oxford, Mississippi. Parallel Computing with MATLAB

Other Professional Development

2005: Unknown, Unknown. Chair of the EU/ME Special Interest Group on Tabu Search and Scatter Search, in The European Chapter on Metaheuristics of EURO (Association of European Operational Research Societies) Working Group.

2001: Oxford, Mississippi. Co-organized (with G. Kochenberger, F. Glover, and B. Alidaee) a 3-day conference on Optimization, focusing on recent developments in Tabu Search and Scatter Search methods

2000: Unknown, Unknown. Organizer (with David Johnson, Lyle McGeogh, and Fred Glover) of the "8th DIMACS Implementation Challenge: The Traveling Salesman Problem

Professional Seminars / Workshops

2006: Pittsburgh, United States of America. Education Cluster on Teaching OR/MS with cases, INFORMS International Conference

2006: Pittsburgh, United States of America. Cluster on Innovations in undergraduate in Operations Research Curriculum - INFORMS International Conference

2006: Pittsburgh, United States of America. Tutorial: Teaching a Traditional Optimization Course in a Non-traditional Manner by James Orlin from MIT - INFORMS International Conference

Technology-Related Training

2012: MathWorks webinar, Natick, Massachusetts. MATLAB to C Made Easy

Other Honors and Awards

2005: , Marquis Who's Who. Who's Who In America.

1994: Model and Solution Procedure for a tank truck dispatching problem, MATRA Cap System and the INRIA, France. Received contract for "Development of a Decision Support System (DSS) prototype for a tank truck dispatching problem", which occurs in a case study concerning the transportation of raw material throughout Europe..

1993: , National Portuguese Foundation for Research (JNICT) . PhD Fellowship.

Other Activities

2000 - : Programming Techniques, Data Structures and Algorithms for Solving Complex and Large Scale Optimization Problems, University of MS, Seminar sponsored by the HCES

1999 - : Recent Contributions in Metaheuristics. Invited Talk: Communication addressed to the International Evaluation Panel scheduled for the Research Unit: "Operations Research Center", Home Institution: Faculty of Sciences - University of Lisbon.

1998 - : Innovations and Applications of Heuristics in Optimization", Invited talk, University of Colorado, Boulder, USA.

1998 - : Graph Based Ejection Chains and Tabu Search for Scheduling-Related Problems: Techniques, Implementation and Results, Invited talk, University of Paris.

1998 - : Developing Decision Support Systems for Optimization Problems, DIUP-98's Technical Sessions, Portucalense University, Portugal.

1997 - : Distributed Programming on Internet, DIUP-97's Technical Sessions, Portucalense University, Portugal.

1997 - : A Decision Support System for Crew Scheduling: the case of the Metro of Lisbon, DIUP-97's Technical Sessions, Portucalense University, Portugal.

Memberships

IEEE Computer Society, 2010-Present

INFORMS, 1999-Present

APDIO, 1998-Present