

Antonio Martínez Sykora



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1 Personal

Born on August 9, 1983.

Spanish Citizen.

2 Education

B.S. Mathematics, University of Valencia, Spain, June 2007.

B.S. Science and Technology of Statistics, University of Valencia, Spain, September 2007.

Postgraduate Certificate in Education, University of Valencia, Spain, June 2008.

Diploma of Advanced Studies, Department of Statistics and Operations Research, University of Valencia, Spain, 2009.

Ph.D. Student, Department of Statistics and Operations Research, University Valencia, Spain, since October 2009.

3 Employment

Visiting/Adjunct Professor, Valencia University, Spain, February 2008– September 2008.

Visiting/Adjunct Professor, Valencia University, Spain, October 2008– September 2009.

Research Personnel in Training, University of Valencia, since October 20011.

4 Grants

PhD grant (Ministerio de Ciencia e Innovacion, Spain), University of Valencia, October 2009– October 2013. Project: "OPEC2: Advanced developments for the optimization of industrial processes of Cutting and Packing".

Research internship for 4 months at the University of Southampton granted by "Ministerio de Ciencia e Innovacion", Spain.

5 Professional training

Workshop: Winter School On Network Optimization (NETOPT2011), Estoril, Portugal 17/01/2011-21/01/2011

ORP³ – 2011 Cádiz, Spain 13/09/2011-17/09/2011. *Operations Research Peripatetic PostGraduate Programme (EURO conference for young researchers)*.

6 Research activities

6.1 Publications

Authors: Enrique Benavent; Antonio Martínez.

Multi-Depot Multiple TSP: a polyhedral study and computational results, 2011, *Annals of Operations Research*, DOI:10.1007/S10479-011-1024-y.

Authors: Ramón Álvarez-Valdés; Jose Manuel Tamarit; Antonio Martínez.

A Branch and Bound algorithm for cutting and packing irregularly-shaped pieces, 2013, *"International Journal of Production Economics"*, DOI: 10.1016/j.ijpe.2013.04.007.

Authors: Antonio Martínez; Ramón Álvarez-Valdés; Jose Manuel Tamarit.

Nesting problems: mixed integer formulations and valid inequalities, 2011, *Proceedings of OR Peripatetic Post-Graduate Programme*, ISBN-10: 8498283485, ISBN-13: 978-8498283488, http://orp3.uca.es/pdfs/ORP3_15_AMartinez.pdf.

Authors: Antonio Martínez; Ramón Álvarez-Valdés; Julia Bennell; Jose Manuel Tamarit.

Constructive Algorithms for the two-dimensional irregular shape bin packing problems, 2013, *Technical Report*, Department of Statistics and Operational Research, University of Valencia, <http://www.uv.es/marsyan/research.html>.

6.2 Presentations

Authors: Enrique Benavent; Antonio Martínez.

Title: Estudio poliédrico del Problema del Viajante Múltiple con Varios Depósitos.

Congress: XXXI Congreso Nacional de Estadística e Investigación Operativa, Murcia, Spain.

Date: 10/02/2009-13/02/2009

Authors: Enrique Benavent; Antonio Martínez.

Title: A polyhedral approach to the multi depot multiple TSP.

Congress: ECCO XXIII - CO 2010, Málaga, Spain.

Date: : 29/05/2010

Authors: Enrique Benavent; Antonio Martínez.
 Title: A Branch-and-Cut algorithm for the Multi Depot Multiple TSP.
 Congress: TRISTAN VII, Tromsø, Norway.
 Date: : 20/06/2010-25/06/2010

Authors: Jose Manuel Belenguer; Enrique Benavent; Antonio Martínez; Christian Prins; Caroline Prodhon; Juan G. Villegas.
 Title: Un algoritmo de ramificación y corte para el problema del reparto por un camión con tráiler y puntos de intercambio (STTRPSD).
 Congress: XXXII Congreso Nacional de Estadística e Investigación Operativa y VI Jornadas de Estadística Pública, A Coruña, Spain.
 Date: : 17/09/2010

Authors: Ramón Álvarez-Valdés; Antonio Martínez; José Manuel Tamarit.
 Title: Nesting Problems: Integer linear formulations and valid inequalities.
 Congress: VII ALIO/EURO, Porto, Portugal.
 Date: : 04/05/2011-06/05/2011

Authors: Ramón Álvarez-Valdés; Antonio Martínez; José Manuel Tamarit.
 Title: Branch and Cut Algorithms to solve Nesting Problems.
 Congress: 8th ESICUP Meeting, Copenhagen, Denmark.
 Date: :19/05/2011-21/05/2011

Authors: Ramón Álvarez-Valdés; Antonio Martínez; José Manuel Tamarit.
 Title: Math-heuristic Algorithms for Nesting Problems.
 Congress: 9th ESICUP Meeting, Tenerife, Spain.
 Date: :20/03/2012-23/03/2012

Authors: Ramón Álvarez-Valdés; Antonio Martínez; José Manuel Tamarit.
 Title: An Iterated Greedy Algorithm for Nesting Problems.
 Congress: 25th EURO, Vilnius, Lithuania.
 Date: :08/07/2012-11/07/2012

Authors: Antonio Martínez; Ramón Álvarez-Valdés; José Manuel Tamarit; Jose Fernando Oliveira; António Miguel Gomes; Maria Antonia Carravilla.
 Title: An Iterated Greedy Algorithm for Nesting Problems.
 Congress: 10th ESICUP, Lille, France.
 Date: :24/04/2013-26/04/2013

Authors: Antonio Martínez; Ramón Álvarez-Valdés; Julia Bennell; José Manuel Tamarit.
 Title: Solving the two dimensional bin packing problem with irregular pieces and guillotine cuts.
 Congress: 10th ESICUP, Lille, France.
 Date: :24/04/2013-26/04/2013

6.3 Conference Attendance

Conference: Euro Working Group on Locational Analysis (EWGLA XVII), Elche, Spain.
 Date: 17/09/2009-19/09/2008

Conference: Combinatorial Optimization, Routing and Location meeting (CORAL 2009), Elche, Spain.
 Date: 10/06/2009-12/06/2009

Conference: ALIO - INFORMS Joint International Meeting, Buenos Aires, Argentina.
 Date: 06/06/2010-09/06/2010

Conference: 9th Metaheuristics International Conference, Udine, Italy.
Date: 25/07/2011-28/07/2011

7 Research Internship

Faculdade de Engenharia. Universidade do Porto.

DEIG: Departamento de Engenharia Industrial e Gestão. With the collaboration of professors José Fernando Oliveira, Maria Antónia Carravilla and António Miguel Gomes. Start: 01/09/2011 End: 01/01/2012

Southampton Management School. University of Southampton

With the collaboration of professor Julia Bennell. Start: 01/09/2012 End: 31/12/2012

8 University Teaching

University of Valencia, Spain, 2007-2008:

Subject: Biostatistics.

Grade: Medicine.

Hours: 60 (Practice).

University of Valencia, Spain, 2007-2008:

Subject: Biostatistics.

Grade: Biology.

Hours: 15 (Practice).

University of Valencia, Spain, 2008-2009:

Subject: Biostatistics.

Grade: Biology.

Hours: 78 (Practice).

University of Valencia, Spain, 2008-2009:

Subject: Biostatistics.

Grade: Biology.

Hours: 90 (Theory).

University of Valencia, Spain, 2011-2012:

Subject: Introduction to the Statistic Analysis.

Grade: Degree in Information and Documentation.

Hours: 30 (Practice).

9 Collaborations

Collaboration with Dr. Teresa Bas Hermida, Hospital La Fe of Valencia.

Project: "Valoración de titanio y factores proinflamatorios en pacientes jóvenes operados de escoliosis idiopática del adolescente con instrumentación de titanio", providing statistical support to the PhD Thesis of Dr. Nuria Franco.