

Universitat Politècnica de Catalunya
IOC - Institute of Industrial and Control Engineering
Barcelona School of Industrial Engineering (ETSEIB)
Diagonal 647
Barcelona, 08028 Spain

joaquin.bautista@upc.edu
Phone: [phone]
Mobile: [mobile]
Fax: [fax]
Website: <http://futur.upc.edu/OPE>

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https://www.researchgate.net/profile/Joaquin_Bautista3

Thesis

Manuel Chica: *Metaheurísticas Multi-Objetivo para Equilibrado de Líneas de Montaje en Automoción: Optimización Conjunta de Tiempo y Espacio*. 10/2011, Degree: Ph.D in Computer Science – Universidad de Granada, Supervisor: Oscar Cordón, Joaquín Bautista, Sergio Damas

Book Chapters

Joaquín Bautista, Alberto Cano, Rocío Alfaro: *Modeling and Solving a Variant of MMSP-W Problem with Production Mix Restrictions*. Annals of Industrial Engineering 2012. Industrial Engineering: overcoming the crisis Part IV, 1st Edition edited by J. Carlos Prado-Prado, Jesús García-Arca, 12/2013: chapter 28; Springer London., ISBN: 978-1-4471-5348-1 / 978-1-4471-5349-8

Joaquín Bautista, Alberto Cano, Rocío Alfaro, Cristina Batalla: *Impact of the Production Mix Preservation on the ORV Problem*. Advances in Artificial Intelligence Lecture Notes in Computer Science, I edited by Concha Bielza, Antonio Salmerón, Amparo Alonso-Betanzos, J. Ignacio Hidalgo, Luis Martínez, Alicia Troncoso, Emilio Corchado, Juan M. Corchado, 09/2013: chapter 26; Springer Berlin Heidelberg., ISBN: 978-3-642-40642-3 / 978-3-642-40643-0

Joaquín Bautista, Rocío Alfaro, Alberto Cano: *Incorporating Regularity of Required Workload to the MMSP-W with Serial Workstations and Free Interruption of the Operations*. Advances in Production Management Systems. Competitive Manufacturing for Innovative Products and Services, Part II edited by Christos Emmanouilidis, Marco Taisch, Dimitris Kiritsis, 08/2013: chapter 51; Springer Berlin Heidelberg., ISBN: 978-3-642-40351-4 / 978-3-642-40352-1

Joaquín Bautista, Cristina Batalla, Rocío Alfaro: *Incorporating ergonomics factors into the TSALBP*. Advances in Production Management Systems. Competitive Manufacturing for Innovative Products and Services - IFIP Advances in Information and Communication Technology, First edited by Christos Emmanouilidis, Marco Taisch, Dimitris Kiritsis, 08/2013: chapter Incorporating Ergonomics Factors into the TSALBP; Springer Berlin Heidelberg., ISBN: 978-3-642-40351-4 / 978-3-642-40352-1

Joaquín Bautista, Alberto Cano, Ramon Companys, Imma Ribas: *Solving Flow Shop Problems with Bounded Dynamic Programming*. Industrial Engineering: Innovative Networks, First edited by Suresh P. Sethi, Marija Bogataj, Lorenzo Ros-McDonnell, 01/2012: chapter 37; Springer London., ISBN: 978-1-4471-2320-0 / 978-1-4471-2321-7

Joaquín Bautista, Alberto Cano, Rocío Alfaro: *Performance of Bounded Dynamic Programming Applied to a Variant of the MMSP-W Problem*. Industrial Engineering: Innovative Networks., First edited by Suresh P. Sethi, Marija Bogataj, Lorenzo Ros-McDonnell, 01/2012: chapter 38; Springer London., ISBN: 978-1-4471-2320-0 / 978-1-4471-2321-7

- Joaquín Bautista, Alberto Cano, Rocío Alfaro: *A bounded dynamic programming algorithm for the MMSP-W considering workstation dependencies and unrestricted interruption of the operations*. Intelligent Systems Design and Applications (ISDA), 2011 11th International Conference on, First edited by Sebastián Ventura, et al, 11/2011: chapter 50; Institute of Electrical and Electronics Engineers, Inc., ISBN: 978-1-4577-1676-8
- Manuel Chica, Oscar Cordon, Sergio Damas, Joaquín Bautista: *A multiobjective memetic ant colony optimization algorithm for the 1/3 variant of the time and space assembly line balancing problem*. 2011 IEEE Workshop On Computational Intelligence In Production And Logistics Systems (CIPLS 2011) Proceedings, First edited by Bülent Çatay, Raymond Chiong, Patrick Siarry, 04/2011: chapter 3; Institute of Electrical and Electronics Engineers, Inc., ISBN: 978-1-61284-332-2
- Joaquín Bautista, Alberto Cano, Ramon Companys, Imma Ribas: *A bounded dynamic programming algorithm for the blocking flow shop problem*. 2011 IEEE Workshop On Computational Intelligence In Production And Logistics Systems (CIPLS 2011) Proceedings, First edited by Bülent Çatay, Raymond Chiong, Patrick Siarry, 04/2011: chapter 2; Institute of Electrical and Electronics Engineers, Inc., ISBN: 978-1-61284-332-2

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- Manuel Chica, Oscar Cordon, Sergio Damas, Joaquin Bautista: *A robustness information and visualization model for time and space assembly line balancing under uncertain demand*. International Journal of Production Economics 10/2013; 145(2). DOI:10.1016/j.ijpe.2013.05.030
- Joaquín Bautista, Cristina Batalla, Rocío Alfaro-Pozo, Alberto Cano: *Extended Models for TSALBP with Ergonomic Risk Constraints*. IFAC Proceedings Volumes 06/2013; 46(9) p. 839-844. DOI:10.3182/20130619-3-RU-3018.00293
- Joaquín Bautista, Alberto Cano, Rocío Alfaro-Pozo, Cristina Batalla: *Hybrid procedure based on Bounded Dynamic Programming and Linear Programming for solving a variant of the MMSP-W*. . IFAC Proceedings Volumes 06/2013; 46(9) p. 1908-1913. DOI: 10.3182/20130619-3-RU-3018.00237
- Joaquin Bautista, Alberto Cano, Rocio Alfaro: *Models for MMSP-W considering workstation dependencies: A case study of Nissan's Barcelona plant*. European Journal of Operational Research 12/2012; 223(3). DOI:10.1016/j.ejor.2012.07.006
- Ramon Companys, Imma Ribas, Joaquín Bautista: *Planificación estratégica de la capacidad en una empresa del sector alimentación*. Dirección y Organización 12/2012; 48, p. 11-16. <http://hdl.handle.net/2117/17111>
- Joaquin Bautista, Alberto Cano, Rocio Alfaro: *Modeling and solving a variant of the mixed-model sequencing problem with work overload minimisation and regularity constraints. An application in Nissan's Barcelona Plant*. Expert Systems with Applications 09/2012; 39(12). DOI:10.1016/j.eswa.2012.03.024
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- Joaquín Bautista, Jordi Pereira: *Procedures for the Time and Space constrained Assembly Line Balancing Problem*. European Journal of Operational Research 08/2011; 212(3). DOI:10.1016/j.ejor.2011.01.052,

Conference Proceedings

- Joaquín Bautista, Alberto Cano, Rocío Alfaro, Cristina Batalla: *Algoritmos GRASP para solucionar el problema Blocking Flow Shop*. Multiconferencia CAEPIA'13. IX Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (MAEB 2013), Madrid (Spain); 09/2013
- Manuel Chica, Oscar Cerdón, Sergio Damas, Joaquín Bautista: *A multiobjective genetic algorithm and robustness information function for time and space assembly line balancing*. Multiconferencia CAEPIA'13. IX Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados - MAEB 2013, Madrid (Spain); 09/2013
- Joaquín Bautista, Cristina Batalla, Rocío Alfaro, Alberto Cano: *Impact of Ergonomic Risk Reduction in the TSALBP-1*. 7th International Conference on Industrial Engineering and Industrial Management - XVII Congreso de Ingeniería de Organización, Valladolid (Spain); 07/2013
- Joaquín Bautista, Rocío Alfaro, Cristina Batalla, Alberto Cano: *Incorporating the Work Pace Concept into the MMSP-W*. 7th International Conference on Industrial Engineering and Industrial Management - XVII Congreso de Ingeniería de Organización, Valladolid -Spain-; 07/2013
- Manuel Chica, Oscar Cerdón, Sergio Damas, Joaquín Bautista: *NTIGen: a Software for Generating Nissan Based Instances for Time and Space Assembly Line Balancing*. 7th International Conference on Industrial Engineering and Industrial Management - XVII Congreso de Ingeniería de Organización, Valladolid - Spain -; 07/2013
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- Joaquín Bautista, Cristina Batalla, Rocío Alfaro, Alberto Cano: *Extended Models for TSALBP with Ergonomic Risk Constraints*. IFAC Conference on Manufacturing Modelling, Management, and Control (MIM 2013), Saint Petersburg (Russia); 06/2013
- Joaquín Bautista: *Sostenibilidad en el sector de automoción*. Jornadas de la Real Academia de Ingeniería: "La inteligencia computacional en la sociedad del conocimiento", Madrid (Spain); 05/2013
- Joaquín Bautista, Cristina Batalla, Rocío Alfaro: *Incorporating Ergonomics Factors into the TSALBP*. International Conference on Advances in Production Management Systems (APMS 2012) IFIP WG 5.7 International Conference, APMS 2012, Rhodes (Greece); 09/2012
- Joaquín Bautista, Rocío Alfaro, Alberto Cano: *Incorporating Regularity of Required Workload to the MMSP-W with Serial Workstations and Free Interruption of the Operations*. International Conference on Advances in Production Management Systems (APMS 2012) IFIP WG 5.7 International Conference, APMS 2012, Rhodes (Greece); 09/2012
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- Joaquín Bautista, Rocío Alfaro, Alberto Cano: *Solving the ORVP with Preservation of the Production Mix using BDP*. VI International Conference on Industrial Engineering and Industrial Management, XVI Congreso de Ingeniería de Organización, Vigo (Spain); 07/2012
- Joaquín Bautista, Alberto Cano, Rocío Alfaro: *Algoritmos GRASP para el MMSP-W con estaciones en serie y libre interrupción de operaciones*. VIII Congreso Español sobre Metaheurísticas, Algoritmos Evolutivos y Bioinspirados, Albacete (Spain); 02/2012
- Manuel Chica, Oscar Cordon, Sergio Damas, Joaquín Bautista: *Análisis del NSGA-II para el TSALBP-1/3 cuando existe variación de demanda en una producción mixta*. VIII Congreso Español sobre Metaheurísticas, Algoritmos Evolutivos y Bioinspirados, Albacete (Spain); 02/2012
- Joaquín Bautista, Alberto Cano, Rocío Alfaro: *A bounded dynamic programming algorithm for the MMSP-W considering workstation dependencies and unrestricted interruption of the operations*. 11th International Conference on Intelligent Systems Design and Applications (ISDA 2011) - IEEE Xplore -, Córdoba (Spain); 11/2011
- Joaquín Bautista, Alberto Cano, Ramon Companys, Imma Ribas: *A bounded dynamic programming algorithm for the blocking flow shop problem*. 2011 IEEE Workshop On Computational Intelligence In Production And Logistics Systems (CIPLS), Paris (France); 04/2011
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