

2016

-

"[Interpreting human activity from electrical consumption data using reconfigurable hardware and hidden Markov models](#)" F.J. Ferrández-Pastor, H. Mora-Mora, J. L. Sánchez-Romero, M. Nieto-Hidalgo, J.M. García-Chamizo.
Journal of Ambient Intelligence and Humanized Computing,
Nov.2016, 1-15

.
DOI: 10.1007/s12652-016-0431-y

-

"[Using Virtual Reality for industrial design learning: a methodological proposal](#)" A. Jimeno-Morenilla, J. L. Sánchez-Romero, H. Mora-Mora & R. Coll-Miralles
Behaviour and Information Technology
Vol. 35 , Issue 11, 897-906

.
DOI: 10.1080/0144929X.2016.1215525

-

"[A new methodological approach for shoe sole design and validation](#)" M. Davia-Aracil, A. Jimeno-Morenilla, F. Salas.
The International Journal of Advanced Manufacturing Technology
. Springer.
vol 86(9), pp. 3495–3516

- "[Automation of the shoe last grading process according to international sizing systems](#)" J.J. Hinojo-Perez, M. Davia-Aracil, A. Jimeno-Morenilla, J.L. Sanchez-Romero, F. Salas.
The International Journal of Advanced Manufacturing Technology . Springer. vol. 85(1), pp. 455–467

- "[GNG based foot reconstruction for custom footwear manufacturing](#)" A. Jimeno-Morenilla, M. Davia-Aracil, J. García-Rodríguez, S. Orts-Escolano.
Computers in Industry
. Elsevier. vol. 75, pp. 116-126, DOI: 10.1016/j.compind.2015.06.002

2015

- "[Smart Sensor Design for Power Signal Processing](#)" F.J. Ferrandez-Pastor, H. Mora-Mora, J.L. Sanchez-Romero, M. Nieto-Hidalgo.
Lecture Notas in Computer Science
vol. 9454, pp. 387-393. Springer

- "[A new boundary-based morphological model](#)" R Sarabia-Perez, A Jimeno-Morenilla, R Molina-Carmona. *Applied Mathematical Modelling*
vol. 39(5-6), pp. 1450–1462. Elsevier

- "[Tuning compilations by multi-objective optimization: Application to Apache web server](#)" Antonio Martínez-Álvarez, Sergio Cuenca-Asensi, Andrés Ortiz, Jorge Calvo-Zaragoza, Luis Alberto Vivas Tejuelo. *Applied Soft Computing* vol. 29, pp. 461-470. Elsevier

- "[Modeling the role of fixational eye movements in real-world scenes](#)" Andrés Olmedo-Payá, Antonio Martínez-Álvarez, Sergio Cuenca-Asensi, José Manuel Ferrández, E Fernández. *eurocomputing*
vol. 151, pp. 78-84. Elsevier

- "[3D Model Reconstruction using Neural Gas Accelerated on GPU](#)" Sergio Orts-Escolano, Jose Garcia-Rodriguez, Jose Antonio Serra-Perez, Antonio Jimeno-Morenilla, Alberto Garcia-Garcia, Vicente Morell, Miguel Cazorla. *Applied Soft Computing*
vol. 32, pp. 87-100. Elsevier

N

2014

- "[Deterministic mathematical morphology for CAD/CAM](#)" R Sarabia-Perez, A Jimeno-Morenilla, R Molina-Carmona. *Engineering Computations*
vol. 31(7), pp. 1221-1241. Emerald

- "[Differences between the personal, social and emotional profiles of teaching and computer engineering professionals and students](#)" Pertegal-Felices, M.L.; Castejón-Costa, J.L.; Jimeno-Morenilla, A. *Studies in Higher Education*
vol. 39(7), pp. 1185-1201. Routledge

- "**Trajectory-Based Morphological Operators: A Model for Efficient Image Processing**" Jimeno-Morenilla, A.; Pujol, F.; Molina-Carmona, R.; Sánchez-Romero, J.L.;

Pujol, M. *The Scientific World Journal* vol. 2014, pp. 801587.1-801587.9,
Hindawi
- **"Research-action Methodology between Computer Science and Educational Psychology: a Multidisciplinary Approach"** Jimeno-Morenilla, A., Pertegal-Felices, M. L., Navarro-Soria, I., Gil, D. *The new educational review*. vol. 35(1), pp. 41-53.

- **"Multi-objective adaptive evolutionary strategy for tuning compilations"**, Martínez-Álvarez, A., Calvo-Zaragoza, J., Cuenca-Asensi, S., Ortiz, A., Jimeno-Morenilla, A. *Neurocomputing*, vol. 123, pp. 381-389, Elsevier.

2013

- **"Selective SWIFT-R: A flexible software-based technique for soft error mitigation on low-cost embedded systems"**, Restrepo-Calle, F., Martínez-Álvarez, A., Cuenca-Asensi, S., Jimeno-Morenilla, A. *Journal of Electronic Testing*, vol. 29(6), pp. 825-838, Springer-Verlag.

- **"Augmented and Virtual Reality techniques for footwear"**, Jimeno-Morenilla, A., Sánchez-Romero, J.L., Salas-Pérez, F., *Computers in Industry*, vol. 64(9), pp. 1371-1382, Elsevier.

- **"3D based reconstruction using growing neural gas: application to rapid prototyping in shoe last manufacturing"**, Jimeno-Morenilla, A.; García-Rodríguez, J.; Orts-Escolano, S.; Davia-Aracil, M.; *International Journal of Advanced Manufacturing Technology*, vol. 69, (1-4), pp. 657-668, Springer-Verlag.

- **"Fault tolerant embedded systems design by multi-objective optimization"**, Martínez-Álvarez, A., Restrepo-Calle, F., Vivas-Tejuelo, L.A., Cuenca-Asensi, S., *Expert Systems with Applications*, vol. 40(17), pp. 6813-6822, Pergamon.

- **"Footwear bio-modelling: An industrial approach"**, Davia, M., Jimeno-Morenilla, A., Salas, F., *Computer-Aided Design*, vol. 45(12), pp. 1575-1590, Elsevier.

- **"A new surface joining technique for the design of shoe lasts"**, Amorós-González, F.; Jimeno-Morenilla, A.; Salas-Pérez, F.; *International Journal of Advanced Manufacturing Technology*, vol. 68, (5-8), pp. 1821-1838, Springer-Verlag.

- **["An approach to the Application of Shift-and-add Algorithms on Engineering and Industrial Processes"](#)**, Sanchez-Romero, J.L., Jimeno-Morenilla, A., Molina-Carmona, R., Pérez-Martínez, J., *Mathematical and Computer Modelling*, vol. 57(7-8), pp. 1800-1806, Elsevier.

- **"Efficient tool path computation using multi-core GPUs"**, Morell-Gimenez, V., Jimeno-Morenilla, A., García-Rodríguez, J., Computers In Industry, vol. 64 (1), pp. 50–56, Elsevier.

2012

- **"Computing the Principal Local Binary Patterns for face recognition using data mining tools"**, Francisco A. Pujol, Juan Carlos García, Expert Systems with Applications, vol. 39 (8), pp. 7165–7172, Elsevier.

2011

- **"Compiler-Directed Soft Error Mitigation for Embedded Systems"**, Martínez-Álvarez, A.; Cuenca-Asensi, S.; Restrepo-Calle, F.; Palomo, F.; Guzman-Miranda, H.; Aguirre, M. (2011), IEEE Transactions on Dependable and Secure Computing, vol. PP, no.99, pp.1, 0 doi: 10.1109/TDSC.2011.54. In Press.

- **"Soft core based embedded systems in critical aerospace applications"**, Sergio Cuenca-Asensi, Antonio Martínez-Álvarez, Felipe Restrepo-Calle, F. R. Palomo, Hipólito Guzmán-Miranda, and M. A. Aguirre. (2011). Journal of Systems Architecture, Vol 5(10): 886-895, Elsevier.

- **"Mathematical morphology for design and manufacturing"**, Jimeno-Morenilla, A.; Molina-Carmona, R.; Sanchez-Romero, J.L.; Mathematical and Computer Modelling, vol. 54, pp. 1753-1759.

- **"A morphological-based method for inverse offset generation. An application for surface reconstruction using mechanical digitizers"**, Jimeno-Morenilla, A.; López, V.; Espi, R.; Cuenca, S.; International Journal of Advanced Manufacturing Technology, vol. 54, no. 9, pp. 1067-1076.

- **"A Novel Co-Design Approach for Soft Errors Mitigation in Embedded Systems"**, Sergio Cuenca-Asensi, Antonio Martínez-Álvarez, Felipe Restrepo-Calle, F. R. Palomo, Hipólito Guzman-Miranda, M. A. Aguirre, IEEE Transactions on Nuclear Science, 58(3):1059-1065. (2011) DOI: 10.1109 / TNS.2011.2112379.

- **"On searching for an optimal threshold for morphological image segmentation"**, Francisco A. Pujol, Mar Pujol, Ramón Rizo and Maria José Pujol ; Pattern Analysis and Applications, vol. 14, no. 3, pp. 235-250

- **"Hardware approach to tool path computation for STEP-NC enabled CNC: A case study of turning operations"**, Cuenca, S.; Jimeno-Morenilla, A.; Martínez, A.; Maestre, R.; Computers in Industry, vol. 62, no. 5, pp. 509-518

- **"Landmark registration for reverse design: a case of study on footwear rapid prototyping"**, Jimeno-Morenilla, A.; Davia, M.; Journal of Engineering Manufacture, vol.

225, no. 2, pp. 235-246

- **"Use of Discussion Boards as a Student-Centered Methodology for Large Groups in Higher Education"**, Pertegal-Felices, M.L.; Jimeno-Morenila, A.; Sánchez-Romero, J.L.; International Journal of Engineering Education, vol. 27, no. 1, pp.

178-186

- **"[Function approximation on decimal operands](#)"**, Sánchez-Romero, J.L.; Mora-Mora, H.; Mora-Pascual, J.; Jimeno-Morenila, A.; Digital Signal Processing, vol. 21, no. 2, pp. 354-366

2010

- **"A Morphological Approach to the Design of Complex Objects"**, Sarabia, R., Jimeno, A., Molina, R.; Journal of Manufacturing Science and Engineering, vol. 132, no. 5, 051003 (7 pp.)

- **"Mathematical model of stored logic based computation"**, Mora, H., Mora, J., Signes, M.T., Sánchez, J.L.; Mathematical and Computer Modelling, vol. 52, no. 7-8, pp. 1243-1250

- **"Personal and emotional skill profiles in the professional development of the computer engineer"**, Pertegal, M.L, Castejón, J.L., Jimeno, A.; International Journal of Engineering Education, vol. 26, pp. 218-226

2009

- **"An iterative method for improving decimal calculations on computers"**, Sanchez, J.L, Mora, H., Mora, J., Ferrandez, F.J, Jimeno, A.; Mathematical and Computer Modelling, vol. 50, pp. 869-878

-

"Using Gaussian Processes in Bayesian Robot Programming" Aznar, F., Pujol, F., Pujol, M., Rizo, R.; Lecture Notes in Computer Science , vol. 5518, pp. 547–553

-

"Colour Image Compression Based on the Embedded Zerotree Wavelet" Pujol, F., Mora, H., Jimeno, A., Sánchez, J.L.; Lecture Notes in Computer Science , vol. 5518, pp. 612–615

-

"Development of a Distributed Facial Recognition System Based on Graph–Matching" Espí, R., Pujol, F., Mora, H., Mora, J.; Advances in Soft Computing , vol. 50, pp. 498–502

2008

- **"VisualJVM: A Visual Tool for Teaching Java Technology"**, Garrido, P.P, Grediaga, A., Ledesma, B.; IEEE Transactions on Education , vol. 51, pp. 86-92
- **"Contour pocketing computation using mathematical morphology"**, Molina-Carmona, R., Jimeno, A., Davia, M.; International Journal of Advanced Manufacturing Technology , vol. 36, pp. 334-342
- **"A BCD-based architecture for fast coordinate rotation"**, Jimeno, A., Mora, H., Sanchez, J.L., Pujol, F.; Journal of Systems Architecture, vol. 54, pp. 829-840

2007

- **"A ghost bit based finite field arithmetic for FPGAs"**, Climent, J.-J., Crespí, F.G., Grediaga, A.; Lecture Series on Computer and Computational Sciences , vol. 8, pp. 44-49
- **"A scalable finite field multiplier with interleaving reduction"**, Climent, J.-J., Crespí, F.G., Grediaga, A.; Lecture Series on Computer and Computational Sciences , vol. 8, pp. 50-53
- **"EZW-Based Image Compression with Omission and Restoration of Wavelet Subbands"**, Francisco A. Pujol, Higinio Mora, José Luis Sánchez, Antonio Jimeno; Lecture Notes in Computer Science , vol. 4756, pp. 134-141
- **"IP core_ethernet V1.02a for firewall architectures"**, Grediaga, A., Ibarra, F., García, F., Brotons F.; Lecture Series on Computer and Computational Sciences , vol. 8, pp. 121-127
- **"State of the art of the virtual reality applied to design and manufacturing processes"**, Jimeno, A., Puerta, A.; International Journal of Advanced Manufacturing Technology , vol. 33, pp. 866-874
- **"Morphological Offset Computing for Contour Pocketing"**, Molina-Carmona, R., Jimeno, A., Rizo-Aldeguer, R.; Journal of Manufacturing Science and Engineering-Transactions of The Asme , vol. 129, pp. 400-406

2006

- **"Application of Neural Networks in Network Control and Information Security"**, Grediaga A.: Ibarra, F., García-Crespi, F., Ledesma, B., Brotons, F; Lecture Notes in Computer Science - Lecture Notes in Artificial Intelligence , vol. 3973, pp. 208-213
- **"Real-time arithmetic unit"**, Higinio Mora-Mora, Jerónimo Mora-Pascual, Juan Manuel García-Chamizo and Antonio Jimeno-Morenilla; Real-Time Systems , vol. 34, pp. 53-79

- **"FPGA-based tool path computation. An application for shoe last machining on CNC lathes"**, Jimeno, A., Sánchez, J.L., Mora, H., Mora, J., García-Chamizo, J.M.; Computers in Industry , vol. 57, pp. 103-111

2005

- **"Automatic Generation of Bio-inspired retina-like Processing Hardware"**, Antonio Martínez, Leonardo M. Reyneri, Francisco J. Pelayo, Samuel F. Romero, Christian A. Morillas, Begoña Pino; Lecture Notes in Computer Science , vol. 3512, pp. 527-533

- **"A Computational Tool to Test Neuromorphic Encoding Schemes for Visual Neuroprostheses"**, Christian A. Morillas, Samuel F. Romero, Antonio Martínez, Francisco J. Pelayo, Eduardo Fernández; Lecture Notes in Computer Science , vol. 3512, pp. 510-517

- **"Domain-Specific Codesign for Automated Visual Inspection Systems"**, Cuenca, S., Cámara, A., Suardíaz, J., Toledo, A.; Lecture Notes in Computer Science - Lecture Notes in Artificial Intelligence , vol. 3522, pp. 683-690

- **"Neuroengineering Tools for the Design and Test of Visual Neuroprostheses"**, E. Fernández, C. Morillas, S. Romero, A. Martínez, F. Pelayo; Investigative Ophthalmology and Visual Science on line, vol. 46

- **"An Electronic Reconfigurable Neural Architecture for Intrusión Detection"**, Grediaga, A, Ibarra, F., García-Crespí, F, Cámara, A.; Lecture Notes in Computer Science - Lecture Notes in Artificial Intelligence, vol. 3562, pp. 376-384

- **"Xilinx System Generator Based HW Components for Rapid Prototyping of Computer Vision SW/HW Systems"**, Toledo, A., Chicote, C., Suardíaz, J., Cuenca S.; Lecture Notes in Computer Science - Lecture Notes in Artificial Intelligence , vol. 3522, pp. 667-674

2004

- **"A Design Framework to Model Retinas"**, Christian A. Morillas, Samuel F. Romero, Antonio Martínez, Francisco J. Pelayo, Eduardo Ros, Eduardo Fernández; Biosystems

- **"Translating image sequences into spikes patterns for cortical neuro-stimulation"**, F.J. Pelayo, S. Romero, C. Morillas, A. Martínez, E. Ros, E. Fernández; Neurocomputing, pp. 885-892

- **"A Note About Binary Finite Fields Multiplication on FPGA"**, Grediaga, A., García F., Gutierrez R.; WSEAS TRANSACTIONS ON CIRCUITS AND SYSTEMS, vol. 3, pp. 1924-1928

- **"Low Cost Digital Oscilloscope"**, Grediaga, A., Vicedo J; WSEAS TRANSACTIONS ON

CIRCUITS AND SYSTEMS, vol. 3, pp. 2030-2035

- **"A FPL bioinspired visual encoding system to stimulate cortical neurons in real time.** ", L. Sousa, P. Tomás, F. J. Pelayo, A. Martínez, C. Morillas, S. Romero; Lecture Notes in Computer Science, vol. 2778, pp. 691-700

- **"Special issue on FPGAs: applications and designs"**, Microprocessors and Microsystems, vol. 28, pp. 193-350

2003

- **"Reconfigurable Computing for Tool-Path Computation."**, Jimeno, A., Cuenca, S.; International Journal of Advanced Manufacturing Technology , vol. 21, pp. 945-951

2001

- **"Reconfigurable frame-grabber for real-time automated visual inspection (RT-AVI) systems** ", Cuenca, S., Ibarra, F., Alvarez, R.; Lecture Notes in Computer Science - Lecture Notes in Artificial Intelligence, vol. 2147, pp. 223-231

- **"Implementación de un sistema automático para el control de calidad en la industria textil** ", Ibarra, F., Cuenca, S., García, F., Morales, J.L., Lorenzo, J.J.; Técnica Textil Internacional , vol. 45, pp. 26-35

- **"Shoe last machining using virtual digitising"**, Jimeno Morenilla, A., García Chamizo, J. M., Salas, F.; International Journal of Advanced Manufacturing Technology, vol. 17, pp. 744-750

2000

- **"Hardware Reconfigurable para el cálculo de trayectorias de mecanizado"**, Jimeno Morenilla, A.M., Ibarra Picó, F.; pp. 1-12

- **"Hormas y sistemas informáticos"**, Salas Pérez, F., García Chamizo, J. M., Jimeno Morenilla, A.; Técnica del calzado, vol. 178, pp. 73-79