

**PUBLICACIONES DERIVADAS DE LAS TESIS DEFENDIDAS EN EL PROGRAMA DE  
DOCTORADO EN TECNOLOGÍAS DE LA INFORMACIÓN Y LAS COMUNICACIONES EN  
EL AÑO 2016**

Doctorando	Carlos Alberto García Santiago
Tesis	Metaheuristic Approaches for Energy Efficient Production Optimisation in Manufacturing Facilities.
Directores	Sancho Salcedo Sanz y Javier del Ser Lorente
Fecha lectura	25/02/2016
Calificación	Sobresaliente cum laude
<p>1. <b>C. A. García-Santiago</b>, J. Del Ser, S. Gil-Lopez, F. Quilligan, C. Upton and S. Salcedo-Sanz, "A Random-Key Encoded Harmony Search Approach for Energy-Efficient Production Scheduling with Shared Resources", Engineering Optimization, vol. 47, pp. 1481-1496, 2015. (JCR: 1.380)</p>	

Doctorando	Ricardo Mallol Poyato
Tesis	Optimización del diseño y la operación de redes eléctricas inteligentes mediante Computación Evolutiva
Directores	Sancho Salcedo Sanz y Pablo Díaz Villar
Fecha lectura	25/02/2016
Calificación	Sobresaliente <i>cum laude</i>
<p>1. <b>R. Mallol-Poyato</b>, S. Salcedo-Sanz, S. Jiménez-Fernández and P. Díaz-Villar, "Optimal discharge scheduling of energy storage systems in MicroGrids based on hyper-heuristics", Renewable Energy, vol. 83, pp. 13-24, 2015. (JCR: 2.226)</p> <p>2. <b>R. Mallol-Poyato</b>, S. Jiménez-Fernández, P. Díaz-Villar and S. Salcedo-Sanz, "Joint optimization of a Microgrid's structure design and its operation using a two-steps evolutionary algorithm," Energy, vol. 94, pp. 775-785, 2016. (JCR: 4.844)</p> <p>3. S. Salcedo-Sanz, C. Camacho-Gómez, <b>R. Mallol-Poyato</b>, S. Jiménez-Fernández and J. del Ser, "A novel Coral Reefs Optimization algorithm with substrate layers for optimal battery scheduling optimization in micro-grids", Soft Computing Journal, in press, 2016. (JCR: 1.630)</p> <p>4. <b>R. Mallol-Poyato</b>, S. Jiménez-Fernández, P. Díaz-Villar, S. Salcedo-Sanz, "Adaptive nesting of evolutionary algorithms for the optimization of Microgrid's sizing and operation scheduling" Soft Computing, in press, 2016. (JCR: 1.630)</p>	

Doctorando	Cosme Llerena Aguilar
Tesis	Multi-channel Speech Separation in Reverberant Environments
Directores	Roberto Gil Pita y Manuel Rosa Zurera
Fecha lectura	10/03/2016
Calificación	Sobresaliente <i>cum laude</i>
<ol style="list-style-type: none"> <li>1. Cosme Llerena-Aguilar, Roberto Gil-Pita, Manuel Rosa-Zurera, David Ayllón, Manuel Utrilla-Manso, Francisco Llerena, "Synchronization based on mixture alignment for sound source separation in wireless acoustic sensor networks", <i>Signal Processing</i>, 118, pp. 177-187, 2016. <b>JCR: 2,063</b> (2015 Impact Factor), posición 66 de 255 en Engineering, Electrical and Electronic (<b>Q2</b>). 2 Citas en google scholar.</li> <li>2. Roberto Gil-Pita, David Ayllón, José Ranilla, Cosme Llerena-Aguilar, Irene Díaz, "A computationally efficient sound environment classifier for hearing aids", <i>IEEE Transactions on Biomedical Engineering</i>, 62 (10), pp. 2358-2368, 2015. <b>JCR: 2,468</b> (2015 Impact Factor), posición 22 de 76 en Engineering, Biomedical (<b>Q2</b>). 5 citas en google scholar.</li> <li>3. Cosme Llerena-Aguilar, Roberto Gil-Pita, Manuel Utrilla-Manso, Manuel Rosa-Zurera, "A new mixing matrix estimation method based on the geometrical analysis of the sound separation problem", <i>Signal Processing</i>, enviado, pendiente de aceptación, 2016. <b>JCR: 2,063</b> (2015 Impact Factor), posición 66 de 255 en Engineering, Electrical and Electronic (<b>Q2</b>).</li> </ol>	

Doctorando	Carlos Fernández López
Tesis	Road Scene Interpretation for Autonomous Navigation Fusing Stereo Vision and Digital Maps
Directores	Miguel Ángel Sotelo y David Fernández Llorca
Fecha lectura	23/09/2016
Calificación	Sobresaliente cum laude
<ol style="list-style-type: none"> <li>1. C. Fernández, D. F. Llorca, M. A. Sotelo. A hybrid Vision-Map for Urban Road Detection, <i>Journal of Advanced Transportation</i> (2017).</li> <li>2. D. F. Llorca, R. Quintero, I. Parra, C. Fernández, I. G. Daza, C. Alén, M. A. Sotelo. Assistive Intelligent Transportation Systems: the need for user localization and anonymous disability identification, <i>IEEE Intelligent Transportation Systems Magazine</i> (2017).</li> <li>3. C. Fernández, R. Domínguez, D. F. Llorca, J. Alonso, M. A. Sotelo. <b>Autonomous Navigation and Obstacle Avoidance of a micro-bus</b>, <i>International Journal of Advanced Robotic Research</i> (2013).</li> <li>4. C. Fernández, D. F. Llorca, M. A. Sotelo, I. G. Daza, A. M. Hellín, S. Alvarez, <b>Real-time Vision-based blind spot warning system: experiments with motorcycles in daytime/nighttime</b></li> </ol>	

**conditions**, International Journal of Automotive Technology, Vol. 14, Issue 1, 113 – 122 (2013).

5. V. Milanés, D. F. Llorca, J. Villagrà, J. Pérez, C. Fernández, I. Parra, C. González, M. A. Sotelo, **Intelligent Automatic Overtaking System using Vision for Vehicle Detection, Expert Systems with Applications**, Vol. 39, 3362-3373 (2012).

Doctorando	Jorge Gascón Moreno
Tesis	Novel evolutionary-based methods for the robust training of SVR and GMDH regressors
Directores	Sancho Salcedo Sanz y José Antonio Portilla Figueras
Fecha lectura	6/10/2016
Calificación	Sobresaliente

1. J. Gascón-Moreno, S. Salcedo-Sanz, E. G. Ortiz-García, J. Acevedo-Rodríguez and J. A. Portilla-Figueras, “New validation methods for improving standard and multi-parametric Support Vector regression training time,” Expert Systems with Applications, vol. 39, no. 9, pp. 8220-8227, 2012. (JCR: 2.908)

2. J. Gascón-Moreno, E. G. Ortiz-García, S. Salcedo-Sanz, L. Carro-Calvo, B. Saavedra-Moreno and J. A. Portilla-Figueras, “Evolutionary optimization of multi-parametric kernel  $\mathcal{R}$ -SVMr for forecasting problems,” Soft Computing, vol. 17, pp. 213-221, 2012. (JCR: 1.880)

3. J. Gascón-Moreno, S. Salcedo-Sanz, B. Saavedra-Moreno, L. Carro-Calvo and A. Portilla-Figueras, “An Evolutionary-based Hyper-Heuristic Approach for Optimal Construction of Group Method of Data Handling Networks,” Information Sciences, vol. 247, pp. 94-108, 2013. (JCR: 3.291)

Doctorando	Beatriz Saavedra Moreno
Tesis	New Soft-Computing Techniques in Wind Energy: contributions to wind speed reconstruction, prediction and wind farm design
Directores	Sancho Salcedo Sanz y José Antonio Portilla Figueras
Fecha lectura	14/10/2016
Calificación	Sobresaliente cum laude

1. B. Saavedra-Moreno, S. Salcedo-Sanz, A. Paniagua-Tineo, L. Prieto and A. Portilla-Figueras, “Seeding evolutionary algorithms with heuristics for optimal wind turbines positioning in wind farms”, Renewable Energy, vol. 36, no. 11, pp. 2838-2844, 2011. (JCR: 2.226)

2. B. Saavedra-Moreno, S. Salcedo-Sanz, L. Carro-Calvo, J. Gascón-Moreno, S. Jiménez-Fernández and L. Prieto, "Very fast training neural-computation techniques for real Measure-Correlate-Predict wind operations in wind farms," *Journal of Wind Engineering and Industrial Aerodynamics*, vol. 116, pp. 49-60, 2013. (JCR: 1.119)
3. B. Saavedra-Moreno, S. Salcedo-Sanz, C. Casanova-Mateo, J. A. Portilla-Figueras and L. Prieto, "Heuristic correction of wind speed mesoscale models simulations for wind farms prospecting and micrositing", *Journal of Wind Engineering and Industrial Aerodynamics*, vol. 130, pp. 1-15, 2014. (JCR: 1.119)
4. B. Saavedra-Moreno, A. de la Iglesia, L. Carro-Calvo, J. Magdalena-Saiz, L. Duran and S. Salcedo-Sanz, "Surface Wind Speed Reconstruction from Synoptic Pressure Fields: Machine Learning versus Weather Regimes Classification Techniques", *Wind Energy*, in press, 2015. (JCR: 1.436)
5. S. Salcedo-Sanz, R. C. Deo, L. Carro-Calvo and B. Saavedra-Moreno, "Monthly prediction of air temperature in Australia and New Zealand with machine learning algorithms", *Theoretical and Applied Climatology*, vol. 125, pp. 13–25, 2016. (JCR: 1.742)
6. S. Salcedo-Sanz, B. Saavedra-Moreno, A. Paniagua-Tineo, L. Prieto and A. Portilla-Figueras, "A review of recent evolutionary computation-based techniques in wind turbine layout optimization problems," *Central European Journal of Computer Science*, Invited paper for inaugural issue, vol. 1, no. 1, pp. 101-107, 2011.