PUBLICACIONES DERIVADAS DE LAS TESIS DEFENDIDAS EN EL PROGRAMA DE DOCTORADO EN TECNOLOGÍAS DE LA INFORMACIÓN Y LAS COMUNICACIONES EN EL AÑO 2018

Doctorando	Hector Adrián Sánchez Hevia
Tesis	Efficient Multichannel Algorithms for Impulsive Sound Source Analysis
Directores	Roberto Gil Pita y Manuel Rosa Zurera
Fecha lectura	8/06/2018
Calificación	Sobresaliente cum laude

1. Héctor Sánchez-Hevia, David Ayllon, Roberto Gil-Pita, Manuel Rosa-Zurera, "Indoor Self-Localization and Orientation Estimation of Smartphones Using Acoustic Signals", Wireless Communications and Mobile Computing, Article ID 3534829, 11 páginas, 2017. **JCR: 0.869** (2017 Impact Factor), posición 216 de 260 en Engineering, Electrical and Electronic (**Q4**).

2. **Hector Sanchez-Hevia**, David Ayllon Álvarez, Roberto Gil-Pita, Manuel Rosa Zurera, "Maximum Likelihood Decision Fusion for Weapon Classification in Wireless Acoustic Sensor Networks", IEEE-ACM Transactions on Audio Speech and Language Processing, 25 issue 6, pp. 1172-1182, 2017. **JCR: 2,950** (2017 Impact Factor), posición 5 de 31 en Acoustics (**Q1**).

3. David Ayllón Álvarez, **Hector Adrián Sánchez Hevia**, Roberto Gil-Pita, Manuel Utrilla Manso, Manuel Rosa Zurera, "Indoor Blind Localization of Smartphones by means of Sensor Data Fusion", IEEE Transactions on Instrumentation and Measurement, 65 no. 4, pp. 783-794. **JCR: 2.456** (2016 Impact Factor) Posición 14 de 58 en Instruments and Instrumentation (**Q1**). 7 citas en ResearcherID, 6 citas en WoS (JCR), 1 cita en Chinese Science Citation Index,

Doctorando	Laura Cornejo Bueno
Tesis	New Hybrid Neuro-Evolutionary Algorithms for Renewable Energy and Facilities Management Problems.
Director	Sancho Salcedo Sanz
Fecha lectura	3/04/2018
Calificación	Sobresaliente *cum laude*

1. **L. Cornejo-Bueno**, J.C. Nieto Borge, E. Alexandre, K. Hessner, S. Salcedo-Sanz, "Accurate Estimation of Significant Wave Height with Support Vector Regression Algorithms and Marine Radar Images", Coastal Engineering, vol. 114, pp. 233-243, 2016 (JCR 2017: 3.221).

2. **L. Cornejo-Bueno**, J.C. Nieto Borge, P. García-Díaz, G. Rodríguez, S. Salcedo-Sanz, "Significant wave height and energy flux prediction for marine energy applications: A grouping genetic algorithm – Extreme Learning Machine approach", Renewable Energy, vol. 97, pp. 380-389, 2016 (JCR 2017: 4.357).

3. A. Aybar-Ruiz, S. Jiménez-Fernández, **L. Cornejo-Bueno**, C. Casanova-Mateo, J. Sanz-Justo, P. Salvador-González, S. Salcedo-Sanz, "A novel Grouping Genetic Algorithm – Extreme Learning Machine Approach for Global Solar Radiation Prediction from Numerical Weather Models Inputs", Solar Energy, vol. 132, pp. 129-142, 2016 (JCR 2017: 4.018).

4. M. Dorado-Moreno, **L. Cornejo-Bueno**, P.A. Gutiérrez, L. Prieto, C. Hervás-Martínez, S. Salcedo-Sanz, "Robust estimation of wind power ramp events with reservoir computing", Renewable Energy, vol. 11, pp. 428-437, 2017 (JCR 2017: 4.357).

5. **L. Cornejo-Bueno,** C. Casanova-Mateo, J. Sanz-Justo, E. Cerro-Prada, S. Salcedo-Sanz, "Efficient Low-Visibility Event Prediction at Airports using Machine-Learning Regression Techniques", Boundary-Layer Meteorology, vol. 165, no. 2, pp. 349-370, 2017 (JCR 2017: 2.573).

6. **L. Cornejo-Bueno**, E.C. Garrido-Merchán, D. Hernández-Lobato, S. Salcedo-Sanz, "Bayesian Optimization of a Hybrid System for Robust Ocean Wave Features Prediction", Neurocomputing, vol. 275, pp. 818-828, 2017 (JCR 2017: 3.317).

7. Z.M. Yaseena, R.C. Deo, A. Hilald, A.M. Abde, **L. Cornejo-Bueno,** S. Salcedo-Sanz, M.L. Nehdig, "Predicting compressive strength of lightweight foamed concrete using extreme learning machine model", Advances in Engineering Software, vol. 115, pp. 112-125, 2017 (JCR 2017: 3.000).

8. S. Salcedo-Sanz, R.C. Deo, **L. Cornejo-Bueno,** C. Camacho-Gómez, S. Ghimire, "An efficient neuro-evolutionary hybrid modelling mechanism for the estimation of daily global solar radiation in Sunshine State of Australia", Applied Energy, vol. 209, pp. 79-94, 2017 (JCR 2017: 7.182).

9. **L. Cornejo-Bueno**, L. Cuadra, S. Jiménez-Fernández, J. Acevedo-Rodríguez, L. Prieto, S. Salcedo-Sanz, "Wind Power Ramp Events Prediction with Hybrid Machine Learning", Energies, vol. 10, no. 11, pp. 1784-1811, 2017 (JCR 2017: 2.262).

10. S. Salcedo-Sanz, **L. Cornejo-Bueno**, L. Prieto, D. Paredes, R. García-Herrera, "Feature Selection in Machine Learning Prediction Systems for Renewable Energy Applications", Renewable & Sustainable Energy Reviews, vol. 90, pp. 728-741, 2018 (JCR 2017: 8.050).

11. **L. Cornejo-Bueno**, P. Rodríguez-Mier, M. Mucientes, J.C. Nieto-Borge, S. Salcedo-Sanz, "Significant Wave Height and Energy Flux Estimation with a Genetic Fuzzy System for Regression", Ocean Engineering, vol. 160, pp. 33-44, 2018 (JCR 2017: 1.894).

Doctorando	Carlos Camacho Gómez
Tesis	Contributions to the Development of the CRO-SL Algorithm: Engineering Applications Problems
Directores	Sancho Salcedo Sanz y Silvia Jiménez Fernández
Fecha lectura	10/07/2018
Calificación	Sobresaliente *cum laude*

1. **C. Camacho-Gómez**, X. Wang, E. Pereira, IM. Díaz, S. Salcedo-Sanz, "Active vibration control design using the Coral Reefs Optimization with Substrate Layer algorithm," Engineering Structures, vol. 157, pp. 14-26, 2018, (JCR 2016: 2.258).

2. S. Salcedo-Sanz, **C. Camacho-Gómez**, R. Mallol-Poyato, S. Jiménez-Fernández, J. Del Ser, "A novel Coral Reefs Optimization algorithm with substrate layers for optimal battery scheduling optimization in micro-grids," Soft Computing, vol. 20, no. 11, pp. 4287-4300, 2016, (JCR 2016: 2.472).

3. S. Salcedo-Sanz, **C. Camacho-Gómez**, A. Magdaleno, E. Pereira, A. Lorenzana, "Structures vibration control via Tuned Mass Dampers using a co-evolution Coral Reefs Optimization algorithm," Journal of Sound and Vibration, vol. 393, pp. 62-75, 2017, (JCR 2016: 2.593).

4. S. Salcedo-Sanz, A. Aybar-Ruíz, **C. Camacho-Gómez**, E. Pereira, "Efficient fractal-based mutation in evolutionary algorithms from iterated function systems," Communications in Nonlinear Science and Numerical Simulation, vol. 56, pp. 434-446, 2018, (JCR 2016: 2.784).

5. S. Salcedo-Sanz, **C. Camacho-Gómez**, L. Carro-Calvo, F. Jaume-Santero, E. AlexandreCortizo, "Near-Optimal Selection of Representative Measuring Points for Robust Temperature Field Reconstruction with the CRO-SL and Analogue Methods," International Journal of Climatology, accepted with minor revision (JCR 2016: 3.76).

6. R. Sánchez-Montero, **C. Camacho-Gómez**, P. López-Espí, S. López-Ruiz, S. Salcedo-Sanz, "Optimal Design of a Planar Textile Antenna for RFID Systems with the CRO-SL Algorithm,"

Sensors, vol. 18, 2018(JCR 2016: 2.957).

7. S. Salcedo-Sanz, **C. Camacho-Gómez**, A. Aybar-Ruiz, E. Alexandre-Cortizo, "Wind Power Field Reconstruction from a Reduced Set of Representative Measuring Points," Applied Energy, accepted, (JCR 2016: 7.182).

8. **C. Camacho-Gómez**, I. Marsá-Maestre, J. M. Giménez-Guzmán, S. Salcedo-Sanz, "A Coral Reefs Optimization Algorithm with Substrate Layer for Robust Wi-Fi Channel Assignment," Applied Soft Computing, under review, (JCR 2016: 3.541).

Doctorando	Lucas Cuadra Rodríguez
Tesis	Soft Computing approaches in ocean wave height prediction for marine energy applications.
Director	Juan Miguel del Pino González
Fecha lectura	22/05/2018
Calificación	Sobresaliente

1. **Cuadra, L.,** Pino, M. D., Nieto-Borge, J. C., & Salcedo-Sanz, S. (2017). Optimizing the Structure of Distribution Smart Grids with Renewable Generation against Abnormal Conditions: A Complex Networks Approach with Evolutionary Algorithms. *Energies*, *vol. 10, issue 8 (2017) p. 1097.* 1784. JCR: 2.676.

2. Alexandre, E., **Cuadra, L.,** Nieto-Borge, J. C., Candil-García, G., Del Pino, M., & Salcedo-Sanz, S. (2015). A hybrid genetic algorithm—extreme learning machine approach for accurate significant wave height reconstruction. *Ocean Modelling*, *92*, 115-123. JCR = 3.337.