Enrique Onieva, Ph.D. Professor at University of Deusto

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Short Biography

Enrique Onieva received the B.E. degree in computer science engineering, the M.E. degree in soft computing and intelligent systems and the Ph.D. degree in computer science from the University of Granada, Spain, in 2006, 2008 and 2011, respectively. From 2007 to 2012, he has been with the AUTOPIA Program at the Centre of Automation and Robotics, Consejo Superior de Investigaciones Científicas, Madrid, Spain. During 2012 he has been with the Models of Decision and Optimization group, at the University of Granada.

From the beginning of 2013, he is with the Mobility Unit at the Deusto Institute of Technology (DeustoTech), where he carries out cutting-edge research in the application of soft computing techniques to the field of intelligent transportation systems. From 2015, he is also professor at the University of Deusto, providing lectures in topics related with Artificial Intelligence and Big Data.

He has participated in more than 20 research projects and authored more than 100 scientific articles. From them, more than 40 are published in journals of the highest level. His research has been recognized and awarded several times in international conferences, and his publications get an H-index of 16 (scopus.com).

Currently, he is one of the most prolific researchers in his area. His research interest is based on the application of Soft Computing Techniques to Intelligent Transportation Systems, including fuzzy-logic based decision and control and evolutionary optimization.

Profiles

- Linkedin: https://www.linkedin.com/in/enriqueonieva/
- Scopus: http://www.scopus.com/authid/detail.uri?authorId=27267790700
- Google Scholar: https://scholar.google.es/citations?user=2ww8fYYAAAAJhl=es
- Orcid: http://orcid.org/0000-0001-9581-1823
- ResearcherID: http://www.researcherid.com/rid/J-6098-2013
- ResearchGate: https://www.researchgate.net/profile/Enrique_Onieva

Education

- **2011 - Ph.D.** in Computer Science, University of Granada, Spain
- **2008 - M.Sc.** in Soft Computing and Intelligent Systems, University of Granada, Spain
- **2006 - B.Sc.** in Computer Science, University of Granada, Spain
- **2015** Big Data and Business Intelligence Executive Program (430 h.), University of Deusto, Spain.

Actual Positions

- **2015-now**: Coordinator of the Big Data and Business Intelligence Program at University of Deusto.
- **2015-now**: Professor, University of Deusto, Bilbao (Spain).
- **2015-now**: Researcher and Project Manager, Mobility Unit at Deusto Institute of Technology (DeustoTech), Bilbao (Spain).

Experience

- **2013-2015**: Post-Doctoral Researcher, Mobility Unit at Deusto Institute of Technology (DeustoTech), University of Deusto, Bilbao (Spain).
- **2007-2012**: External Collaborator with the Models of Decision and Optimization group, University of Granada (Spain).
- **2012-2013**: Post-Doctoral Researcher, Dept. Computers Science and Artificial Intelligence, University of Granada (Spain).
- **2011-2012**: Post-Doctoral Researcher, AUTOPIA Program at Center for Automation and Robotics, Spanish Research Council, Madrid (Spain).
- **2007-2011**: Research Engineering, AUTOPIA Program at Center for Automation and Robotics, Spanish Research Council, Madrid (Spain).
- **2010**: Research Fellow at Politecnico di Milano (Italy), 14 weeks
- **2009**: Research Fellow at SRI International's Artificial Intelligence Center, Menlo Park (USA), 13 weeks
- **2006**: Research Grant, Dept. Computers Science and Artificial Intelligence, University of Granada (Spain), 25 weeks.

Teaching

- Regular Teaching

  6. Estadística y Análisis Avanzado de Datos. 3 ECTS. Master en Ingeniería en Informática - Especialidad en Big Data. University of Deusto. Courses: [2016/17]

  5. Sistemas Inteligentes. 6 ECTS. Grado en Administración y Dirección de Empresas + Ingeniería en Informática. University of Deusto. Courses: [2015/16]-[2016/17]

  4. Intelligent Systems. 6 ECTS. Grado en Ingeniería en Informática. University of Deusto. Courses: [2015/16]-[2016/17]

  3. Inteligencia Artificial Avanzada. 6 ECTS. Master en Ingeniería en Informática. University of Deusto. Courses: [2013/14]-[2014/15]-[2015/16]-[2016/17]

  2. In-Vehicle Intelligent Transportation Systems. 3 ECTS. Grado en Organización Industrial. University of Deusto. Courses: [2014/15]-[2015/16]

  1. Técnicas de Inteligencia Artificial aplicadas a la Ingeniería. 1.5 ECTS. Programa de Doctorado Ingeniería para la Sociedad de la Información y Desarrollo Sostenible. University of Deusto. Courses: [2014/15]-[2015/16]-[2016/17]

- Courses and Seminars

  5. Participation in Programa en Big Data y Business Intelligence (Executive Program) Donosti - 2017:
     - M1 - Seminarios Introducción A Big Data y Business Intelligence (4 hours).
     - M3.1 - Business Analytics (20 hours).

  4. Participation in Programa en Tecnologías Big Data (Executive Program) Madrid - 2017:
     - M2 - Ciclo de vida del dato en ambientes de Big Data y Business Intelligence (10 hours).
     - M3 - Estadística y Machine Learning (5 hours).

  3. Participation in Programa en Big Data y Business Intelligence (Executive Program) Bilbao - 2017:
     - M1 - Seminarios Introducción A Big Data y Business Intelligence (10 hours).
     - M2.1 - Ciclo de Vida del Dato en Ambientes de BI (30 hours).
     - M2.2 - Tecnología y desarrollo en Big Data (45 hours).

  2. Participation in Programa en Big Data y Business Intelligence (Executive Program) Bilbao - 2016:
     - M1 - Seminarios Introducción A Big Data y Business Intelligence (2 hours).
     - M2.1 - Ciclo de Vida del Dato en Ambientes de BI (14,5 hours).
     - M2.2 - Tecnología y desarrollo en Big Data (37,5 hours).
     - M3.1 - Business Analytics (26,25 hours).
     - M3.2 - Puesta en valor de Big Data y Business Analytics (32,5 hours).

  1. Other Courses and Seminars:

- La importancia de los datos para la toma de decisiones en la gestión municipal (10 hours) - In-Company training for the Council of Donosti. [Jan. 2016]
- Programa en Big Data y Business Analytics Euskaltel (12 hours) - In-Company training for Euskaltel. [May. 2017]
- Empezando Con El Big Data Desde Cero (12 hours) - Seminar at University of Deusto. [Jan. 2016]

SCI-Listed Journal Articles[1]

42. E. Osaba, R. Carballedo, F. Diaz, **E. Onieva**, A.D. Masegosa, A. Perallos. Good Practice Proposal for the Implementation, Presentation, and Comparison of Metaheuristics for Solving Routing Problems. Neurocomputing - SI: SOCO 2014. (IN PRESS)

    https://doi.org/10.1016/j.neucom.2016.11.098   IF(2016) = 3.317

41. E. Osaba, X.S. Yang, **E. Onieva**, F. Diaz, A.D. Masegosa, A. Perallos. A Discrete Firefly Algorithm to Solve a Rich Vehicle Routing Problem Modeling a Newspaper Distribution Problem with Recycling Policy. Soft Computing. (IN PRESS)

    http://dx.doi.org/10.1007/s00500-016-2114-1   IF(2016) = 2.472

40. L. Arjona, H. Landaluce, A. Perallos, **E. Onieva**. Scalable RFID Tag Estimator with Enhanced Accuracy and Low Estimation Time. IEEE Signal Processing Letters, 24(7), pp. 982 – 986, 2017.

    https://doi.org/10.1109/LSP.2017.2692201   IF(2016) = 2.528

39. **E. Onieva**, E. Osaba, I. Angulo, A. Moreno, A. Bahillo, A. Perallos, Improvement of drug delivery routes through the adoption of multi-operator evolutionary algorithms and intelligent vans capable of reporting real time incidents. IEEE Transactions on Automation Science and Engineering, 14(2), pp. 1009 – 1019, 2017.

    http://dx.doi.org/10.1109/TASE.2015.2476508   IF(2016) = 3.502

38. E. Osaba, **E. Onieva**, A. Moreno, P. Lopez-Garcia, A. Perallos, P. G. Bringas. Decentralized Intelligent Transport System with distributed intelligence based on classification techniques. IET Intelligent Transport Systems, 10(10), pp. 674-682, 2016.

    http://dx.doi.org/10.1049/iet-its.2016.0047   IF(2016) = 1.194

37. S. Bataineh, A. Bahillo, L.E. Díez, **E. Onieva**, I. Bataineh. Conditional Random Field-Based Offline Map Matching for Indoor Environments. Sensors, 16(8), 1302, 2016

    http://dx.doi.org/10.3390/s16081302   IF(2016) = 2.677

36. A. Moreno, E. Osaba, **E. Onieva**, A. Perallos, G. Iovino, P. Fernández. Design and Field Experimentation of a Cooperative ITS Architecture Based on Distributed RSUs. Sensors, 16(7), 1147, 2016.

    http://dx.doi.org/10.3390/s16071147   IF(2016) = 2.677

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[1]IF: Impact Factor in the publication's year (or the current one)

35. H. Landaluce, A. Perallos, **E. Onieva**, L. Arjona, L. Bengtsson. An energy and identification time decreasing procedure for memoryless RFID Tag Anti-Collision Protocols. IEEE transactions on Wireless Communications, 15(6), Art. 7425263, pp. 4234–4247, 2016.

http://dx.doi.org/10.1109/TWC.2016.2537800 IF(2016) = 4.951

34. L. Arjona, H. Landaluce, A. Perallos, **E. Onieva**. A fast Fuzzy anti-collision protocol for the RFID standard EPC Gen-2. Electronics Letters, 52(8), pp. 663 – 665, 2016.

http://dx.doi.org/10.1049/el.2015.3258 IF(2016) = 1.155

33. P. Lopez-Garcia, **E. Onieva**, E. Osaba, A.D. Masegosa, A. Perallos. GACE: A meta-heuristic based in the hybridization of Genetic Algorithms and Cross Entropy methods for continuous optimization. Expert Systems with Applications. 55(15), pp 508–519, 2016.

http://dx.doi.org/10.1016/j.eswa.2016.02.034 IF(2016) = 3.376

32. P. Lopez, **E. Onieva**, E. Osaba, A. Perallos. A hybrid method for short-term traffic congestion forecasting using genetic algorithms and cross-entropy. IEEE transactions on Intelligent Transportation Systems, 17(2), pp. 557 – 569. 2016.

http://dx.doi.org/10.1109/TITS.2015.2491365 IF(2016) = 3.140

31. A.D. Masegosa, **E. Onieva**, P. Lopez-Garcia, E. Osaba, A. Perallos. An adaptive local search with prioritized tracking for Dynamic Environments. International Journal of Computational Intelligence Systems, 8(6), pp. 1053–1075, 2015.

http://dx.doi.org/10.1080/18756891.2015.1113736 IF(2015) = 0.391

30. J. Godoy, J. Perez, **E. Onieva**, J. Villagra, V. Milanes, R. Haber. A Driverless Vehicle Demonstration on Motorways and in Urban Environments. Transport, 30 – 3, pp. 253–263, 2015

http://dx.doi.org/10.3846/16484142.2014.1003406 IF(2015) = 0.594

29. I. Angulo, **E. Onieva**, A. Perallos, A. Bahillo, L. Azpilicueta, F. Falcone, J.J. Astrain, J. Villadongos. Low Cost Real Time Location System based in Radio Frequency Identification for the Provision of Social and Safety Services. Wireless Personal Communications, 84(4), pp. 2797–2814, 2015.

http://dx.doi.org/10.1007/s11277-015-2767-6 IF(2015) = 0.701

28. **E. Onieva**; U. Hernandez-Jayo; E. Osaba; A. Perallos; X. Zhang. A Multi-Objective Evolutionary Algorithm for the Tuning of Fuzzy Rule Bases for Uncoordinated Intersections in Autonomous Driving. Information Sciences. 321, pp. 14 – 30, 2015.

http://dx.doi.org/10.1016/j.ins.2015.05.036 IF(2015) = 3.364

27. A. Moreno, A. Perallos, D. Lopez-de-ipina, **E. Onieva**, I. Salaberria, A.D. Masegosa. A Novel Software Architecture for Multimodal Transport Semantic Information Provision Adapted to the User Context. Sensors. 15(6), pp. 12299 – 12322, 2015.

http://dx.doi.org/10.3390/s150612299 IF(2015) = 2.033

26. X. Zhang, **E. Onieva**, A. Perallos, E. Osaba, V. C.S.-Lee. Hierarchical Fuzzy Rule Based System Optimized with Genetic Algorithms for Short Term Traffic Congestion Prediction. Transportation Research Part C: Emerging Technologies. 43, pp. 127-142. 2014

    http://dx.doi.org/10.1016/j.trc.2014.02.013   IF(2014) = 2.818

25. E. Osaba, **E. Onieva**, F. Diaz, R. Carballedo, A. Perallos. Comments on Álbayrak, M., & Allahverdy N. (2011). Development a new mutation operator to solve the Traveling Salesman Problem by aid of Genetic Algorithms. Expert Systems with Applications, 38(3), 1313-1320': A Proposal of Good Practice. Expert Systems with Applications. 41 − 4(part 1), pp. 1530 − 1531. 2014.

    http://dx.doi.org/10.1016/j.eswa.2013.08.049   IF(2014) = 2.240

24. E. Osaba, **E. Onieva**, R. Carballedo, F. Diaz, A. Perallos, X. Zhang. A Multi-Crossover and Adaptive Island Based Population Algorithm for Solving Routing Problems. Journal of Zhejiang University-SCIENCE C-Computers & Electronic. 14 − 11, pp. 815-821, 2013.

    http://dx.doi.org/10.1631/jzus.C1300184   IF(2013) = 0.380

23. J. Godoy, V. Milanes, J. Perez, J. Villagra, **E. Onieva**. An Auxiliary V2I Network for Road Transport and Dynamic Environments. Transportation Research Part C: Emerging Technologies. 37, pp. 145–156, 2013.

    http://dx.doi.org/10.1016/j.trc.2013.09.012   IF(2013) = 2.820

22. L. Cardamone, P.L. Lanzi, D. Loiacono, **E. Onieva**. Advanced Overtaking Behaviors for Blocking Opponents in Racing Games Using a Fuzzy Architecture. Expert Systems with Applications. 40 - 16, pp. 6447–6458, 2013.

    http://dx.doi.org/10.1016/j.eswa.2013.04.030   IF(2013) = 1.965

21. R. Dominguez, J. Alonso, **E. Onieva**, C. Gonzalez. A Transferable Belief Model Applied to LIDAR Perception Systems. Integrated Computer-Aided Engineering. 20 - 3, pp. 289-302, 2013.

    http://dx.doi.org/10.3233/ICA-130433   IF(2013) = 4.667

20. **E. Onieva**, J. Godoy, J. Villagra, V. Milanes, J. Perez. On-line learning of a fuzzy controller for a precise vehicle cruise control system. Expert Systems with Applications. 40 − 4, pp. 1046-1053, 2013.

    http://dx.doi.org/10.1016/j.eswa.2012.08.036   IF(2013) = 1.965

19. J. Perez, V. Milanes, J. Godoy, J. Villagra, **E. Onieva**. Cooperative controllers for highways based on human experience. Expert Systems with Applications. 40 − 4, pp. 1024-1033, 2013.

    http://dx.doi.org/10.1016/j.eswa.2012.08.011   IF(2013) = 1.965

18. **E. Onieva**, V. Milanes, J. Villagra, J. Perez, J. Godoy. Genetic optimization of a vehicle fuzzy decision system for intersections. Expert Systems with Applications. 39 - 18, pp. 13148 − 13157, 2012.

    http://dx.doi.org/10.1016/j.eswa.2012.05.087   IF(2012) = 1.854

17. V. Milanes, J. Villagra, J. Godoy, J. Simo, J. Perez, **E. Onieva**. An intelligent V2I-based traffic management system. IEEE Transactions on Intelligent Transportation Systems. 13 - 1, pp. 49 - 58, 2012.

    http://dx.doi.org/10.1109/TITS.2011.2178839   IF(2012) = 3.064

16. V. Milanes, J. Perez, J. Godoy, **E. Onieva**. A fuzzy aid rear-end collision warning/avoidance system. Expert Systems with Applications. 39 - 10, pp. 9097 - 9107, 2012.

    http://dx.doi.org/10.1016/j.eswa.2012.02.054   IF(2012) = 1.854

15. **E. Onieva**, D.A. Pelta, J. Godoy, V. Milanes, J. Perez. An evolutionary tuned driving system for virtual car racing games: The AUTOPIA driver. International Journal of Intelligent Systems. 27 - 3, pp. 217 - 241, 2012

    http://dx.doi.org/10.1002/int.21512   IF(2012) = 1.416

14. **E. Onieva**, J.E. Naranjo, V. Milanes, J. Alonso, R. Garcia, J. Perez. Automatic lateral control for unmanned vehicles via genetic algorithms. Applied Soft Computing Journal. 11 - 1, pp. 1303 - 1309, 2011.

    http://dx.doi.org/10.1016/j.asoc.2010.04.003   IF(2011) = 2.612

13. **E. Onieva**, D.A. Pelta, V. Milanes, J. Perez. A fuzzy-rule-based driving architecture for non-player characters in a car racing game. Soft Computing. 15 - 8, pp. 1617 - 1629, 2011.

    http://dx.doi.org/10.1007/s00500-011-0691-6   IF(2011) = 1.880

12. J. Alonso, V. Milanes, **E. Onieva**, J. Perez, C. Gonzalez, T. De Pedro. Cartography for cooperative manoeuvres with autonomous land vehicles. Journal of Navigation. 64 - 1, pp. 141 - 155, 2011.

    http://dx.doi.org/10.1017/S0373463310000275   IF(2011) = 0.613

11. J. Alonso, V. Milanes, J. Perez, **E. Onieva**, C. Gonzalez, T. de Pedro. Autonomous vehicle control systems for safe crossroads. Transportation Research Part C: Emerging Technologies. 19 - 6, pp. 1095 - 1110, 2011.

    http://dx.doi.org/10.1016/j.trc.2011.06.002   IF(2011) = 1.957

10. J. Perez, V. Milanes, **E. Onieva**. Cascade architecture for lateral control in autonomous vehicles. IEEE Transactions on Intelligent Transportation Systems. 12 - 1, pp. 73 - 82, 2011.

    http://dx.doi.org/10.1109/TITS.2010.2060722   IF(2011) = 3.452

9. J. Perez, V. Milanes, J. Villagra, **E. Onieva**, C. Gonzalez. Driving assistance system applied in curves for real vehicles [Sistema de ayuda a la conduccion en curvas para vehiculos reales]. Dyna. 86 - 1, pp. 95 - 104, 2011. http://dx.doi.org/10.6036/3854 IF(2011) = 0.171

8. V. Milanes, C. Gonzalez, J.E. Naranjo, **E. Onieva**, T. de Pedro. Electro-hydraulic braking system for autonomous vehicles. International Journal of Automotive Technology. 11 - 1, pp. 89 - 95, 2010.

    http://dx.doi.org/10.1007/s12239-010-0012-6   IF(2010) = 0.511

7. V. Milanes, J. Perez, **E. Onieva**, C. Gonzalez, T. De Pedro. Lateral power controller for unmanned vehicles. Przeglad Elektrotechniczny. 86 - 1, pp. 207 - 211, 2010. IF(2010) = 0.242

6. V. Milanes, **E. Onieva**, B.M. Vinagre, C. Gonzalez, J. Perez, J. Alonso. Driving aid system based on a low-cost wireless network [Sistema de asistencia a la conduccion basado en una red de comunicaciones de bajo coste]. Dyna. 85 - 3, pp. 245 - 254, 2010. http://dx.doi.org/10.6036/3056   IF (2010) = 0.144

5. **E. Onieva**, V. Milanes, J. Perez, T. de Pedro. Vehicle lateral fuzzy control estimation [Estimacion de un control lateral difuso de vehiculos]. RIAI - Revista Iberoamericana de Automatica e Informitica Industrial. 7 - 2, pp. 91 - 98, 2010.

    http://dx.doi.org/10.1016/S1697-7912(10)70029-7   IF(2010) = 0.195

4. V. Milanes, J. Perez, **E. Onieva**, C. Gonzalez. Controller for Urban intersections based on wireless communications and fuzzy logic. IEEE Transactions on Intelligent Transportation Systems. 11 - 1, pp. 243 - 248, 2010.

    http://dx.doi.org/10.1109/TITS.2009.2036595   IF(2010) = 2.258

3. **E. Onieva**, V. Milanes, C. Gonzalez, T. De Pedro, J. Perez, J. Alonso. Throttle and brake pedals automation for populated areas. Robotica. 28 - 4, pp. 509 - 516, 2010.

    http://dx.doi.org/10.1017/S0263574709005815   IF(2010) = 0.939

2. J. Perez, V. Milanes, J. Alonso, **E. Onieva**, T. de Pedro. Overtaking with autonomous vehicles two-way roads [Adelantamiento con vehiculos autonomos en carreteras de doble sentido]. RIAI - Revista Iberoamericana de Automatica e Informatica Industrial. 7 - 3, pp. 25 - 33, 2010.

    http://dx.doi.org/10.1016/S1697-7912(10)70039-X   IF(2010) = 0.195

1. V. Milanes, **E. Onieva**, J. Perez, T. de Pedro, C. Gonzalez. Speed control based on fuzzy logic for traffic jams [Control de velocidad basado en logica borrosa para entornos urbanos congestionados]. RIAI - Revista Iberoamericana de Automatica e Informatica Industrial. 6 - 4, pp. 61 – 68, 2009

    http://dx.doi.org/10.1016/S1697-7912(09)70109-8   IF(2009) = 0.291

Non SCI-Listed Articles

12. E. Osaba, **E. Onieva**, F. Diaz, R. Carballedo, P. Lopez, A. Perallos. A migration strategy for distributed evolutionary algorithms based on stopping non-promising subpopulations: preliminary results in routing problems. International Journal of Artificial Intelligence, 13(2), pp. 46–56, 2015

11. E. Osaba, F. Diaz, R. Carballedo, **E. Onieva**, A. Perallos. Focusing on the Golden Ball meta-heuristic: An extended study on a wider set of problems. The Scientific World Journal. Article ID 563259, 17 pags, 2014

    http://dx.doi.org/10.1155/2014/563259

10. E. Osaba, R. Carballedo, F. Diaz, **E. Onieva**, I. de la Iglesia, A. Perallos. Crossover vs. Mutation: A Comparative Analysis of the Evolutionary Strategy of Genetic Algorithms Applied to Combinatorial Optimization Problems. The Scientific World Journal. 2014, Article ID 154676, 22 pags. 2014

    http://dx.doi.org/10.1155/2014/154676

9. E. Osaba, F. Diaz, **E. Onieva**. Golden Ball: A Novel Meta-Heuristic to Solve Combinatorial Optimization Problems Based on Soccer Concepts. Applied Intelligence, $41 - 1$, pp. $145 - 166$, 2014

    http://dx.doi.org/10.1007/s10489-013-0512-y

8. **E. Onieva**, E. Osaba, X. Zhang, A. Perallos. GABF: Genetic Algorithm with Base Fitness for Obtaining Generality from Partial Results: Study in Autonomous Intersection by Fuzzy Logic. Applied Intelligence, $41 - 1$, pp. $1 - 12$, 2014

    http://dx.doi.org/10.1007/s10489-013-0498-5

7. E. Osaba, F. Diaz, **E. Onieva**, R. Carballedo, A. Perallos. AMCPA: a population metaheuristic with adaptive crossover probability and multi-crossover mechanism for solving combinatorial optimization problems. International Journal of Artificial Intelligence. 12 - 2, pp. 1 - 23, 2014.

6. **E. Onieva**, V. Milanes, J. Perez, T. de Pedro. Genetic fuzzy-based steering wheel controller using a mass-produced car. International Journal of Innovative Computing, Information and Control. 8 - 5 B, pp. 3477 - 3494. 2012

5. V. Milanes, **E. Onieva**, J. Perez, J. Simo, C. Gonzalez, T. De Pedro. Making transport safer: V2V-based automated emergency braking system. Transport. 26 - 3, pp. 290 - 302, 2011.

    http://dx.doi.org/10.3846/16484142.2011.622359

4. D. Loiacono, P.L. Lanzi, J. Togelius, **E. Onieva**, D. Pelta, M.V. Butz, T.D. Lonneker, L. Cardamone, D. Perez, Y. Saez, M. Preuss, J. Quadflieg. The 2009 simulated car racing championship. IEEE Transactions on Computational Intelligence and AI in Games. 2 - 2, pp. $131 - 147$, 2010.

    http://dx.doi.org/10.1109/TCIAIG.2010.2050590

3. **E. Onieva**, V. Milanes, J. Perez, J. Alonso, T. de Pedro. Soft Computing Techniques for Autonomous Driving, Mathware and Soft Computing, vol. 16, n.1, pp. 45-58, 2009

2. **E. Onieva**. Generation of an Autonomous Car Fuzzy Controller via Genetic Algorithms, New Trends on Intelligent Systems and Soft Computing, pp. 33-44, Ed. Universidad de Granada, 2009.

1. V. Milanes, J. Alonso, **E. Onieva**, J. Perez, C. Gonzalez, T. de Pedro, R. Garcia. Las comunicaciones inalambricas en los sistemas inteligentes de transporte, in Automatica e Instrumentacion, n. 403, pp. 76-80, Oct. 2009

International Conferences

41. M. Canizo, **E. Onieva**, A. Conde, S. Charramendieta, S. Trujillo. Real-time predictive maintenance for wind turbines using Big Data frameworks. 2017 IEEE International Conference on Prognostics and Health Management (ICPHM), pp. 70–77, 2017.

    http://dx.doi.org/10.1109/ICPHM.2017.7998308

40. P. Lopez-Garcia, E. Osaba, E. Onieva, A. D. Masegosa, A. Perallos. Short-term traffic congestion forecasting using hybrid metaheuristics and rule-based methods: A comparative study. 17th Conference of the Spanish Association for Artificial Intelligence. Advances in Artificial Intelligence, Volume 9868, pp. 290-299, 2016

    http://dx.doi.org/10.1007/978-3-319-44636-3_27

39. E. Osaba, P. Lopez-Garcia, A.D. Masegosa, E. Onieva, H. Landaluce, A. Perallos. TIMON Project: Description and Preliminary Tests for Traffic Prediction Using Evolutionary Techniques. Proceedings of the 2016 on Genetic and Evolutionary Computation Conference Companion, GECCO2016, pp. 1471–1472, 2016.

    http://dx.doi.org/10.1145/2908961.2931635

38. E. Onieva, P. Lopez-Garcia, A.D. Masegosa, E. Osaba, A. Perallos. A Comparative Study on the Performance of Evolutionary Fuzzy and Crisp Rule Based Classification Methods in Congestion Prediction. Transportation Research Procedia - 6th Transport Research Arena (TRA2016), 14, pp. 4458–4467, 2016

    http://dx.doi.org/10.1016/j.trpro.2016.05.368

37. P. Lopez-Garcia, M. Wozniak, **E. Onieva**, A. Perallos. Hybrid Optimization Method Applied to Adaptive Splitting and Selection Algorithm. 11th International Conference Hybrid Artificial Intelligent Systems, HAIS 2016. Lecture Notes in Computer Science, Volume 9648, pp. 742-750, 2016.

    http://dx.doi.org/10.1007/978-3-319-32034-2_62

36. A. Moreno, **E. Onieva**, A. Perallos, G. Iovino, P. Fernandez. Cooperative decision-making ITS architecture based on distributed RSUs. 9th International Conference on Ubiquitous Computing and Ambient Intelligence, UCAmI 2015. Lecture Notes in Computer Science, Volume 9454, pp. 84-90, 2015.

    http://dx.doi.org/10.1007/978-3-319-26401-1_8

35. A. Bahillo, I. Angulo, **E. Onieva**, A. Perallos, P. Fernandez. Low-cost Bluetooth foot-mounted IMU for pedestrian tracking in industrial environments. IEEE International Conference on Industrial Technology, pp. 3430 – 3434, 2015.

    http://dx.doi.org/10.1109/ICIT.2015.7125608

34. A. D. Masegosa, A. Bahillo, **E. Onieva**, P. Lopez-Garcia, A. Perallos. A new optimization approach for indoor location based on Differential Evolution. 16th World Congress of the International Fuzzy Systems Association - 9th Conference of the European Society for Fuzzy Logic and Technology (IFSA-EUSFLAT), pp. 1604–1611, 2015

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10. **E. Onieva**, P. Lopez, A. Perallos. Sistemas de prediccion de congestion basados en Inteligencia Artificial Avanzada. XV Congreso ITS España, 2015.

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5. V. Milanes, J. Alonso, **E. Onieva**, J. Perez, C. Gonzalez, T. de Pedro and R. Garcia, Aplicacion de las tecnologias de las comunicaciones a vehiculos autonomos, in Proc. V Simposio de Control Inteligente, 2009.

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2. V. Milanes, **E. Onieva**, T. de Pedro, R. Garcia, J. Alonso, J. Perez and C. Gonzalez, Conduccion Autonoma en Circuito de Dificil Maniobrabilidad, Proc. XXIX Jornadas de Automatica JATA08, 2008.

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Edited Books and Book Chapters

5. A.D. Masegosa, **E. Onieva**, P. Lopez-Garcia, E. Osaba. Applications of Soft Computing in Intelligent Transportation Systems. Soft Computing Based Optimization and Decision Models. Part of the Studies in Fuzziness and Soft Computing book series (STUDFUZZ, volume 360). pp. 63-81, 2018. ISBN: 978-3-319-64285-7 (Print) 978-3-319-64286-4 (Online)

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4. A.D. Masegosa, I. de La Iglesia, U. Hernandez, L.E. Diez, A. Bahillo, **E. Onieva**. A new approach for information dissemination in VANETs based on covering location and metaheuristics. Soft Computing for Sustainability Science. pp 179-202, 2017. ISBN: 978-3-319-62358-0 (Print) 978-3-319-62359-7 (Online).

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3. **E. Onieva**, I. Santos, E. Osaba, H. Quintian, E. Corchado (Eds.) Hybrid Artificial Intelligent Systems. 10th International Conference, HAIS 2015, Bilbao, Spain, June 22-24, 2015, Proceedings. Springer International Publishing. ISBN: 978-3-319-19643-5 (Print) 978-3-319-19644-2 (Online).

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2. A. Perallos, U. Hernandez-Jayo, **E. Onieva**, I.J. Garcia-Zuazola (Eds.) Intelligent Transport Systems. Wiley, 2015. ISBN: 978-1-118-89478-1

1. X. Zhang, **E. Onieva**, V. C.S. Lee and K. Liu. Congestion Prediction by means of Fuzzy Logic and Genetic Algorithms. A. Perallos, et al. (Eds.) Intelligent Transport Systems. Chapter 10, pp. 191–204, Wiley, 2015. ISBN: 978-1-118-89478-1

Participation in Funded Projects as Researcher in Charge

4. TIMON: Enhanced real time services for an optimized multimodal mobility relying on cooperative networks and open data
   Participation as Work Package Leader - WP3: Artificial Intelligence
   Funded by Horizon 2020 - MG-3.5a-2014 - Cooperative ITS for safe, congestion-free and sustainable mobility [Grant Agreement 636220]
   Participants: Confederation of organisations in road transport enforcement aisbl; Centre tecnologic de telecomunicacions de catalunya; Fraunhofer-gesellschaft zur foerderung der angewandten forschung e.v; Geox terinformatikai kft; Intecs spa; Iskra elektro in elektronska industrija dd; Javno podjetje ljubljanska parkirisca in trznice doo; Scraperwiki ltd; TASS international mobility center bv; Universidad de Deusto; XLAB razvoj programske opreme in svetovanje doo
   Duration: June 2015 - December 2018

3. e-DeliverTIC: Framework de herramientas y servicios para la mejora de la distribucion de mercancias en la ultima milla asociada a transacciones de e-commerce
   Funded by Science and Innovation Ministry, RETOS Program [RTC-2014-3061-4]
   Participants: University of Deusto, Arconet Servicios Telematicos S.L., Avangroup S.L., Universidad Carlos III
   Duration: June 2014 - December 2016.

2. TIC-TAO: Servicio de Ayuda y Pago Remoto de Estacionamiento en Zona Azul y Plataforma de Administracion de Aparcamientos en Entornos Urbanos.
   Funded by the Basque Goverment, GAITEK Program [IG-2013/00798]
   Participants: Avalon, Electricas Asmotur Uriarte, S.L., Tapquo, University of Deusto.
   Duration: 01/06/2013, 19 months.

1. PRINT2: Nueva plataforma para monitorizacion y control predictivo Inteligente en la industria.
   Funded by the Basque Goverment, ETORGAI Program
   Participants: Fundiciones Garbi S.A., Gerday Aceros Especiales Europa S.L., Avangroup Business Solutions S.L., University of Deusto.
   Duration: January 2013 - December 2015.

Participation in Funded Projects as Researcher

22. HORUS: Hornos de recalentamiento inteligentes para procesos siderugicos competitivos y sostenibles
Funded by Ministry of Economy, Industry and Competitiveness, CIEN 2016 call
Participants: Sidenor Aceros Especiales SL (Leader)
Duration: October 2016 - December 2019

21. CITYTOOL: Plataforma Tecnológica CITYTOOL para la Gestión Inteligente y Sostenible del Transporte y la Movilidad Urbana y Territorial
Funded by the Basque Goverment, HAZITEK Program [ZE-2016/00005].
Participants: Ikusi SLU, Nextell SA, Sofware Quality Systems SA, Ingartek Consulting SLL, Fundación Deusto, Vicomtech, Asociaicón de Empresas Tecnológicas Innovalia
Duration: May 2016 - December 2018

20. IOTT: Plataforma Cloud de Servicios Integrales y Subasta de Portes Basada en la IoT Aplicada al Transporte.
Funded by Science and Innovation Ministry, RETOS Colaboración Program [RTC-2016-5463-4]
Participants: Dantia Tecnología SL, Avangroup Business Solutions, DeustoTech, Grupo Innovati, Universidad Carlos III
Duration: September 2016 - December 2018.

19. CITYPORT: Plataforma tecnológica smartcity para la mejora de los procesos portuarios y generación de nuevos servicios
Funded by Science and Innovation Ministry, RETOS Colaboración Program [RTC-2016-4942-7]
Participants: Ikusi, DeustoTech, Innovalia, Nextel, Vicontech
Duration: June 2016 - December 2018.

18. PostLowCit: Low-noise and low-carbon freight delivery for Postal Operators to ensure last mile connections through optimized urban and long distance transport
Funded by European Comission. Connecting Europe Facility (CEF) Transport-2015 [2015-ES-TM-0239-S]
Participants: Sociedad Estatal de Correos y Telegrafos SA (Coordinator)
Duration: February 2016 - May 2019

17. DEUSTO SMART MOBILITY 2016-2021
Funded by the Basque Goverment, Call for recognition of Research Groups [IT1024-16]
Participants: University of Deusto
Duration: January 2016 - December 2021

16. i-LogisTICs: Sistema telematico para la mejora de la logistica en el transporte de mercancias a traves de servicios avanzados de planificacion y trazabilidad
Funded by Science and Innovation Ministry, RETOS Program [TEC2013-45585-C2-2-R]

Participants: University of Deusto, Universidad Publica de Navarra.
Duration: June 2014 - December 2016.

15. UBITRACE: Entornos Inteligentes Ubicuos aplicados a la Trazabilidad en el sector de Transportes y Vehiculares.
Funded by the Basque Goverment, Basic/Applied Research Program
Participants: University of Deusto
Duration: September 2013 - September 2016.

14. SELICA: Identification systems and advanced sensing for security management and sustainability in the food chain.
Funded by Science and Innovation Ministry, INNPACTO Program [IPT-2012-0381-060000].
Participants: Inkoa Sistemas S.L., Farsens S.L., Garaia SCOOPL., Planet Media S.L., Fundacion Deusto
Duration: September 2012 - June 2015.

13. DECIDE: Decide how you move, environmental impact-assessment and decision-making tool for personsíntermodal mobility.
Funded by the Basque Goverment, SAIOTEK Program [SA-2012/00098].
Participants: Tecnologico Fundacion Deusto
Duration: September 2012 - November 2013.

12. ICSI: Intelligent Cooperative Sensing for Improved traffic efficiency
Funded by the Seventh Framework Programme, European Union. [FP7-ICT-2011-8: Grant agreement no 317671]
Participants: Brisa Inovacao e Tecnologia, Consorcio Nazionale Interuniversitario per le Telecomunicazioni, Consiglio Nazionale delle Ricerche, University of Deusto, Hellenic Telecommunications & Telematics Applications, University of Zagreb
Duration: November 2012 - December 2014.

11. FREEWAY: Multi-technology, Smart and Interoperable integral system of Toll
Funded by Economy and Competitiveness Ministry, INNPACTO Program [IPT-2012-0270-370000].
Participants: Ikusi Angel Iglesias S.A., LKS SCOOPL, Fundacion Centro de Tecnologias de Interaccion Visual y Comunicaciones - Vicomtech, Fundacion Deusto.
Duration: July 2012 - Januray 2015.

10. GIZAIN: Telematic system of easily deployment to locate and follow up persons in controlled environments
Funded by the Basque Goverment, GAITEK Program [IG-2012/01206].
Participants: Sarein Sistemas S.L., Ingenieria De Microsistemas Programados S.L., Urbabil 2000 s.l., Universidad de Deusto.
Duration: May 2012 - January 2014.

9. PRINT: New platform for monitoring and controlling industrial processes basing on predictive intelligence
Funded by the Basque Goverment, ETORGAI Program
Participants: Sidenor industrial S.L., Tubacex Tubos Inoxidables S.A., Avangroup Business Solutions S.L., Sidenor I+D, Universidad de Deusto.
Duration: January 2012 - December 2012.

8. MULTITRANS: applications and services framework for configuration of last generation control centers, for a sustainable, efficient and safe management of travellers and goods transport.
Funded by Science and Innovation Ministry, INNPACTO Program [ER-2010/00041].
Participants: Ikusi, Idom, uSysCom, LKS, Datik, NetPLC, Vicomtech, Tecnologico Fundacion Deusto
Duration: June 2011 - December 2014.

7. City-Elec: Electricity systems for mobility in urban environments.
Funded by the Science and Innovation Department, Spain.
Participants: Tecnalia, Ormazabal, Temper, Maser, IPS, Isotrol, Union Fenosa, Hidrocantabrico, ZIV, UPV, Reivaj, Insia, Cidaut, INTA, IAI-CSIC, Valeo, Mavilor, Rucker.
Duration: December 2009 - December 2011.

6. GUIADE: Automated guidance of public transport vehicles using perception to improve the efficiency.
Funded by the Industry Department, Spain [P9/08].
Participants: SICE, ETRA, FITSA, IAI, UAH, URJC, Selesta y Albentia.
Duration: January 2009 - January 2011.

5. MARTA: Mobility and automation in advanced transport networks research project.
Funded by the Technologic and Industrial Development Centre, Education Department, Spain.
Participants: Ficosa International S.A., Avanced Automotive Antennas S.L., ETRA Investigacion y Desarrollo S.A., Instituto de Automatica Industrial, Grupo Mecanica de Vuelo Sistemas S.A., IDOM Ingenieria y Arquitectura S.A., Centro Tecnico de SEAT S.A., Obras Publicas y Telecomunicaciones de Navarra S.A., AGNITO S.L., Southwing S.L., AT4 Wireless S.A., APIF Moviquity S.A., A2C Ficosa International y GMV, Fico Triad S.A. TSS S.L., GMV Soluciones Globales Internet, Telefonica I+D, Ficomirrors S.A., ATIPPIC S.L.
Duration: January 2008 - January 2012.

4. TRANSITO: Local coordination between vehicles and infrastructures.
Funded by CICYT, Spain [TRA 2008-06602-C03-01/AUT].
Participants: CSIC, UAH, UEX.
Duration: January 2008 - January 2011.

3. ENVITE: Communications between vehicles and infrastructure using GNSS in hot areas.
Funded by the Industry Department, Spain.
Participants: CSIC, UAH.
Duration: November 2006 - November 2009.

2. CyberCars2: Close Communications for Cooperation between Cybercars.
Funded by the Sixth Framework Programme, European Union [Proposal n. 028062].
Participants: Institut National de Recherche en Informatique et en Automatique, Netherlands Organisation for Applied Scientific Research, Centro Ricerche Fiat, Frog Navigation Technologies, Robosoft SA, Robotiker, Instituto de Automatica Industrial, University of Stuttgart, Eurolum, Shangai Jiao Tong University, Griffith Uni-

versity.
Duration: January 2005 - March 2008.

1. SARA: Agent systems for an automobile network.
   Funded by the Science and Innovation Department, Spain [DPI2005-07980-C03-01].
   Participants: Institute of Industrial Automation, University of Alcala, University of Extremadura
   Duration: December 2005 - December 2008.

Advisory Activities

- Ph.D. Theses:

  - Safaa Bataineh. Conditional random field-based offline map matching for indoor positioning. Advisors: A. Bahillo & E. Onieva. Dissertation: 07/07/2017. Qualification: Sobresaliente. Doctoral Program: Ingeniería para la Sociedad de la Información y Desarrollo Sostenible - University of Deusto

  - Pedro López García. Aplicación de técnicas de inteligencia artificial par la predicción de congestiones a corto plazo. Advisors: E. Onieva & A. Perallos. Dissertation: 02/12/2016. Qualification: Cum Laude. Doctoral Program: Ingeniería para la Sociedad de la Información y Desarrollo Sostenible - University of Deusto

- External Expert in Calls:

  - **Sep. 2017**: External Evaluator, Agencia Nacional de Evaluación y Prospectiva (ANEP).

  - **Jun. 2017**: External Evaluator, Dirección General de Tráfico, Spanish Goverment. Transport proposals

  - **Feb. 2017**: External Evaluator, The Research Council of Oman. Transport proposals

  - **Dec. 2016**: External Expert, European Commission. Smart, green and integrated transport calls

  - **Feb. 2016**: External Expert, European Commission. Smart, green and integrated transport calls

- International Students'Fellowships Mentoring:

  - Yigit Cagatay Kuyu, Uludag University, Turkey. Title of the Traineeship: Pattern recognition and hibridization of metaheuristics. 3rd of May to 22th of August, 2017.

- Master Theses:

  - Implantación de un sistema Business Intelligence en la empresa VISESA para su explotación en Power BI y en Microsoft Excel Student: Iker Díaz de Corcuera. Máster Universitario en Ingeniería Informática - Universidad de Deusto. July 2017. Advisors: E. Onieva

- Analítica de marca personal en Twitter mediante minería de texto y modelos predictivos. Student: Luis Carlos Fernández San Martín. Máster Universitario en Ingeniería Informática - Universidad de Deusto. May 2017. Advisors: E. Onieva

- Diseño e implantación del módulo de Gestión de Tiempos en SAP Human Capital Management. Student: Adriana Markaida. Máster Universitario en Ingeniería Informática - Universidad de Deusto. May 2017. Advisors: E. Onieva

- Desarrollo de una solución Business Intelligence para el Área de Obras y Servicios del Ayuntamiento de Bilbao. Student: Yaiza Solís Boado. Máster Universitario en Ingeniería Informática - Universidad de Deusto. May 2017. Advisors: E. Onieva

- Diseño del escenario virtual de Tecnalia y la implantación de mapas para las rutas del vehículo autónomo. Student: Ander Barrenetxea Uriarte. Máster Universitario en Ingeniería Industrial - Universidad de Deusto. May 2017. Advisors: E. Onieva

- Detección automática de señales de tráfico mediante tratamiento de imágenes y redes neuronales. Student: Fredy Barrientos Espillco. Máster Universitario en Ingeniería Informática - Universidad de Deusto. February 2017. Advisors: E. Onieva

- Diseño e implementación de una aplicación para el autodiagnóstico y mejora en equipos de trabajo basada en técnicas de inteligencia artificial. Student: Silvana Llanque Pérez. Máster Universitario en Ingeniería Informática - Universidad de Deusto. July 2016. Advisors: E. Onieva

- Análisis y definición de una plataforma de información para el Café Estoril mediante AI y BI. Student: Aitor Briones Val. Máster Universitario en Organización Industrial - Universidad de Deusto. July 2016. Advisors: E. Onieva

- Desarrollo del módulo gestión de problemas dentro de la solución Service Manager de HP para una institución sanitaria. Student: Julen Merino Arrese. Máster Universitario en Ingeniería Informática - Universidad de Deusto. May 2015. Advisor: E. Onieva

- Optimización de Sistemas Basados en Reglas Difusas para predicción de congestión a corto plazo. Student: Pedro López García. Máster en Inteligencia Artificial Avanzada - Universidad Nacional de Educación a Distancia. July 2014. Advisors: E. Onieva & A. Perallos

- Degree Theses:

  - Sistema de Aprendizaje de Controladores Difusos para Conducción Automática de Vehículos. Student: Alejandro do Nascimiento Mora. Ingeniería Electrónica - Universidad Simón Bolivar. May 2012. Advisors: E. Onieva & L. Tineo

  - Implementación de la Librería de Lógica Difusa orientada al Control de Vehículos. Student: Hilda López DÁndria. Ingeniería Electrónica - Universidad Simón Bolivar. May 2012. Advisors: E. Onieva & L. Tineo

  - Diseño y Optimización de Coches Virtuales en TORCS. Student: José Manuel Acosta Arza. Ingeniería en Informática - Universidad de Granada. May 2010. Advisors: D.A. Pelta & E. Onieva

Other Scientific Activities

- Patent: J. Perez; V. Milanes; E. Onieva; J. Godoy; C. Gonzalez. Dispositivo y Procedimiento para la Implementacion de una Maniobra de Emergencia para Abortar Adelantamientos. Aplication number: P201131949, December 1st, 2011.

- Intelectual Property Registration: Resolución del Problema VRPB mediante un método multi-poblacional basado en conceptos futbolísticos. by E. Osaba, F. Díaz, E. Onieva. Software. Number 01/2017/545. Date 20/01/2017

- Intelectual Property Registration: Método AMCEA para la resolución del nuevo problema DAC_VRP_VSTT. by E. Osaba, E. Onieva, A. Moreno, I. Angulo, A. Bahillo, A. Perallos. Software. Number 01/2016/958. Date 07/04/2016

- Intelectual Property Registration: GACE (Genetic Algorithm with Cross Entropy): Método híbrido de optimización de sistemas difusos. by P. López, E. Onieva. Software. Number 01/2016/1350. Date 23/06/2016

- Intelectual Property Registration: Función para eliminar los bordes en blanco de las imágenes. by E. Onieva, P. López. Software. Number 01/2016/1364. Date 29/06/2016

- Thesis Committees:

  - Member of the Ph.D. Evaluation Committee for the Thesis: Soft Computing en Problemas de Optimización Dinámicos. Student: Jenny Fajardo Calderín. Advisors: David Alejandro Pelta and Antonio David Masegosa Arrendondo. Date: 21/12/2015. University of Granada.

  - Member of the Ph.D. Evaluation Committee for the Thesis: Design and Implementation of Dynamic Genetic Algorithms for Lift Group Control with Passenger Information to Improve Time and Energy Performance with Adaptation to Traffic Patterns. Student: Maite Beamurgia Bengoa. Advisors: Rosa Basagoiti Astigarraga and Ignacio Rodriguez Carreño. Date: 30/04/2014. University of Mondragon.

Referee Activities and Programme Committees

- Member of the Editorial Board (Journals) at:

  - Journal of Control Science and Engineering (Hindawi Publishing Corporation), from 2016.

- Member of the Programme Committee at:

  - Regular Programme Committee member at International Conference on Soft Computing Models in Industrial and Environmental Applications (SOCO). 9th - 12th (2017) Editions.

  - Regular Programme Committee member at International Conference on Computational Intelligence in Security for Information Systems (CISIS-ICEUTE). 7th - 10th (2017) Editions.

- 12th International Conference on Hybrid Artificial Intelligence Systems, Logroño, Spain, July, 18-21, 2017
- XI Congreso de Tecnologias, Aprendizaje y Enseñanza de la Electronica (TAEE 2014). Bilbao, Spain, June 11-13, 2014
- VI International Workshop on Nature Inspired Cooperative Strategies for Optimization (NICSO 2013). Canterbury, United Kingdom, September 2-4, 2013

- Participation as Scientific Reviewer (Journals) at:
  - Advances in Operation Research
  - Journal of Advanced Transportation
  - Applied Soft Computing
  - International Journal of Fuzzy Systems
  - International Journal of Automation and Computing
  - DYNA
  - Computers and Operations Research
  - Expert Systems with Applications
  - Transportmetrica A
  - IEEE Transactions on Intelligent Transportation Systems
  - Computational Intelligence and Neuroscience
  - Transport
  - Neural Computing and Applications journal
  - Physica A
  - IEEE Transactions on Industrial Informatics
  - Electronics
  - International Journal of Information Technology & Decision Making
  - Fuzzy Sets and Systems
  - IET Intelligent Transport Systems
  - Computational Intelligence
  - IEEE Intelligent Transportation Systems Magazine
  - Applied Intelligence
  - Genetic Programming and Evolvable Machines
  - Revista Iberoamericana de Automatica e Informatica Industrial
  - International Journal of Computer Games Technology

- Participation as Scientific Reviewer (Conferences) at:
  - 2017 IEEE International Conference on Fuzzy Systems, July 9-12, 2017
  - 2017 IEEE Intelligent Vehicles Symposium, June 11-14, 2017
  - IEEE 19th International Conference on Intelligent Transportation Systems, November 1-4, 2016

- 2015 IEEE Intelligent Vehicles Symposium, June 28-July 1, 2015
- 2015 IEEE International Conference on Fuzzy Systems
- IEEE 18th International Conference on Intelligent Transportation Systems, September 15-18, 2015
- 17th International IEEE Conference on Intelligent Transportation Systems, October 8-11, 2014
- 2014 IEEE Intelligent Vehicles Symposium, June 8-11, 2014
- 2014 IEEE International Conference on Fuzzy Systems
- 2014 Congreso de Tecnologias, Aprendizaje y Enseñanza de la Electronica
- VI International Workshop on Nature Inspired Cooperative Strategies for Optimization
- 2013 Genetic and Evolutionary Computation Conference

Qualifications and Awards

- H-Index = 13 (source: SCOPUS)

- H-Index = 17 (source: Google Scholar)

- Candidate to the award Andaluces del Futuro in the field of Science, selected from remarkable Andalusian researchers in all the areas. Date: 07/11/2014

- Overall Winner of the 2013 Simulated Car Racing Championship, held during the 2013 Genetic and Evolutionary Computation Conference. Date: 10/07/2013

- Candidate to the award Andaluces del Futuro in the field of Science, selected from remarkable Andalusian researchers in all the areas. Date: 07/11/2012

- Overall Winner of the 2012 Simulated Car Racing Championship, held during three international conferences:
2012 EVO* (1st place), 2012 Genetic and Evolutionary Computation Conference (1st place) and 2012 IEEE Symposium on Computational Intelligence and Games (1st place). Date: 14/09/2012

- Overall Winner of the 2011 Simulated Car Racing Championship, held during three international conferences:
2011 EVO* (1st place), 2011 Genetic and Evolutionary Computation Conference (1st place) and 2011 IEEE Symposium on Computational Intelligence and Games (1st place). Date: 03/09/2011

- Best Paper Candidate at IEEE Symposium on Computational Intelligence and Games. Date: 21/08/2010

- Overall Winner of the 2010 Simulated Car Racing Championship, held during three international conferences:
2010 Genetic and Evolutionary Computation Conference (1st place), 2010 IEEE Symposium on Computational Intelligence and Games (2nd place) and 2010 World Congress on Computational Intelligence (1st place). Date: 21/08/2010

- Best Student Paper at XV Congreso Español sobre Tecnologias y Logica Fuzzy. Date: 05/02/2010

- Overall Winner of the 2009 Simulated Car Racing Championship, held during three international conferences:
  2009 IEEE Congress on Evolutionary Computation (2nd place), 2009 Genetic and Evolutionary Computation Conference (1st place) and 2009 IEEE Symposium on Computational Intelligence and Games (2nd place). Date: 10/09/2009

- Best Paper at 2009 IEEE Conference-Workshop Compatibility & Power Electronics. Date: 22/05/2009

- Best Student Paper at XIV Congreso Español sobre Tecnologias y Logica Fuzzy. Date: 19/09/2008

Other credits

- 7th most prolific author when searching for *Intelligent Transportation System* in SCOPUS, for all the years (checked: 23/02/2017)

- 1st most prolific author when searching for *Intelligent Transportation System* in SCOPUS, for the last 5 years (checked: 23/02/2017)

- 1st most prolific author when searching for *Intelligent Transportation System* in SCOPUS, for journal articles and all the years (checked: 23/02/2017)