

Curriculum Vitae

Name: OSCAR CORDÓN

Date: 19/02/2017

Signature:

A handwritten signature in black ink, enclosed within a hand-drawn oval. The signature appears to be 'Oscar Córdón' written in a cursive style.

Number of pages: 90

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1. PERSONAL, ACADEMIC AND PROFESSIONAL DATA

SURNAME: CORDÓN
NAME: OSCAR
ID: 45.281.118-Y
NATIONALITY: SPANISH
PERSONAL ADDRESS: AVDA. RUFO GARCÍA RENDUELES, No. 4, 6º A
TOWN: GIJÓN, ASTURIAS (SPAIN) *ZIP CODE:* 33203
UNESCO SPECIALIZATION CODE: 120304

SEX: MALE
BIRTH DATE: 11/8/1972
SPANISH CIVIL SERVANT Nº: 4528111813A0504
PHONE: +34-984399507

ACADEMIC DEGREES

<i>MASTER DEGREE</i>	<i>CENTER</i>	<i>DATE</i>
COMPUTER SCIENCE	FACULTAD DE CIENCIAS UNIVERSITY OF GRANADA. SPAIN	August 1994

PhD DEGREE: PhD IN COMPUTER SCIENCE, UNIVERSITY OF GRANADA
DOCTORAL DISSERTATION TITLE: AN EVOLUTIONARY METHODOLOGY FOR DESIGNING FUZZY RULE-BASED SYSTEMS
DATE: OCTOBER 1997
ADVISOR: Dr. D. FRANCISCO HERRERA

RESEARCH LINES

Fuzzy rule-based systems; Genetic fuzzy systems; Fuzzy and linguistic modeling; Evolutionary algorithms, Ant colony optimization and other metaheuristics; Soft computing applications to different topics (medical image registration, forensic anthropology, assembly line balancing, information retrieval, etc.); Visual science maps design and mining; Multiobjective graph-based data mining; Agent-based Modeling, Social Networks, and their applications in Marketing Science.

CURRENT PROFESSIONAL AFFILIATION

INSTITUTION: UNIVERSITY OF GRANADA
DEPARTMENT: COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE
POSITION AND STARTING DATE: FULL PROFESSOR, 14/07/2011.

POSTAL ADDRESS: Escuela Técnica Superior de Ingenierías Informática y de Telecomunicación. C/ Daniel Saucedo Aranda, s/n. 18071 – Granada.

PHONE: +34 - 958 - 248555 *E-MAIL:* ocordon@decsai.ugr.es *URL:* <http://decsai.ugr.es/~ocordon>

PREVIOUS SCIENTIFIC OR PROFESSIONAL POSITIONS

<i>DATES</i>	<i>POSITION</i>	<i>INSTITUTION</i>
01/06/93 - 30/09/94	Research Starting Scholar	Dept. Computer Science and A.I. UNIVERSITY OF GRANADA
01/02/95 - 30/04/95	Scholar	Computer Services UNIVERSITY OF GRANADA
01/05/95 - 30/09/95	Andalusian Government Research Scholar	Dept. Computer Science and A.I. UNIVERSITY OF GRANADA
01/10/95 - 30/04/00	Assistant Professor	UNIVERSITY OF GRANADA
01/05/00 - 26/01/01	Acting Associate Professor	UNIVERSITY OF GRANADA
01/02/01 - 30/09/05	Head of the Virtual Learning Center	Vicerectorate of New Technologies UNIVERSITY OF GRANADA
27/01/01 - 31/05/07	Associate Professor	UNIVERSITY OF GRANADA
01/04/06 - 31/08/11	Principal Researcher	Applications of Fuzzy Logic and Evolutionary Algorithms Research Unit EUROPEAN CENTRE FOR SOFT COMPUTING
14/02/11 - 13/07/11	Associate Professor	UNIVERSITY OF GRANADA
14/07/11 -	Full Professor	UNIVERSITY OF GRANADA
01/09/11 - 20/02/13	Coordinator of the Official PhD Program on Information and Communication Technologies	UNIVERSITY OF GRANADA
01/10/11 – 31/12/15	Distinguished Affiliated Researcher (Scientific Consultant)	Applications of Fuzzy Logic and Evolutionary Algorithms Research Unit EUROPEAN CENTRE FOR SOFT COMPUTING
02/07/14 -	ViceRector for Digital University	UNIVERSITY OF GRANADA

FOREIGN LANGUAGES

<i>LANGUAGE</i>	<i>SPEAKS</i>	<i>READS</i>	<i>WRITES</i>
ENGLISH	CORRECTLY	CORRECTLY	CORRECTLY

RESEARCHER IDENTIFICATION CODES

Researcher ID code: F-6672-2011

Researcher ID web page: <http://www.researcherid.com/rid/F-6672-2011>

Orcid code: 0000-0001-5112-5629

Google Scholar web page: <https://scholar.google.com/citations?user=oUmv8xgAAAAJ&hl=en>

2. TEACHING

1. Subjects taught in the University of Granada Official Master Programs. Academic Course 2012-13

Master in "Soft Computing and Intelligent Systems" (Soft Computing y Sistemas Inteligentes)

Official master on ICT adapted to the HERA

Quality mark MCD2007-00212 of the Spain's Ministry of Education and Science (since 2003, MCD2003-00509)

Dept. Computer Science and A.I. University of Granada

- Course: Soft Computing and Computer Vision. 1 ECTS. **Taught in English and on blended learning modality (face to face and on-line).**
- Course: New Trends in Data Mining. 1 ECTS.

Master in "Scientific Information and Communication" (Información y Comunicación Científica)

Official master on ICT adapted to the HERA

Quality mark MCD2006-00476 of the Spain's Ministry of Education and Science (since 2004, MCD2004-00260)

Information Sciences Faculty (Facultad de Documentación y Comunicación). University of Granada

- Course: Applications of Evolutionary Computation to Information Retrieval. 3 ECTSs. **Taught on blended learning modality (face to face and on-line).**

2. Subjects taught in the University of Oviedo – European Centre for Soft Computing PhD Program. Academic Course 2011-12

Master in "Soft Computing and Intelligent Data Analysis"

Official international master on ICT adapted to the HERA. Fully taught in English

University of Oviedo and European Centre for Soft Computing

- Course: Evolutionary Computation and Metaheuristics. 1 ECTSs.

3. RESEARCH PROJECTS

**1. Aplicaciones de la Lógica Difusa con Algoritmos Genéticos
(Fuzzy Logic Applications with Genetic Algorithms)**

Funding Institution and Reference: Dirección General de Investigación, Ciencia y Tecnología (DGICYT) PB92-0933

Period: June 1993 - May 1996

Principal Researcher: Dr. José Luís Verdegay

**2. Aprendizaje de Sistemas Basados en Reglas Difusas Utilizando Algoritmos Genéticos y Redes Neuronales. Aplicaciones
(Fuzzy Rule-Based Systems Learning by means of Genetic Algorithms and Neural Networks. Applications)**

Funding Institution and Reference: Comisión Interministerial de Ciencia y Tecnología (CICYT) TIC96-0778

Period: August 1996 - July 1999

Budget: 39.000€

Principal Researcher: Dr. Francisco Herrera

**3. Procesador Borroso de Altas Prestaciones y su Sistema de Desarrollo: Entornos de Usuario y Aprendizaje
(High Performance Fuzzy Processor and its Development System: User and Learning Environments)**

Funding Institution and Reference: Comisión Interministerial de Ciencia y Tecnología (CICYT) TIC96-1393-C06-04

Period: August 1996 - July 1999

Principal Researcher: Dr. Miguel Delgado

4. GENESYS: Fuzzy Controllers and Smart Tuning Techniques for Energy Efficiency and Overall Performance of HVAC Systems in Buildings

Funding Institution and Reference: European Commission. JOULE Programme. Contract JOE-CT98-0090

Period: October 1998 - September 2000

Budget: 111.705 (for the University of Granada)

Principal Researcher (Granada node coordinator): Dr. Antonio González

**5. Análisis Inteligente de Datos Utilizando Sistemas Basados en Reglas Difusas y Algoritmos de Aprendizaje Evolutivos
(Intelligent Data Analysis by means of Fuzzy Rule-based Systems and Evolutionary Learning Algorithms)**

Funding Institution and Reference: Comisión Interministerial de Ciencia y Tecnología (CICYT) PB98-1319

Period: December 1999 - November 2002

Budget: 37.950€

Principal Researcher: Dr. Francisco Herrera

6. CIPRESES: Computación Inteligente para Análisis y Predicción de Series Temporales (Intelligent Computation for Time Series Analysis and Prediction)

Funding Institution and Reference: CICYT. TIC2000-1362-C02.

Granada Subproject Reference: **REMOTO: Redes Neuronales y Técnicas Híbridas para el Modelado de Series Temporales (Neural Networks and Hybrid Techniques for the Modeling of Time Series)**. TIC2000-1362-C02-01

Period: December 2000 - November 2003

Principal Researcher (Granada node coordinator): Dr. Miguel Delgado

7. Mejora de Metaheurísticas mediante Hibridación y sus Aplicaciones (Improvement of Metaheuristics by means of Hybridization and their Applications)

Funding Institution and Reference: Universidad de Granada. ISB 2325

Period: November 2002 - October 2003

Budget: 3000€

Principal Researcher: Dr. Oscar Córdón

8. GLIRS: Modelos de Recuperación de Información Documental Basados en Información Lingüística Difusa y Algoritmos Genéticos (Information Retrieval Models based on Fuzzy Linguistic Information and Genetic Algorithms)

Funding Institution and Reference: Comisión Interministerial de Ciencia y Tecnología (CICYT) TIC2002-03276

Period: December 2002 - November 2003

Budget: 13.800€

Principal Researcher: Dr. Enrique Herrera-Viedma

9. Hibridación de Algoritmos Evolutivos y Algoritmos de Optimización Basados en Colonias de Hormigas. Aplicación al Aprendizaje de Bases de Reglas Difusas y a Problemas de Bioinformática

(Hybridizing Evolutionary Algorithms and Ant Colony Optimization. Application to the Learning of Fuzzy Knowledge Bases and to Bioinformatics Problems)

Funding Institution and Reference: Ministerio de Ciencia y Tecnología TIC2003-00877

Period: December 2003 - November 2006

Budget: 34.960€

Principal Researcher: Dr. Oscar Córdón

10. Diseño y Experimentación Práctica de una Metodología de Evaluación de la Calidad de Cursos Virtuales a Nivel Universitario

(Design and Practical Experimentation of a Methodology for the Evaluation of Quality of University Virtual Courses)

Funding Institution and Reference: Unidad para la Calidad de las Universidades Andaluzas. Junta de Andalucía. Ref. UGR24

Period: December 2003 - December 2004

Budget: 26.029€

Principal Researcher: Dr. Oscar Córdón

11. MASSIVE: Modelling Advice and Support Services to Integrate Virtual Components in Higher Education

Funding Institution and Reference: European Commission. DG Education and Culture. E-learning Program. Contract 2004 - 3521 / 001 - 001 ELE-ELEB12

Period: January 2005 - December 2006

Budget: 990.267,27€

Principal Researcher: Dr. Oscar Córdón

12. REVE: REal Virtual Erasmus

Funding Institution and Reference: European Commission. DG Education and Culture. E-learning Program. Contract 2004 - 3041 / 001 - 001 ELE-ELEB12

Period: January 2005 - December 2006

Budget: 834.920€

Principal Researcher: Dr. George Van der Perre. EuroPACE 2000. Belgium

13. VICTORIOUS: VIRTual Curricula ThrOUGH Reliable InterOperating University Systems

Funding Institution and Reference: European Commission. DG Education and Culture. E-learning Program. Contract 2004 - 3324 / 001 - 001 ELE-ELEB12

Period: January 2005 - December 2006

Budget: 452.855€

Principal Researcher: Koen Delaere. Coimbra Group Office. Brussels. Belgium

14. Procesos de Regulación Genética sobre Microarrays usando Extracción de Conocimiento

(Genetic Regulatory Processes on Microarrays using Knowledge Extraction)

Funding Institution and Reference: Ministerio de Educación y Ciencia. Ayuda para Acciones Complementarias del Programa Nacional de Cooperación Internacional en Ciencia y Tecnología. Ref. BIO2004-270-E

Period: January 2005 - December 2005

Budget: 7.000€

Principal Researcher: Dr. Igor Zwir

15. Remote Control of Adaptive and Self-governing Mobile Robot Systems to Perform Joint Task by Beta-type Genetic Fuzzy Systems

Funding Institution and Reference: Agencia Española de Cooperación Internacional. 26/04/P/T

Period: January 2005 - December 2005

Budget: 15.100€

Principal Researcher: Dr. Jorge Casillas

16. SOCOVIFI: Soft Computing y Visión por Ordenador en Identificación Forense (Soft Computing and Computer Vision in Forensic Identification)

Funding Institution and Reference: Ministerio de Educación y Ciencia TIN2006-00829

Period: October 2006 - September 2009

Budget: 79.860€

Principal Researcher: Dr. Oscar Córdón

17. Metodología Automática para Identificación Forense por Superposición Fotográfica usando Algoritmos Evolutivos, Lógica Difusa y Registrado de Imágenes (Automatic Methodology to Forensic Identification by Photographic Superimposition Using Evolutionary Algorithms, Fuzzy Logic and Image Registration)

Funding Institution and Reference: Consejería de Innovación, Ciencia y Empresa, Junta de Andalucía P06-TIC-01619

Period: April 2007 - March 2010

Budget: 122.787€

Principal Researcher: Dr. Oscar Córdón

18. CONECTA: Herramientas de Gestión del Conocimiento en Empresas con Asistencias Técnica (Outsourcing) mediante Comunidades de Práctica, Folksonomías Corporativas y Tecnologías de la Web Semántica

(Knowledge Management Tools in Companies with Outsourcing by means of Communities of Practice, Corporative Folksonomies and Web Semantics Technologies)

Funding Institution and Reference: Ministerio de Industria, Comercio y Turismo. Proyecto de Fomento de la Investigación Tecnológica (PROFIT) FIT-350400-2007-19

Period: January 2007 - December 2007

Budget: 153.860€ (38.220€ for the ECSC)

Principal Researcher (ECSC node coordinator): Dr. Luis Magdalena

19. PROCOGNIT: Marco Tecnológico para la Cognición de Procesos Industriales (Technological Framework for Industrial Processes Cognition)

Funding Institution and Reference: Ministerio de Ciencia e Innovación. Proyecto del Programa Nacional de Proyectos de Investigación Aplicada. Subprograma Investigación aplicada-Centros Tecnológicos IAP-020100-2008-15

Period: January 2008 - December 2008

Budget: 119.299€ (22.637 for the ECSC)

Principal Researcher: Dr. Eusebio Gainza. Fundación LEIA

Principal Researcher (ECSC node coordinator): Dr. Oscar Córdón

20. OASIS: Operación de Autopistas Seguras, Inteligentes y Sostenibles (Operation of Safe, Intelligent and Sustainable Highways)

Funding Institution and Reference: Centro para el Desarrollo Tecnológico Industrial (CDTI). Ministerio de Ciencia e Innovación. Proyecto del Programa de Consorcios Estratégicos Nacionales en Investigación Técnica CENIT-2008-1016

Period: March 2008 - December 2011

Budget: 13.910.968€ (262.000€ for the ECSC)

Principal Researcher: F. García Linares. OHL Concesiones

Principal Researcher (ECSC node coordinator): Dr. Luis Magdalena

21. mIO!: Tecnologías para Prestar Servicios en Movilidad en el Futuro Universo Inteligente (Technologies for Providing Services under Mobility in the Future Intelligent Universe)

Funding Institution and Reference: Centro para el Desarrollo Tecnológico Industrial (CDTI). Ministerio de Ciencia e Innovación. Proyecto del Programa de Consorcios Estratégicos Nacionales en Investigación Técnica CENIT-2008-1019

Period: March 2008 - December 2011

Budget: 10.025.665€ (228.375 for the ECSC)

Principal Researcher: Tomás Cruz. Telefónica I+D

Principal Researchers (ECSC node coordinators): Dr. Oscar Córdón, Dr. Gracián Triviño

**22. RESULTA: Red de Consultoría para la Gestión de Procesos y Relaciones
(Consulting Network for Processes and Relationships Management)**

Funding Institution and Reference: Ministerio de Industria, Turismo y Comercio. Proyecto Singular Estratégico. Subprograma Avanza I+D 2009. Prioridad Temática: Internet del Futuro. TSI-020301-2009-31

Period: June 2009 - January 2011

Budget: 1.350.540€ (277.354,73€ for the ECSC)

Principal Researcher (ECSC node coordinator): Dr. Oscar Córdón

**23. PROCOGNIT2: Marco Tecnológico para la Cognición de Procesos Industriales
(Technological Framework for Cognitive Technologies in Industrial Processes)**

Funding Institution and Reference: Ministerio de Industria, Turismo y Comercio PID-020100-2009-7

Budget: 68.575€ (14.415€ for the ECSC)

Period: October 2009 - December 2010

Principal Researcher (ECSC node coordinator): Dr. Oscar Córdón

24. MIBISOC: Medical Imaging Using Bio-inspired and Soft Computing

Funding Institution and Reference: European Commission. Marie Curie Actions. FP7-PEOPLE-ITN-2008. Contract Ref. 238819.

Budget: 3.314.788€ (674.740€ for the ECSC)

Period: October 2009 – September 2013

Principal Researcher (Global project coordinator): Dr. Oscar Córdón

**25. SIMMRA: Metaheurísticas Mono- y Multi-Objetivo para Aplicaciones Reales: Equilibrado de Líneas de Montaje, Minería de Mapas Visuales de la Ciencia y Modelado Forense 3D
(Single- and Multi-objective Metaheuristics for Real-world Applications: Assembly Line Balancing, Visual Science Map Mining, and 3D Forensic Modeling)**

Funding Institution and Reference: Ministerio de Ciencia e Innovación TIN2009-07727

Budget: 147.400€

Period: January 2010 - December 2012

Principal Researcher: Dr. Oscar Córdón, Dr. Sergio Damas

**26. ACARO-3D: Clasificación Automática de Restos Arqueológicos Obtenidos con Técnicas Inteligentes de Reconstrucción 3D
(Automatic Classification of Archeological Remains Obtained with Intelligent 3D Reconstruction Techniques)**

Funding Institution and Reference: Universidad de Jaén R1/12/2010/61

Budget: 7.000€

Period: March 2011 - February 2013

Principal Researcher: Dr. José Santamaría

27. MEPROCS: New MEthodologies and PROtocols of forensic identification by Craniofacial Superimposition

Funding Institution and Reference: European Commission. FP7 Security Call. Topic SEC-2011.1.4-3 – Advanced forensic framework – Coordination and Support Actions. FP7-SEC-2011-1, Grant Agreement number 285624.

Budget: 1.005.800€ (102.185€ for the UGR)

Period: February 2012 - July 2014

Principal Researcher (UGR node coordinator): Dr. Oscar Córdón

28. SOCOVIFI2: Nuevos Desarrollos sobre Soft Computing y Visión por Ordenador en Identificación Forense
(New Developments on SOft COmputing and Computer VIsion Techniques in Forensic Identification)

Funding Institution and Reference: Ministerio de Economía y Competitividad TIN2012-38525-C02

Budget: 113.500€

Period: January 2013 - December 2015

Principal Researcher: Dr. Oscar Córdón

29. Nuevos Desarrollos en Métodos Automáticos de Identificación Forense por Superposición Craneofacial Basados en Técnicas de Soft Computing
(New Developments on Automatic Methods of Forensic Identification by Craniofacial Superimposition Based on Soft Computing Techniques)

Funding Institution and Reference: Consejería de Innovación, Ciencia y Empresa, Junta de Andalucía P11-TIC-7745

Budget: 192.771,05€

Period: June 2013 - June 2017

Principal Researcher: Dr. Oscar Córdón

30. NEWSOCO: Nuevas Metodologías de Soft Computing para Problemas de Alta Complejidad. Aplicación al Diseño de Modelos de Sistemas Sociales y de Técnicas Automáticas de Identificación Forense
(NEW SOft COmputing Methodologies for Highly Complex Problems. Application to Social System Modeling and Automatic Forensic Identification)

Funding Institution and Reference: Ministerio de Economía y Competitividad TIN2015-67661-P

Budget: 115.555€

Period: January 2016 - December 2018

Principal Researcher: Dr. Oscar Córdón

31. DriveUGR: Infraestructura de almacenamiento orientada a un Servicio de Cloud Privado para Investigación
(Storage Infrastructure for a Research Private Cloud Service)

Funding Institution and Reference: Ministerio de Economía y Competitividad UNGR15-CE-3750

Budget: 202.786€

Period: January 2017 - December 2018

Principal Researcher: Dr. Oscar Córdón

32. SKELETON-ID: Soft Computing and Computer Vision for Comparative Radiography in Forensic Identification

Funding Institution and Reference: European Commission. Horizon 2020 - Research and Innovation Framework Programme. Marie Slowoska Curie Actions. H2020-MSCA-IF-2016. Proposal number 746592

Budget: 170.121,60€

Period: February 2018 – January 2020

Principal Researcher: Dr. Oscar Córdón

PARTICIPATION IN NETWORKS OF EXCELLENCE AND COORDINATED ACTIONS

1. Network of Excellence in Evolutionary Computing (EvoNet)

Funding Institution and Reference: European Commission DG III Industry. Esprit Program

Period: May 1996 - April 2003

Principal Researcher (University of Granada DECSAI node coordinator): Dr. Francisco Herrera

2. Red Andaluza de Investigación en Algoritmos Evolutivos y Bioinspirados (Red RADIAEB-2002-2005)

(Andalusian Research Network on Evolutionary and Bioinspired Algorithms)

Funding Institution and Reference: Plan Andaluz de Investigación - Programa de TIC

Period: September 2002 – June 2005

Network Coordinator: Dr. Francisco Herrera

3. Red Española de Procedimientos Metaheurísticos en Optimización (Red HEUR 2003-2005)

(Spanish Research Network on Metaheuristics)

Funding Institution and Reference: Ministerio de Ciencia y Tecnología TIC2002-10886E

Period: May 2003 - April 2007

Network Coordinator: Dr. Rafael Martí

4. Red Temática Nacional sobre Decisión, Modelado de Preferencias y Agregación (Red REDEMAP)

(Spanish Research Network on Decision Making, Preference Modeling and Aggregation)

Funding Institution and Reference: Ministerio de Ciencia y Tecnología TIC-2002-11942-E

Period: June 2004 - May 2005

Network Coordinator: Dr. Enrique Herrera Viedma

5. Red Temática Nacional sobre Sistemas de Acceso a la Información en la Web basados en Soft-Computing (Red SCIA)

(Spanish Research Network on Access Systems to Web Information based on Soft-Computing)

Funding Institution and Reference: Ministerio de Educación y Ciencia TIN2004-20503-E

Period: January 2005 - December 2006

Network Coordinator: Dr. José Angel Olivas

6. Red Temática Nacional sobre Minería de Datos y Aprendizaje (Red MIDAS)

(Spanish Research Network on Data Mining and Machine Learning)

Funding Institution and Reference: Ministerio de Educación y Ciencia TIN2006-27675-E

Period: January 2007 - December 2008

Network Coordinator: Dr. José Riquelme

7. Red Temática Española para el Avance y la Transferencia de la Inteligencia Computacional Aplicada (Red ATICA)

(Spanish Research Network for the Advancement and Transfer of Applied Computational Intelligence)

Funding Institution and Reference: Ministerio de Ciencia e Innovación TIN2011-14083-E

Period: January 2012 - December 2012

Network Coordinator: Dr. Miquel Sànchez i Marrè

8. UNESCO UniTwin Complex Systems Digital Campus (CS-DC) (<http://unitwin-cs.org/>)

Funding Institution and Reference: UNESCO University Twinning and Networking Programme.

Budget: 10.000.000€

Period: August 2013 - July 2019

Network Coordinators: Paul Bourguin (Ecole Polytechnique, President), Cyrille Bertelle (Le Havre University) and Pierre Collet (Strasbourg University) (Coordinators)

Principal Researcher (UGR node coordinator): Dr. Oscar Cerdón

4. R&D CONTRACTS

1. Estudio para la Definición de la Estructura Tecnológica y de Contenidos de la Unidad de Gestión del Conocimiento de Puleva Food (Study for the Definition of the Technological and Contents Structure of the Knowledge Management Unit of Puleva Food)

Research Contract number 2087 between the company Puleva Food S.A. and the University of Granada via the Research Transference Office

Period: 15 April 2004 - 14 April 2006

Principal Researcher: Dr. Oscar Córdón

Number of participating researchers: 5

Budget: 55.355 euros

2. Sistemas Inteligentes para la Racionalización y Optimización de Capacidades y Optimización de Capacidades y Operaciones en Tenneco Automotive (Intelligent Systems to Optimize the Capacities and Operations of Tenneco Automotive Ibérica)

Research Contract IDEPA IDE/2007/000482 between the company Tenneco Automotive Iberica S.A. and the European Centre for Soft Computing. Funded by the Asturias' Regional Government (Institute for the Economic Development)

Period: 1 March 2007 – 28 February 2008

Principal Researcher: Dr. Oscar Córdón

Number of participating researchers: 3

Budget: 53.360 euros

3. CAJACASH: Herramienta de optimización de efectivo en oficinas (Cash Flow Optimization Tool for Branch Offices)

Research Contract between CajAstur and the European Centre for Soft Computing

Period: 1 July 2009 – 1 March 2010

Principal Researcher: Dr. Sergio Damas

Budget: 34.800 euros

4. Modelo de Previsión de Producción de Parques Eólicos (Wind Farm Energy Production Forecasting Model)

Research Contract IDI.PA4003 between the company Nuevas Energías de Occidente S.L. (Neo Energía) (currently, EDP Renewables Europe S.L.) and the European Centre for Soft Computing

Period: 1 September 2009 – 30 July 2011

Principal Researcher: Dr. Oscar Córdón

Number of participating researchers: 3

Budget: 87.000 euros

5. Contrato de Asesoramiento y Apoyo Técnico al European Centre for Soft Computing (Scientific Consultancy for the European Centre for Soft Computing)

Research Contract number 3076 between the Foundation for the Advancement of Soft Computing (European Centre for Soft Computing) and the University of Granada via the Research Transference Office

Period: 1 October 2011 – 31 December 2015

Principal Researcher: Dr. Oscar Córdón

Number of participating researchers: 1
Budget: 161.224 euros

6. IDENTIMOD-ZIO-SD: Herramienta de Apoyo a la Toma de Decisiones Estratégicas en Sistemas de Imagen Corporativa v1.0

(Support Tool for Strategic Decision Making in Corporate Image System v1.0)

Research Contract IDI.PA4005 between the company R0d Brand Consultants and the European Centre for Soft Computing

Period: 15 February 2013 – 14 May 2014

Principal Researchers: Drs. Oscar Cordón, Sergio Damas, and Manuel Chica

Number of participating researchers: 7

Budget: 169.400 euros

7. Segundo Modelo de Previsión de Producción de Parques Eólicos

(Second Wind Farm Energy Production Forecasting Model)

Research Contract IDI.PA4006 between the company EDP Renewables Europe S.L. and the European Centre for Soft Computing

Period: 3 March 2013 – 31 October 2013

Principal Researcher: Drs. Oscar Cordón and Manuel Chica

Number of participating researchers: 4

Budget: 60.500 euros

8. TOXDTECT: Embalaje Innovador para la Detección de la Calidad de la Carne Fresca y la Predicción de la Vida Útil

(Innovative Packaging for the Detection of Fresh Meat Quality and Prediction of Shelf-life)

Research Contract Inspiralia/TOXDTECT PROJECT/ECSC/2014-2015 between the company TECNOLOGIAS AVANZADAS INSPIRALIA SL and the European Centre for Soft Computing

Period: 1 January 2014 – 31 December 2015

Principal Researcher: Dr. Manuel Chica

Number of participating researchers: 4

Budget: 75.625 euros

9. ZIO-ABM: Simulación Social para Estrategias de Marketing. Aplicación al Sector Seguros y Gran Consumo.

(Social Simulation for Marketing Strategies. Application to the Insurance and Retail and Consumer Sectors)

Research Contract between the company R0d Brand Consultants and the European Centre for Soft Computing

Period: 1 March 2014 – 1 Sep 2015

Principal Researchers: Drs. Oscar Cordón, Sergio Damas, and Manuel Chica

Number of participating researchers: 7

Budget: 30.000 euros

10. Contrato de Asesoramiento y Apoyo Técnico a la Empresa Tecnologías Avanzadas Inspiralia S.A. en Tareas de Simulación, Minería de Datos y Big Data (Scientific Consultancy for Tecnologías Avanzadas Inspiralia S.A. on Simulation, Data Mining, and Big Data)

Research Contract 4112 between Tecnologías Avanzadas Inspiralia S.A. and the University of

Granada via the General Foundation University of Granada-Bussiness

Period: 1 March 2015 – 31 August 2017

Principal Researchers: Drs. Oscar Cordón and Francisco Herrera

Number of participating researchers: 2

Budget: 198.134,47 euros

11. Desarrollo de un Sistema Semi-automático para el Diseño de la Instalación de Geosintéticos Optimizando el Material o la Distancia de la Soldadura (Development of a Semi-automatic System for the Layout of Biosynthetics Optimizing the Material Consumption or the Welding Distance)

Research Contract 4184 between Atarfil S.L. and the University of Granada via the General Foundation University of Granada-Bussiness

Period: 15 September 2015 – 14 June 2016

Principal Researchers: Drs. Oscar Cordón and Manuel Lozano

Number of participating researchers: 5

Budget: 48.400 euros

12. Contrato de Asesoramiento a la Empresa R0d Brand Consultants S.L. en Modelado Basado en Agentes y Ciencia de Datos (Scientific Consultancy for R0d Brand Consultants S.L. on Agent-based Modeling and Big Data)

Research Contract 4382 between R0d Brand Consultants S.L. and the University of Granada via the General Foundation University of Granada-Bussiness

Period: 1 January 2017 – 31 December 2019

Principal Researcher: Dr. Oscar Cordón

Number of participating researchers: 5

Budget: 15.492,13 euros

5. PATENTS

Inventors (in signature order): Cordon, O., Damas, S., Ibanez, O., Santamaría, J., Alemán, I., Botella, M.

Title: **Método y Sistema de Identificación Forense por Superposición Craniofacial (Method and System for Forensic Identification by Craniofacial Superimposition)**

Application No.: P200901732/3 Application date: 30/07/2009

Publication No.: P200901732 Publication date: 15/02/2011

Priority Country: Spain

Owning Institutions: Foundation for the Advancement of Soft Computing, University of Granada

Inventors (in signature order): Cordon, O., Damas, S., Ibanez, O., Santamaría, J., Alemán, I., Botella, M.

Title: **Sistema de Identificación Forense por Superposición Craniofacial Basado en Soft Computing (Forensic Identification System Using Craniofacial Superimposition Based on Soft Computing)**

Publication No.: WO/2011/01274 Publication date: 03/02/2011

International application No.: PCT/ES2010/00350 International filing date: 30/07/2010

Priority Data: P200901732 30.07.2009 ES Designated States: International

Owning Institutions: Foundation for the Advancement of Soft Computing, University of Granada

Web: <http://www.wipo.int/patentscope/search/en/WO2011012747>

Mexican patent:

Application No.: MX/a/2012/000942

Publication No.: 315500

Publication date: 20/11/2013

Renewal: 2º five-year period (before July, 2018)

Maximum validity: 20 years

This patent was exploited by the *European Centre for Soft Computing* and the resulting software product (<http://www.face2skull.com/>) was distributed in Mexico by *Asesoría y Proveedora de Equipos para Laboratorio (Aspelab), S.A.*

6. SCIENTIFIC PUBLICATIONS

6.1. BOOKS

O. Cordón, F. Herrera, F. Hoffmann, L. Magdalena.

GENETIC FUZZY SYSTEMS. Evolutionary Tuning and Learning of Fuzzy Knowledge Bases.

World Scientific, July 2001. ISBN 981-02-4016-3

(Advances in Fuzzy Systems - Applications and Theory, Vol. 19)

Number of times cited (source: Google Scholar. Date: May, 20, 2016): 1127

6.2. EDITED BOOKS

1. *J.M. Benítez, O. Cordón, F. Hoffmann, R. Roy (Eds.).* **Advances in Soft Computing – Engineering Design and Manufacturing.** Springer, 2003. ISBN 1-85233-755-9. Engineering Series, Vol. XII.
2. *J. Casillas, O. Cordón, F. Herrera, L. Magdalena (Eds.).* **Interpretability Issues in Fuzzy Modeling.** Springer-Verlag, 2003. ISBN 3-540-02932-X. Studies in Fuzziness and Soft Computing, Vol. 128.
3. *J. Casillas, O. Cordón, F. Herrera, L. Magdalena (Eds.).* **Accuracy Improvements in Linguistic Fuzzy Modeling.** Springer-Verlag, 2003. ISBN 3-540-02933-8. Studies in Fuzziness and Soft Computing, Vol. 129.

6.3. EDITED CONFERENCE PROCEEDINGS

1. O. Cordón, F. Herrera, R. Alcalá, J. Alcalá-Fdez., J. Casillas, M.J. del Jesus, R. Pérez, I. Rojas, P. Villar (Eds.), **First International Workshop on Genetic Fuzzy Systems (GFS2005)**, Granada (Spain), March 2005. ISBN: 84-689-1117-8.
2. P. Angelov, D. Filev, N. Kasabov, O. Cordón (Eds.), **Proceedings of the 2006 International Symposium on Evolving Fuzzy Systems (EFS06)**, IEEE, Ambleside (UK), September 2006. IEEE Catalog Number: 06EX1440. ISBN: 0-7803-9718-5.
3. F. Hoffmann, O. Cordón, P. Angelov, F. Klawonn (Eds.), **Proceedings of the 2008 International Workshop on Genetic and Evolving Fuzzy Systems (GEFS08)**, IEEE, Witten-Bommerholz (Germany), March 2008. IEEE Catalog Number: CFP0895A. ISBN: 978-1-4244-1613-4.
4. J.M. Alonso, O. Cordón, L. Magdalena (Eds.), **Actas del XIV Congreso Español sobre Tecnologías y Lógica Fuzzy (ESTYLF2008)**, Langreo-Mieres (España), Septiembre 2008. ISBN: 978-84-691-5807-4.
5. O. Cordón, F. Hoffmann, L. Magdalena (Eds.), **Proceedings of the 2010 Fourth International Workshop on Genetic and Evolutionary Fuzzy Systems (GEFS2010)**, IEEE, Mieres (Spain), March 2010. IEEE Catalog Number: CFP1095A. ISBN: 978-1-4244-4622-3.
6. O. Cordón, E.E. Kerre, M. Dorigo, L. Bai, S. Cagnoni, F. Herrera, L. Ascari, J. Hennig (Eds.), **Proceedings of the International Conference on Medical Imaging using Bio-inspired and Soft Computing (MIBISOC 2013)**, Brussels (Belgium), May 2013. ISBN: 978-84-695-7710-3.

6.4. EDITORIALS OF SPECIAL ISSUES EDITED IN JOURNALS

1. O. Cordon, F. Herrera, F. Hoffmann and L. Magdalena. **Preface: Recent advances on genetic fuzzy systems.** *Special Issue on Recent Advances on Genetic Fuzzy Systems. Information Sciences*, Volume 136, Numbers 1-4, 2001, 1-5.
2. O. Cordon, F. Herrera, T. Stützle. **Guest Editorial: “Ant Colony Optimization: Models and Applications”.** *Special Issue on Ant Colony Optimization: Models and Applications. Mathware and Soft Computing*, Volume 9, Numbers 2-3, 2002, 137-139.
3. O. Cordon, E. Herrera-Viedma, **Editorial: Soft Computing Applications to Intelligent Information Retrieval on the Internet.** *Special Issue on Soft Computing Applications to Intelligent Information Retrieval on the Internet. International Journal of Approximate Reasoning*, Volume 34, Numbers 2-3, 2003, 89-95.
4. O. Cordon, F. Gomide, F. Herrera, F. Hoffmann and L. Magdalena. **Preface: Genetic Fuzzy Systems: New Developments.** *Special Issue on Genetic Fuzzy Systems: New Developments. Fuzzy Sets and Systems*, Volume 141, Number 1, 2004, 1-3.
5. O. Cordon, R. Alcalá, J. Alcalá-Fdez., I. Rojas. **Preface: Genetic Fuzzy Systems: What’s Next?,** *Special Issue on Genetic Fuzzy Systems: What’s Next? IEEE Transactions on Fuzzy Systems*, Volume 15, Number 4, 2007, 533-535.
6. J.M. Alonso, O. Cordon, L. Magdalena. **Preface: Selected Papers from ESTYLF2008,** *Special Issue on “Selected Papers from the ESTYLF2008 Conference”. Mathware and Soft Computing*, Volume XVI, Number 1, 2009, 1-3.
7. O. Cordon, A. Fernández-Caballero, J.A. Gámez, F. Hoffmann. **Preface: The Impact of Soft Computing for the Progress of Artificial Intelligence,** *Special Issue on “The Impact of Soft Computing for the Progress of Artificial Intelligence”. Applied Soft Computing*, Volume 11, Number 2, 2011, 1491-1492.
8. O. Cordon, P. Kazienko, B. Trawiński. **Preface: Special Issue on Hybrid and Ensemble Methods in Machine Learning,** *Special Issue on “Hybrid and Ensemble Methods in Machine Learning”. New Generation Computing.* Volume 29, Number 3, 2011, 241-244.
9. O. Cordon, P. Kazienko. **Preface: Special Section on Hybrid and Ensemble Methods in Machine Learning,** *Special Section on “Hybrid and Ensemble Methods in Machine Learning”. International Journal of Applied Mathematics and Computer Science.* Volume 22, Number 4, 2012, 787-881.
10. B. Çatay, R. Chiong, P. Siarry, O. Cordon. **Guest Editorial: Computational Intelligence in Production and Logistics Systems: Solving Vehicle Routing, Supply Chain Network, and Air-Traffic Trajectory Planning Problems.** *Special Issue on “Computational Intelligence in Production and Logistics Systems (CIPLS)”. IEEE Computational Intelligence Magazine*, Volume 9, Number 4, 2014, 16-17.

11. J. Alcalá-Fdez, J.M. Alonso, O. Cordon. **Guest Editorial: Special Issue on Computational Intelligence Software**. *Special Issue on “Computational Intelligence Software”*. *IEEE Computational Intelligence Magazine*, Volume 11, Number 2, 2016, 13-14.
12. J.M. Alonso, O. Cordon, L. Magdalena. **Guest Editorial: Special Issue on Selected Papers from IFSA-EUSFLAT2015 Conference**. *Virtual Special Issue on “Selected Papers from IFSA-EUSFLAT2015 Conference”*. *International Journal of Approximate Reasoning*, DOI:10.1016/j.ijar.2016.03.002, 2016. <http://www.sciencedirect.com/science/journal/0888613X/vsi/103BH1J40FP>.

6.5 JOURNAL PAPERS INDEXED IN THE SCI-JCR

1. *I. Moya, M. Chica, J.L. Sáez-Lozano, O. Cordón. An agent-based model for understanding the influence of the 11-M terrorist attacks on the 2004 Spanish elections.* Knowledge-based Systems (2017) in press. *Impact factor 2015: 4.943. Category: COMPUTER SCIENCE, CYBERNETICS. Order: 1/22. Q1.*
2. *M. Chica, J. Barranquero, T. Kajdanowicz, S. Damas, O. Cordón. moGrams: A Network-based Methodology for Visualizing the Set of Non-dominated Solutions in Multiobjective Optimization.* IEEE Transactions on Cybernetics (2017) in press. *Impact factor 2015: 4.943. Category: COMPUTER SCIENCE, CYBERNETICS. Order: 1/22. Q1.*
3. *C. Campomanes-Álvarez, Sergio Guadarrama, O. Ibáñez, O. Cordón. An Experimental Study on Fuzzy Distances for Skull-Face Overlay in Craniofacial Superimposition.* Fuzzy Sets and Systems (2017) in press. *Impact factor 2015: 2.098. Category: COMPUTER SCIENCE, THEORY & METHODS. Order: 13/105. Q1.*
4. *M. Chica, J. Barranquero, T. Kajdanowicz, S. Damas, O. Cordón. Multimodal optimization: an effective framework for model calibration.* Information Sciences 375:1 (2017) 79-97. *Impact factor 2015: 3.364. Category: COMPUTER SCIENCE, INFORMATION SYSTEMS. Order: 8/143. Q1.*
5. *C. Campomanes-Álvarez, O. Ibáñez, O. Cordón. Design of Criteria to Assess Craniofacial Correspondence in Forensic Identification based on Computer Vision and Fuzzy Integrals.* Applied Soft Computing 46 (2016) 596–612. *Impact factor 2015: 2.857. Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE. Order: 21/130. Q1.*
6. *M. Chica, O. Cordón, S. Damas, V. Iglesias, J. Mingot. Identimod: Modeling and Managing Brand Value using Soft Computing.* Decision Support Systems 89 (2016) 41–55. *Impact factor 2015: 2.604. Category: COMPUTER SCIENCE, INFORMATION SYSTEMS. Order: 14/143. Q1.*
7. *C. Zarco, S. del Barrio-García, O. Cordón. Propuesta de Rankings de Universidades Españolas en Redes Sociales.* El Profesional de la Información 25:4 (2016) 684-698. *Impact factor 2015: 0.710. Category: INFORMATION SCIENCE & LIBRARY SCIENCE. Order: 51/86. Q3.*
8. *P. Mesejo, O. Ibáñez, O. Cordón, S. Cagnoni. A Survey on Image Segmentation using Metaheuristic-based Deformable Models: State of the Art and Critical Analysis.* Applied Soft Computing 44 (2016) 1-29. *Impact factor 2015: 2.857. Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE. Order: 21/130. Q1.*
9. *N. Bova, V. Gal, O. Ibáñez, O. Cordón. Deformable Models Direct Supervised Guidance: A Novel Paradigm for Automatic Image Segmentation.* Neurocomputing 177 (2016) 317-333. *Impact factor 2015: 2.392. Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE. Order: 31/130. Q1.*
10. *M. Chica, J. Bautista, O. Cordón, S. Damas. A multiobjective model and evolutionary*

- algorithms for robust time and space assembly line balancing under uncertain demand.** *Omega - International Journal of Management Science* 58:1 (2016) 55-68. *Impact factor* 2015: 3.962. *Category: OPERATIONS RESEARCH & MANAGEMENT SCIENCE.* *Order: 2/82. Q1.*
11. *M. Chica, O. Cordón, S. Damas, J. Bautista. Interactive Preferences in Multiobjective Ant Colony Optimization for Assembly Line Balancing.* *Soft Computing* 19:10 (2015) 2891-2903. *Impact factor: 1.630. Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE.* *Order: 56/130. Q2.*
 12. *B.R. Campomanes-Álvarez, O. Ibáñez, C. Campomanes-Álvarez, S. Damas, O. Cordón. Modeling the Facial Soft Tissue Thickness for Automatic Skull-Face Overlay.* *IEEE Transactions on Information Forensics & Security* 10:10 (2015) 2057-2070. *Impact factor: 2.441. Category: COMPUTER SCIENCE, THEORY & METHODS.* *Order: 10/105. Q1.*
 13. *E. Bermejo, O. Cordón, S. Damas, J. Santamaría. A comparative study on the application of advanced bacterial foraging models to image registration.* *Information Sciences* 295 (2015) 160–181. *Impact factor: 3.364. Category: COMPUTER SCIENCE, INFORMATION SYSTEMS.* *Order: 8/143. Q1.*
 14. *B.R. Campomanes-Álvarez, O. Ibáñez, F. Navarro, I. Alemán, O. Cordón, S. Damas. Dispersion assessment in the location of facial landmarks on photographs.* *International Journal of Legal Medicine* 129:1 (2015) 227–236. *Impact factor: 2.862. Category: MEDICINE, LEGAL.* *Order: 2/15. Q1.*
 15. *A. Palacios, K. Trawinski, O. Cordón, L. Sánchez. Cost-sensitive Learning of Fuzzy Rules for Imbalanced Classification Problems using Furia.* *International Journal of Uncertainty, Fuzziness and Knowledge-based Systems* 22:5 (2014) 643-675. *Impact factor: 0.954. Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE.* *Order: 82/123. Q3.*
 16. *B.R. Campomanes-Álvarez, O. Ibáñez, F. Navarro, I. Alemán, M. Botella, S. Damas, O. Cordón. Computer Vision and Soft Computing for Automatic Skull-Face Overlay in Craniofacial Superimposition.* *Forensic Science International* 245 (2014) 77-86. *Impact factor: 2.140. Category: MEDICINE, LEGAL.* *Order: 3/15. Q1.*
 17. *J.M. García-Torres, S. Damas, O. Cordón, J. Santamaría. A case study of innovative population-based algorithms in 3D modeling: Artificial bee colony, biogeography-based optimization, harmony search.* *Expert Systems with Applications* 41:4 Part 2 (2014) 1750–1762. *Impact factor: 2.240. Category: OPERATIONS RESEARCH & MANAGEMENT SCIENCE.* *Order: 12/81. Q1.*
 18. *P. Shelokar, A. Quirin, O. Cordón. Three-Objective Subgraph Mining using Multiobjective Evolutionary Programming.* *Journal of Computer and System Sciences* 80:1 (2014) 16-26. *Impact factor: 1.138. Category: COMPUTER SCIENCE, THEORY & METHODS.* *Order: 38/102. Q2.*
 19. *D.P. Pancho, J.M. Alonso, O. Cordón, A. Quirin, L. Magdalena. FINGRAMS: Visual Representations of Fuzzy Rule-Based Inference for Expert Analysis of Comprehensibility.* *IEEE Transactions on Fuzzy Systems* 21:6 (2013) 1133-1149. *Impact*

factor: 6.306. Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE. Order: 2/121. Q1.

20. K. Trawinski, O. Cordon, L. Sanchez, A. Quirin. **Multiobjective Genetic Classifier Selection For Random Oracles Fuzzy Rule-Based Classifier Ensembles: How Beneficial Is The Additional Diversity?** Knowledge-based Systems 54 (2013) 3-21. *Impact factor: 3.058. Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE. Order: 15/121. Q1.*
21. N. Bova, O. Ibañez, O. Cordon. **Extended Topological Active Nets.** Image and Vision Computing 31:12 (2013) 905-920. *Impact factor: 1.581. Category: COMPUTER SCIENCE, SOFTWARE ENGINEERING. Order: 23/105. Q1.*
22. B.R. Campomanes-Álvarez, O. Cordon, S. Damas. **Evolutionary Multi-Objective Optimization for Mesh Simplification of 3D Open Models.** Integrated Computer-Aided Engineering 20:4 (2013) 375-390. *Impact factor: 4.667. Category: ENGINEERING, MULTIDISCIPLINARY. Order: 1/90. Q1.*
23. K. Trawinski, O. Cordon, L. Sanchez, A. Quirin. **A Genetic Fuzzy Linguistic Combination Method for Fuzzy Rule-Based Multiclassifiers.** IEEE Transactions on Fuzzy Systems 21:5 (2013) 950-965. *Impact factor: 6.306. Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE. Order: 2/121. Q1.*
24. J. Rada-Vilela, M. Chica, O. Cordon, S. Damas. **A comparative study of multi-objective ant colony optimization algorithms for the time and space assembly line balancing problem.** Applied Soft Computing 13:11 (2013) 4370-4382. *Impact factor: 2.679. Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE. Order: 20/121. Q1.*
25. J. Santamaría, S. Damas, O. Cordon, A. Escámez. **Self-Adaptive Evolution: Towards New Parameter Free Image Registration Methods.** IEEE Transactions on Evolutionary Computation 17:4 (2013) 545-557. *Impact factor: 5.545. Category: COMPUTER SCIENCE, THEORY & METHODS. Order: 1/102. Q1.*
26. M. Chica, O. Cordon, S. Damas, J. Bautista. **A robustness information and visualization model for time and space assembly line balancing under uncertain demand.** International Journal of Production Economics 145:2 (2013) 761-772. *Impact factor 2014: 2.752. Category: ENGINEERING, INDUSTRIAL. Order: 1/43. Q1.*
27. E. Bermejo, O. Cordon, S. Damas, J. Santamaría. **Quality time-of-flight range imaging for feature-based registration using bacterial foraging.** Applied Soft Computing 13:6 (2013) 3178-3189. *Impact factor: 2.679. Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE. Order: 20/121. Q1.*
28. P. Shelokar, A. Quirin, O. Cordon. **A Multiobjective Evolutionary Programming Framework for Graph-based Data Mining.** Information Sciences 273:1 (2013) 118-136. *Impact factor: 3.893. Category: COMPUTER SCIENCE, INFORMATION SYSTEMS. Order: 8/135. Q1.*
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- 16-32. *Impact factor: 2.706. Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE. Order: 19/121. Q1.*
30. P. Shelokar, A. Quirin, O. Cordón. **MOSubdue: A Pareto Dominance-based Multiobjective Subdue Algorithm for Frequent Subgraph Mining.** Knowledge and Information Systems 34:1 (2013) 75-108. *Impact factor 2014: 1.782. Category: COMPUTER SCIENCE, INFORMATION SYSTEMS. Order: 30/139. Q1.*
31. J. Santamaría, S. Damas, J.M. García-Torres, O. Cordón. **Self-adaptive evolutionary image registration using differential evolution and artificial immune systems.** Pattern Recognition Letters 33:16 (2012) 2065-2070. *Impact factor: 1.266. Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE. Order: 56/114. Q2.*
32. O. Ibáñez, O. Cordón, S. Damas. **A cooperative coevolutionary approach dealing with the skull-face overlay uncertainty in forensic identification by craniofacial superimposition.** Soft Computing 16:5 (2012) 797-808. *Impact factor: 1.124. Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE. Order: 63/114. Q3.*
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38. S. Damas, O. Cordón, O. Ibáñez, J. Santamaría, I. Alemán, MC. Botella, F. Navarro. **Forensic Identification by Computer-aided Craniofacial Superimposition: A Survey.** ACM Computing Surveys 43:4 (2011) 27:1-27. *Impact factor: 4.529. Category: COMPUTER SCIENCE, THEORY & METHODS. Order: 1/99. Q1.*
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Impact factor: 4.260. Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE. Order: 5/111. Q1.

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43. *O. Cordón, E. Herrera-Viedma, M. Luque, F. Moya, C. Zarco. Aprendizaje Automático de Consultas Booleanas Extendidas para Sistemas de Recuperación de Información Difusos Mediante Algoritmos SA-P.* Actas del XI Congreso Español Sobre Tecnologías y Lógica Fuzzy (ESTYLF'2002), León, September 2002, 117-122.
44. *O. Cordón, I. Fernández de Viana, F. Herrera. Análisis de las tres componentes que distinguen al sistema de la mejor peor hormiga.* Actas del Primer Congreso Español de Algoritmos Evolutivos y Bioinspirados (AEB'2002), Mérida 2002, 260-266.
45. *O. Cordón, F. Herrera, J. de la Montaña, A.M. Sánchez, P. Villar. Aprendizaje evolutivo de un sistema basado en reglas difusas para la predicción de enfermedades cardiovasculares.* Actas del Primer Congreso Español de Algoritmos Evolutivos y Bioinspirados (AEB'2002), Mérida 2002, 183-190.
46. *O. Cordón, F. Moya, C. Zarco. Uso de un Esquema de Nichos en un Algoritmo GA-P para el Aprendizaje Automático de Consultas Booleanas Extendidas.* Actas del Primer Congreso Español de Algoritmos Evolutivos y Bioinspirados (AEB'2002), Mérida 2002, 60-66.
47. *O. Cordón, F. Herrera, P. Villar. Aprendizaje Evolutivo de la Granularidad e las particiones Difusas y las Funciones de Pertenencia de un Sistema Basado en Reglas Difusas.* Actas del X Congreso Español sobre Tecnologías y Lógica Fuzzy (ESTYLF'2000). Sevilla, September 2000, 417-422.
48. *J. Casillas, O. Cordón, F. Herrera. Generación de Reglas Difusas con Buen Nivel de Cooperación Mediante Algoritmos de Hormigas.* Actas del X Congreso Español sobre Tecnologías y Lógica Fuzzy (ESTYLF'2000). Sevilla, September 2000, 291-296.
49. *O. Cordón, F. Moya, C. Zarco. Breve Estudio sobre la Aplicación de los Algoritmos Genéticos a la Recuperación de Información.* Actas del IV Congreso de la Sociedad

Internacional para la Organización del Conocimiento (ISKO)-España (EOCONSID'99), Granada, 1999, 179-186.

50. *O. Cordón, F. Herrera, Ll. Moreno. Integración de Conceptos de Computación Evolutiva en un Nuevo Modelo de Colonias de Hormigas.* Actas de la VIII Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA'99), Seminario Especializado en Computación Evolutiva, Murcia, November 1999, Vol. II, 98-105.
51. *O. Cordón, M.J. del Jesus, F. Herrera. Métodos de Razonamiento Aproximado Basados en el Concepto de Mayoría Difusa para Sistemas de Clasificación.* Actas del VIII Congreso Español sobre Tecnologías y Lógica Fuzzy (ESTYLF'98). Pamplona, 1998, 399-404.
52. *O. Cordón, F. Herrera. Una Propuesta para Mejorar la Precisión del Modelado Lingüístico.* Actas del VIII Congreso Español sobre Tecnologías y Lógica Fuzzy (ESTYLF'98). Pamplona, 1998, 199-204.
53. *O. Cordón, A. Espín, W. Fajardo, F. Herrera, L. Sánchez. Estimación de la Longitud de Línea de Baja Tensión Mediante Técnicas Evolutivas Híbridas de Análisis de Datos.* Actas de la IX Reunión Nacional de Grupos de Investigación en Ingeniería Eléctrica, Cádiz, 1998.
54. *O. Cordón, M.J. del Jesus, F. Herrera, M. Lozano. Una Metodología para el Diseño Automático de Sistemas Basados en Reglas Difusas Mediante Algoritmos Evolutivos.* Actas de la VII Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA'97), (Seminario sobre Computación Evolutiva), Málaga, 1997, 13-24.
55. *O. Cordón, M.J. del Jesus, F. Herrera. Nuevos Métodos de Razonamiento en Sistemas de Clasificación Basados en Reglas Difusas.* Actas del VII Congreso Español sobre Tecnologías y Lógica Fuzzy (ESTYLF'97). Tarragona, 1997, 109-114.
56. *O. Cordón, M.J. del Jesus, F. Herrera. Sistema de Clasificación con Reglas Difusas Utilizando Algoritmos Genéticos.* Actas del VI Congreso Español sobre Tecnologías y Lógica Fuzzy (ESTYLF'96). Oviedo, 1996, 95-100.
57. *O. Cordón, F. Herrera. Un Proceso Evolutivo para el Aprendizaje de Bases de Conocimiento de Controladores Difusos.* Actas del VI Congreso Español sobre Tecnologías y Lógica Fuzzy (ESTYLF'96). Oviedo, 1996, 89-94.
58. *E. Cárdenas, J.C. Castillo, O. Cordón, F. Herrera, A. Peregrín. SCD: Una Herramienta Gráfica para el Estudio de Controladores Difusos.* Actas del V Congreso Español sobre Tecnologías y Lógica Fuzzy (ESTYLF'95). Murcia, 1995, 103-106 (Actas I Jornadas sobre Transferencia de Tecnología).
59. *O. Cordón, Martínez, A., F.J. Peregrín. Optimización de las S-cajas en DES mediante algoritmos genéticos.* Actas de la III Reunión Española sobre Criptología (REC). Barcelona, 1994, 109-114.
60. *E. Cárdenas, J.C. Castillo, O. Cordón, F. Herrera, A. Peregrín. Influencia de las T-normas en controladores difusos.* Actas del IV Congreso Español sobre Tecnologías y

Lógica Fuzzy (ESTYLF'94). Blanes, 1994, 259-264.

61. *E. Cárdenas, J.C. Castillo, O. Cordón, F. Herrera, A. Peregrín. Estudio de Sistemas de Inferencia y Métodos de Defuzzificación aplicados al control difuso del Péndulo Invertido.* Actas del III Congreso Español sobre Tecnologías y Lógica Fuzzy (ESTYLF'93). Santiago de Compostela, 1993, 259-266.

7. ADVISED PhD DISSERTATIONS

1. Pedro Villar
Learning of Fuzzy Partitions for Linguistic Fuzzy Rule Based Systems
Co-advisor: F. Herrera. E.T.S.I. Informática. University of Vigo, December 2000
2. Igor Zwir
Hierarchical Systems of Linguistic Rules and Their Corresponding Learning Methodologies
Co-advisor: F. Herrera. E.T.S.I. Informática. University of Granada, January 2001
3. Jorge Casillas
Cooperative Learning for Flexible Fuzzy Linguistic Modeling: Interpretability and Accuracy
Co-advisor: F. Herrera. E.T.S.I. Informática. University of Granada, July 2001
4. Carmen Zarco
Application of Evolutionary Algorithms to the Automatic Learning of Extended Boolean Queries for Fuzzy Information Retrieval System
Co-advisor: F. Moya. Faculty of Information Sciences. University of Granada, July 2003
5. Sergio Damas
Feature-based Image Registration by means of Metaheuristics
E.T.S.I. Informática. University of Granada, July 2003
6. Rafael Alcalá
Combined Use of Weighted Fuzzy Rules and Rule Selection to Improve Cooperation in Extended Fuzzy Linguistic Modeling
E.T.S.I. Informática. University of Granada, July 2003
7. Karina Anaya
A Virtual Teaching-Learning Model: Analysis, Design and Application in a Mexican University System
Co-advisor: E. Herrera-Viedma. E.T.S.I. Informática. University of Granada, March 2005
8. María Luque
Improving the User Needs Representation in Information Retrieval Systems by means of Evolutionary Algorithms and Fuzzy Linguistic Modeling
Co-advisor: E. Herrera-Viedma. E.T.S.I. Informática. University of Granada, April 2005
9. Rocío C. Romero-Zaliz
Recognition of Genetic Regulation Profiles by means of Multiobjective Evolutionary Algorithms
Co-advisor: I. Zwir. E.T.S.I. Informática. University of Granada, September 2005
10. José Santamaría
Scatter Search for 3D Image Registration: Application to Forensic Anthropology
Co-advisor: S. Damas. E.T.S.I. Informática. University of Granada, December 2006

11. Cristina Rubio
Fusion of Knowledge towards the Identification of Genetic Profiles in the Systemic Inflammation Problem
Co-advisor: I. Zwir. E.T.S.I. Informática. University of Granada, December 2007
12. Oscar Ibáñez
Forensic Identification by Craniofacial Superimposition using Soft Computing
Co-advisor: S. Damas. E.T.S. Ingeniería. University of Santiago, September 2010
EUSFLAT Best Ph.D. Thesis Award. 2010.
13. Manuel Chica
Multiobjective Metaheuristics for Assembly Line Balancing in the Automotive Sector: Joint Optimization of Time and Space
Co-advisors: S. Damas, J. Bautista. E.T.S.I. Informática y Telecomunicación. University of Granada, October 2011
University of Granada Best PhD Dissertation Award. 2011-12 edition.
14. Nicola Bova
Soft computing and machine learning for image segmentation by deformable models
Co-advisor: O. Ibáñez. E.T.S.I. Informática. University of Oviedo, Gijón, November 2013
PhD dissertation developed within the MIBISOC Marie Curie ITN
15. Krzysztof Trawinski
Design of Fuzzy Rule-based Ensembles using FURIA, Diversity Induction and Evolutionary Algorithms
Co-advisors: L. Sánchez, A. Quirin. E.T.S.I. Informática. University of Oviedo, Gijón, January 2014
16. Blanca Rosario Campomanes
New Developments in Craniofacial Superimposition Based on Soft Computing and Computer Vision
Co-advisors: S. Damas, O. Ibáñez. E.T.S.I. Informática. University of Oviedo, Gijón, January 2015

8. RESEARCH STAYS

INSTITUTION: Universidad de California-Berkeley

TOWN: Berkeley *COUNTRY:* USA *YEAR:* 1999 *DURATION:* 2 months

ACTIVITY: Research within the BISC (Berkeley Initiative in Soft Computing) Group, founded and directed by Professor L.A. Zadeh

9. INTERNATIONAL REPRESENTATIONS

- **Director (and founder) of the “Genetic Fuzzy Systems” Task Force** (currently “Evolutionary Fuzzy Systems” Task Force), Fuzzy Systems Technical Committee, IEEE Computational Intelligence Society from April 2004 to June 2007.
- Member of the **Fuzzy Systems Technical Committee**, IEEE Computational Intelligence Society from April 2004 to December 2013, and since January 2015.
- Member of the **“Genetic Fuzzy Systems” Task Force**, Fuzzy Systems Technical Committee, IEEE Computational Intelligence Society since April 2004.
- Member of the **Executive Board** (treasurer) of the European Association of Fuzzy Logic and Technology (EUSFLAT) from September 2005 to September 2007.
- **Reviewer of the European Science Foundation** since April 2006.
- Member of the **“Future Directions in Fuzzy Sets and Systems” Task Force**, Fuzzy Systems Technical Committee, IEEE Computational Intelligence Society since its creation in September 2006.
- Member of the **Standards Technical Committee**, IEEE Computational Intelligence Society in from May 2007 to December 2008.
- Member of the **Technical Committee on Soft Computing**, IEEE Systems, Man, and Cybernetics Society from 2008 to 2011.
- Member of the **Graduate Student Research Grants sub-committee**, IEEE Computational Intelligence Society from January 2009 to December 2011.
- Member of the **Executive Board** (calls information member) of the European Association of Fuzzy Logic and Technology (EUSFLAT) from September 2009 to September 2013.
- *Elected member of the Administrative Committee (AdCom), IEEE Computational Intelligence Society (term January 2010-December 2012).*
- Member of the **Outstanding Computational Intelligence Institution Award sub-committee**, IEEE Computational Intelligence Society, 2010.
- Member of the **Outstanding Computational Intelligence Early Career Award sub-committee**, IEEE Computational Intelligence Society, from 2011 to 2015.
- Member of the **“Evolutionary Computation and Image Processing” Task Force**, Evolutionary Computation Technical Committee, IEEE Computational Intelligence Society, since its creation in June 2011.
- Member of the **Emerging Technologies Technical Committee**, IEEE Computational Intelligence Society, since 2012.
- Member of the **Awards Committee**, IEEE Computational Intelligence Society, from 2014 to 2015.

- Member of the **Outstanding PhD Dissertation Award sub-committee**, IEEE Computational Intelligence Society, 2016.
- Member of the **Outstanding Chapter Award sub-committee**, IEEE Computational Intelligence Society, 2017.

10. EDITORIAL ACTIVITIES

10.1. EDITORIAL AFFILIATIONS

Current appointments:

1. **Area Editor** of the **International Journal of Approximate Reasoning** (ISSN: 0888-613X, <http://www.elsevier.com/locate/ijar>) since May 2005.
2. **Associate Editor** of the **IEEE Transactions on Fuzzy Systems** (ISSN: 1089-778X, <http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=91>) since January 2008.
3. **Member of the Editorial Board** of the **International Journal of Swarm Intelligence Research** (ISSN: 1947-9263, <http://www.igi-global.com/journals/details.asp?ID=33440>) since January 2009.
4. **Member of the Editorial Board** of the **LNCS Transactions on Computational Collective Intelligence** (ISSN: 1751-5858, <http://www.springer.com/computer+science/lncs/transactions+cci?SGWID=0-173802-0-0-0>) since September 2009.
5. **Associate Editor** of the **Progress in Artificial Intelligence** journal (Springer) (ISSN: 2192-6352, <http://www.springer.com/journal/13748>) since October 2010.
6. **Associate Editor** of the **EUSFLAT Mathware & Soft Computing Magazine** (ISSN: 1134-5632, <http://www.eusflat.org/msc/>) since July 2011.
7. **Associate Editor** of **IEEE Access** (ISSN: 2169-3536, <http://ieeexplore.ieee.org/xpl/aboutJournal.jsp?punumber=6287639>) since February 2013.
8. **Associate Editor** of **IEEE Transactions on Evolutionary Computation** (ISSN: 1089-778X, <http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=4235>) since January 2015.
9. **Founding Associate Editor** of **IEEE Transactions on Emerging Technologies in Computational Intelligence** (ISSN: 2168-6750, <http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=6245516>) since its creation in July 2016.

Past appointments:

1. **Member of the Editorial Advisory Board of The Open Cybernetics & Systemics Journal** (ISSN: 1874-110X, <http://www.bentham.org/open/tocsj/>) from October 2007 to June 2011.
2. **Founding Associate Editor of Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery** (Online ISSN: 1942-4795, <http://wires.wiley.com/WileyCDA/WiresJournal/wisId-WIDM.html>) from May 2008 to December 2015.
3. **Member of the Editorial Board of the Journal of Advanced Research in Fuzzy and Uncertain Systems** (Electronic ISSN: 1943-1430, <http://www.i-asr.com/Journals/jarfus/Default.aspx>) from November 2008 to the journal end.
4. **Member of the Editorial Board of the International Journal of Computational Intelligence Research** (ISSN: 0974-1259, <http://www.ripublication.com/ijcir.htm>) from July 2009 to December 2011.
5. **Associate Editor (Area: Real-world Applications) of the Revista Iberoamericana de Inteligencia Artificial** (ISSN: 1137-3601, http://www.erevistas.csic.es/ficha_revista.php?oai_iden=oai_revista175) from May 2010 to June 2011.
6. **Member of the Editorial Board of the Journal of Multiple Valued Logic and Soft Computing** (ISSN: 1542-3980, <http://www.oldcitypublishing.com/MVLSC/MVLSC.html>) from October 2010 to December 2015.
7. **Associate Editor of the IEEE Computational Intelligence Magazine** (ISSN: 1556-603X, <http://ieeexplore.ieee.org/xpl/RecentIssue.jsp?punumber=10207>) from January 2012 to December 2015.

10.2. EDITED JOURNAL SPECIAL ISSUES

1. O. Cordón, F. Herrera, F. Hoffmann and L. Magdalena. (Eds.), **Special Issue on Recent Advances on Genetic Fuzzy Systems**. Information Sciences 136: 1-4, 2001.
2. O. Cordón, F. Herrera, T. Stützle (Eds.), **Special Issue on Ant Colony Optimization: Models and Applications**. Mathware and Soft Computing 9:2-3, 2002.
3. O. Cordón, E. Herrera-Viedma (Eds.), **Special Issue on Soft Computing Applications to Intelligent Information Retrieval on the Internet**. International Journal of Approximate Reasoning 34:2-3, 2003.
4. O. Cordón, F. Gomide, F. Herrera, F. Hoffmann and L. Magdalena (Eds.), **Special Issue on Genetic Fuzzy Systems: New Developments**. Fuzzy Sets and Systems 141:1, 2004.
5. O. Cordón, R. Alcalá, J. Alcalá-Fdez., I. Rojas (Eds.), **Genetic Fuzzy Systems: What's Next?** IEEE Transactions on Fuzzy Systems 15:4, 2007.
6. J.M. Alonso, O. Cordón, L. Magdalena (Eds.), **Special Issue on Selected Papers from the ESTYLF2008 Conference**. Mathware and Soft Computing XVI:1, 2009.
7. O. Cordón, A. Fernández-Caballero, J.A. Gámez, F. Hoffmann (Eds.), **Special Issue on The Impact of Soft Computing for the Progress of Artificial Intelligence**. Applied Soft Computing 11:2, 2011.
8. O. Cordón, P. Kazienko, B. Trawiński (Eds.), **Special Issue on Hybrid and Ensemble Methods in Machine Learning**. New Generation Computing 29:3, 2011.
9. O. Cordón, P. Kazienko (Eds.), **Special Section on Hybrid and Ensemble Methods in Machine Learning**. International Journal of Applied Mathematics and Computer Science 22:4, 2012.
10. B. Çatay, R. Chiong, P. Siarry, O. Cordón (Eds.), **Special Issue on Computational Intelligence in Production and Logistics Systems: Solving Vehicle Routing, Supply Chain Network, and Air-Traffic Trajectory Planning Problems**. IEEE Computational Intelligence Magazine 9:4, 2014.
11. J. Alcalá-Fdez, J.M. Alonso, O. Cordón (Eds.), **Special Issue on Computational Intelligence Software**. IEEE Computational Intelligence Magazine 11:2, 2016.
12. O. Cordón, J.M. Alonso, L. Magdalena (Eds.), **Virtual Special Issue on Selected Papers from the IFSA-EUSFLAT 2015 Conference**. International Journal of Approximate Reasoning, 2016. <http://www.sciencedirect.com/science/journal/0888613X/vsi/103BH1J40FP>.

11. CONFERENCE ORGANIZATION ACTIVITIES

11.1. CONFERENCE ORGANIZATION

General Chairman of the Conference:

- 2016 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE2016), IEEE World Conference on Computational Intelligence (WCCI 2016), Vancouver (Canada), July 2016.

Co-Chairman of the Conferences:

- Seventh Online World Conference on Soft Computing in Industrial Applications (WSC7), September 2002, Granada (Spain), The Internet.
- First International Workshop on Genetic Fuzzy Systems (GFS2005), March 2005, Granada (Spain).
- Fourth International Workshop on Genetic and Evolutionary Fuzzy Systems (GEFS2010), March 2010, Mieres (Spain).
- International Conference on Medical Imaging using Bio-inspired and Soft Computing (MIBISOC2013), May 2013, Brussels (Belgium).
- International Workshop on Craniofacial Superimposition, May 2013, Granada (Spain).

Co-Chairman of the Workshops:

- Advances in Computational Intelligence — An IEEE Computational Intelligence Society Workshop. Organized by IEEE Computational Intelligence Society (<http://cis.ieee.org/>) and University of Granada. 10 April 2015, Granada (Spain).
- Key Challenges and Future Directions of Evolutionary Computation. Organized By Y. Li, C. Alippi, T. Bäck, P. Bonissone, S. Cagnoni, C. Coello, O. Cordón, K. Deb, D. Fogel, M. Kessentini, Y. Shi, X. Yao, and M. Zhang. IEEE World Congress on Computational Intelligence (WCCI 2016), Vancouver (Canada), 24-29 July, 2016.

Member of the Organizing Committee of the Conferences:

- International Conference on Networked e-Learning for European Universities, November 2003, Granada (Spain).
- EUROCALL 2006, Integrating Call into Study Programmes, September 2006, Granada (Spain).
- **International Program Committee Chair** of the 2006 IEEE International Symposium on Evolving Fuzzy Systems (EFS06), Second International Workshop on Evolving Fuzzy Systems, September 2006, Ambleside (UK).
- **International Program Committee Chair** of the Third International Workshop on Genetic and Evolving Fuzzy Systems (GEFS2008), IEEE, March 2008, Witten-

Bommerholz (Germany).

- **Program Committee Chair** of the 14th Spanish Conference on Fuzzy Logic and Technologies (ESTYLF'2008), September 2008, Mieres (Spain).
- **International co-Chair** of the 8th Hybrid Intelligent Systems Conference (HIS2008), September 2008, Barcelona (Spain).
- **Publicity co-Chair** of the Multiconference 2009 IEEE Symposium Series on Computational Intelligence (SCCI 2009), March-April 2009, Nashville (USA).
- **Finance co-Chair** of the Joint International Fuzzy Systems Association – European Society for Fuzzy Logic and Technologies International Conference (IFSA-EUSFLAT 2009), July 2009, Lisbon (Portugal).
- **Advisory Board member** of the 9th International Conference on Intelligent Systems Design and Applications (ISDA'09), Pisa (Italy), November 2009.
- **Evolutionary Algorithms IPC Area Chair** of the 13th International Conference on Information Processing and Management of Uncertainty in Knowledge-based Systems (IPMU 2010), Dortmund (Germany), June-July 2010.
- **Special Session Co-chair** of the 2010 IEEE Conference on Evolutionary Computation (CEC 2010), IEEE World Conference on Computational Intelligence (WCCI 2010), Barcelona (Spain), July 2010.
- **Fuzzy image, speech, vision and signal processing IPC Area Chair** of the 2011 IEEE International Conference on Fuzzy Systems (Fuzz-IEEE 2011), Taipei (Taiwan), June 2011.
- **Soft Computing Track Chair** of the XIV Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA'11). San Cristóbal de La Laguna (Spain), Noviembre 2011.
- **Special Session Chair** of the 2013 IEEE Conference on Fuzzy Systems (FUZZ-IEEE2013), Hyderabad (India), July 2013.
- **Program Co-chair** of the 2015 IEEE Congress on Evolutionary Computation (CEC 2015), Sendai (Japan), May 2015.
- **Program Co-chair** of the 16th IFSA World Congress and 9th EUSFLAT Conference (IFSA-EUSFLAT 2015), Gijón (Spain), June-July 2015.
- **Technical Co-chair** of the 2017 IEEE Congress on Evolutionary Computation (CEC 2017), San Sebastian (Spain), June 2017.
- **Tutorial Co-chair** of the 2017 IEEE International Conference on Fuzzy Systems (FuzzIEEE 2017), Naples (Italy), July 2017.

11.2. SPECIAL SESSION ORGANIZATION

Organizer of the following Conference Special Sessions:

- Co-organizer (O. Cordón, F. Herrera) of 2 special sessions: 8th IPMU Conference, Madrid (Spain), July 2000.
 - Title: *Genetic Fuzzy Systems: Issues and Applications I and II*.
- Co-organizer (O. Cordón, F. Gomide, F. Herrera, F. Hoffmann, L. Magdalena) of 2 special sessions: Joint 9th IFSA World Congress – 20th NAFIPS International Conference, Vancouver (Canada), July 2001.
 - Title: *Genetic Fuzzy Systems: New Developments I and II*
- Co-organizer (O. Cordón, E. Herrera-Viedma) of 1 special session: Primer Congreso Español de Algoritmos Evolutivos y Bioinspirados (AEB'02), Mérida (Spain), 6-8 February, 2002.
 - Title: Aplicaciones de los Algoritmos Evolutivos a la Recuperación de Información
- Co-organizer (O. Cordón, F. Herrera) of 1 special session: Primer Congreso Español de Algoritmos Evolutivos y Bioinspirados (AEB'02), Mérida (Spain), 6-8 February, 2002.
 - Title: Algoritmos Basados en Colonias de Hormigas: Modelos y Aplicaciones
- Co-organizer (O. Cordón, E. Herrera-Viedma) of 2 special sessions: Seventh International Conference of the International Society for Knowledge Organization (ISKO'02), Granada (Spain), July, 2002.
 - Title: Applications of Artificial Intelligence Techniques to Information Retrieval I and II
- Co-organizer (E. Herrera-Viedma, O. Cordón, J.A. Olivas) of 2 special sessions: Decimosegundo Congreso Español sobre Tecnologías y Lógica Fuzzy (ESTYLF'2004), Jaén (Spain), September, 2004.
 - Title: Soft Computing para la Recuperación de Información en Internet I y II
- Co-organizer (J.A. Olivas, E. Herrera-Viedma, O. Cordón) of 1 special session: Joint EUSFLAT-LFA'05 Conference, Barcelona (Spain), September, 2005.
 - Title: Soft Computing for Information Access on the Web
- Co-organizer (O. Cordón, S. Damas, R. Martí) of 2 special sessions: Cuarto Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (MAEB2005). Primer Congreso Español de Informática (CEDI2005), Granada (Spain), September, 2005.
 - Title: Scatter Search I y II
- Organizer of a mini-track composed of 2 special sessions: 2007 IEEE International Conference on Fuzzy Systems (FuzzIEEE 2007), London (UK), July 2007.
 - Title: Genetic Fuzzy Systems: Foundations (co-organized by H. Ishibuchi) and Genetic Fuzzy Systems: Applications (co-organized by P. Bonissone)

- Co-organizer (O. Cordón, P. Kazienko, B. Trawiński) of 1 special session: 2nd Asian Conference on Intelligent Information and Database Systems (ACIIDS 2010), Hue City (Vietnam), March 2010.
 - Title: Multiple Model Approach to Machine Learning (MMAML)
- Co-organizer (O. Cordón, P. Kazienko, B. Trawiński) of 1 special session: 3rd Asian Conference on Intelligent Information and Database Systems (ACIIDS 2011), Daegu (Korea), April 2011.
 - Title: Multiple Model Approach to Machine Learning (MMAML)
- Co-organizer (J. Bautista, S. Damas, O. Cordón) of 1 special session: Octavo Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (MAEB2012), Albacete (Spain), February, 2012.
 - Title: Metaheurísticas en Empresas y Producción
- Co-organizer (J. Bautista, S. Damas, O. Cordón) of 1 special session: Noveno Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (MAEB2013), Cuarto Congreso Español de Informática (CEDI2013), Madrid (Spain), September, 2013.
 - Title: Metaheurísticas en Empresas y Producción
- Co-organizer (J. Bautista, M. Chica, S. Damas, O. Cordón) of 1 special session: Décimo Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (MAEB2015), Mérida (Spain), February, 2015.
 - Title: Metaheurísticas en Empresas y Producción
- Co-organizer (J. Bautista, M. Chica, S. Damas, O. Cordón) of 1 special session: Undécimo Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (MAEB2016), Quinto Congreso Español de Informática (CEDI2016), Salamanca (Spain), September, 2016.
 - Title: Metaheurísticas en Empresas y Producción

11.3. PROGRAM COMMITTEE MEMBERSHIP

1. 2nd IEE/IEEE International Conference on Genetic Algorithms in Engineering Systems: Innovations and Applications, GALESIA'97, Glasgow (UK), September 1997.
2. Cuarto Congreso de la Sociedad Internacional para la Organización del Conocimiento (ISKO)-España (EOCONSID'99), Granada (Spain), May 1999.
3. 8th International Conference on Information Processing and Management of Uncertainty in Knowledge-Bases System, IPMU'2000, Madrid (Spain), July 2000.
4. 14th International FLAIRS Conference. Special Track on Neural Network and Fuzzy Logic Applications (FLAIRS'01), Key West, Florida, (USA), May 2001.
5. 3rd Annual Genetic and Evolutionary Computation Conference (GECCO-2001), San Francisco, California (USA), July, 2001.
6. Primer Congreso Español de Algoritmos Evolutivos y Bioinspirados (AEB'02), Mérida (Spain), February 2002.
7. 4th Annual Genetic and Evolutionary Computation Conference (GECCO-2002), New York (USA), 9-13 July, 2002.
8. 7th International Conference of the International Society for Knowledge Organization (ISKO'02), Granada (Spain), July 2002.
9. 7th International Conference on Parallel Problem Solving from Nature (PPSN VII), Granada (Spain), 7-11 September 2002.
10. 7th Online World Conference on Soft Computing in Industrial Applications (WSC7), The Internet, Granada (Spain), 23-29 September 2002.
11. 3rd International Workshop on Ant Algorithms (ANTS 2002), Brussels (Belgium). September 2002.
12. Segundo Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (MAEB'03), Gijón, February 2003.
13. 10th International Fuzzy Systems Association World Congress (IFSA 2003), Istanbul (Turkey), July 2003.
14. Primer Congreso Mexicano de Computación Evolutiva (COMCEV'03), Guanajuato (Mexico), May 2003.
15. Congreso Internacional de Inteligencia Computacional (CIIC 2003), Medellín (Colombia). November 2003.
16. Tercer Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (MAEB'04), Córdoba (Spain), 4-6 February 2004.
17. 5th Annual Genetic and Evolutionary Computation Conference (GECCO-2003), Chicago (USA), 12-16 July 2003.
18. 8th World Online Conference on Soft Computing in Industrial Applications (WSC8), <http://wsc8.e-technik.uni-dortmund.de>, September 29th-October 10th, 2003.
19. 6th Annual Genetic and Evolutionary Computation Conference (GECCO-2004), A-Life, Adaptive Behavior, Agents, & Ant Colony Optimization Track. Seattle (USA), July, 2004.
20. 8th IASTED International Conference on Artificial Intelligence and Soft Computing (ASC 2004), Marbella (Spain), September 2004.
21. 4th International Workshop on Ant Algorithms (ANTS 2004), Brussels (Belgium). September 2004.
22. XII Congreso Español sobre Tecnologías y Lógica Fuzzy (ESTYLF'2004), Jaén (Spain), 15-17 September 2004.
23. 8th International Conference on Parallel Problem Solving from Nature (PPSN-VIII), Birmingham (UK), 18-22 September 2004.

24. 9th Online World Conference on Soft Computing in Industrial Applications (WSC9), The Internet, September 20th - October 08th 2004.
25. 27th European Conference on Information Retrieval (ECIR-05), Santiago de Compostela (Spain), March 2005.
26. Segundo Congreso Mexicano de Computación Evolutiva (COMCEV'05), Guanajuato (Mexico), May 2005.
27. 2005 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE 2005), Reno, Nevada (USA), May 2005.
28. Workshop on Text Information Retrieval: Soft Computing and Ecological Aspects, Santiago de Compostela (Spain), June 2005.
29. 7th Annual Genetic and Evolutionary Computation Conference (GECCO-2005), A-Life, Adaptive Behavior, Agents, & Ant Colony Optimization Track. Washington, D.C. (USA), July, 2005.
30. 5th Meeting on Multiagent Systems and New Trends in Soft Computing (The Agent Days 2005), Malaga (Spain), July 2005.
31. 2nd International Conference on Fuzzy Systems and Knowledge Discovery (FSKD'05), Hunan (China), August 2005.
32. 2nd International Workshop on Hybrid Metaheuristics (HM2005), Barcelona (Spain), August 2005.
33. Cuarto Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (MAEB'05). Primer Congreso Español de Informática (CEDI'2005), Granada (Spain), September 2005.
34. Primer Simposio sobre Lógica Fuzzy y Soft Computing (LFSC'2005). Primer Congreso Español de Informática (CEDI'2005), Granada (Spain), September 2005.
35. Quintas Jornadas de Bibliotecas Digitales (JBiDi'2005). Primer Congreso Español de Informática (CEDI'2005), Granada (Spain), September 2005.
36. Tercer Taller Nacional de Minería de Datos y Aprendizaje (TAMIDA'2005). Primer Congreso Español de Informática (CEDI'2005), Granada (Spain), September 2005.
37. 10th Online World Conference on Soft Computing in Industrial Applications (WSC10), The Internet, September 2005.
38. 2nd International Conference on Machine Intelligence (ACIDCA-ICMI 2005), Tozeur (Tunisia), November 2005.
39. 8th International Conference Artificial Intelligence and Soft Computing (ICAISC), Zakopane (Poland), June 2006.
40. International Conference on 50 AÑOS DE INTELIGENCIA ARTIFICIAL, Campus Multidisciplinar en Percepción e Inteligencia (CMPI2006), Albacete (Spain), July 2006.
41. 10th IASTED International Conference on Artificial Intelligence and Soft Computing (ASC 2006), Palma de Mallorca (Spain), August 2006.
42. 5th International Workshop on Ant Algorithms (ANTS 2006), Brussels (Belgium). September 2006.
43. 2nd IEEE International Symposium on Evolving Fuzzy Systems (EFS06), September 7-9, 2006, Lake district, UK. **IPC Chair.**
44. 9th International Conference on Parallel Problem Solving from Nature (PPSN-IX), Reykjavik (Iceland), September 2006.
45. XIII Congreso Español sobre Tecnologías y Lógica Fuzzy (13th Spanish Conference on Fuzzy Logic and Technologies) (ESTYLF'2006), Ciudad Real (Spain), September 2006.
46. 11th Online World Conference on Soft Computing in Industrial Applications (WSC11), The Internet, September 2006.
47. 3rd International Workshop on Hybrid Metaheuristics (HM2006), Gran Canaria (Spain), October 2006.

48. 1st International Conference on Multidisciplinary Information Sciences & Technologies (InSciT2006), Mérida (Spain), October 2006.
49. Quinto Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (5th Spanish Conference on Metaheuristics, and Evolutionary and Bio-inspired Algorithms) (MAEB'07), Tenerife (Spain), February 2007.
50. IEEE Symposium on Foundations of Computational Intelligence (SFOCI). 2007 IEEE Symposium Series on Computational Intelligence (SCCI 2007), Hawaii (USA), April 2007.
51. IEEE Swarm Intelligence Symposium (SIS2007). 2007 IEEE Symposium Series on Computational Intelligence (SCCI 2007), Hawaii (USA), April 2007.
52. IEEE Symposium on Computational Intelligence in Multicriteria Decision Making Symposium. 2007 IEEE Symposium Series on Computational Intelligence (SCCI 2007), Hawaii (USA), April 2007.
53. 25th International Conference of North American Fuzzy Information Processing Society (NAFIPS2007), San Diego (USA), June 2007.
54. 2007 International Workshop on Computational Forensics (IWCF2007), 3rd International Symposium on Information Assurance and Security (IAS 2007), Manchester (UK), August 2007.
55. Jornadas sobre Algoritmos Evolutivos y Metaheurísticas (JAEM 2007). Segundo Congreso Español de Informática (CEDI'2007), Zaragoza (España), Septiembre 2007.
56. Segundo Simposio sobre Lógica Fuzzy y Soft Computing (LFSC'2007). Segundo Congreso Español de Informática (CEDI'2007), Zaragoza (España), Septiembre 2007.
57. XII Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA-TTIA 2007), Salamanca (España), Noviembre, 2007.
58. 12th Online World Conference on Soft Computing in Industrial Applications (WSC12), The Internet, October 2007.
59. 3rd Australian Conference on Artificial Life (ACAL2007), Gold Coast (Australia). December, 2007.
60. 3rd International Workshop on Genetic and Evolving Fuzzy Systems (GEFS08), IEEE, Witten-Bommerholz (Germany). March, 2008. **IPC Chair.**
61. 10th European Workshop on Evolutionary Computation in Image Analysis and Signal Processing (EvoIASP 2008), European Workshops on the Theory and Applications of Evolutionary Computation (EvoWorkshops 2008), EvoStar 2008. Napoli (Italy), March 2008.
62. 26th International Conference of North American Fuzzy Information Processing Society (NAFIPS2008), New York (USA), May 2008.
63. 2008 IEEE International Conference on Fuzzy Systems (FuzzIEEE2008), IEEE World Congress on Computational Intelligence (WCCI2008), Hong Kong (China), June 2008.
64. 2008 IEEE International Workshop on Computational Forensics (IWCF2008), Washington (USA), August 2008.
65. 8th Hybrid Intelligent Systems Conference (HIS2008), Barcelona (Spain), September 2008. **International co-Chair.**
66. 14th Spanish Conference on Fuzzy Logic and Technologies (ESTYLF'2008), Mieres (Spain), September 2008. **Program Committee Chair.**
67. 6th International Conference on Ant Colony Optimization and Swarm Intelligence (ANTS 2008), Brussels (Belgium), September 2008.
68. 2008 IEEE Swarm Intelligence Symposium (SIS2008), St. Louis (USA), September 2008.
69. IEEE International Symposium on Computational Intelligence and Design (ISCID 2008), Wuhan (China), October 2008.
70. 13th Online World Conference on Soft Computing in Industrial Applications (WSC2008), The Internet, October 2008.

71. 2009 IEEE Symposium of Computational Intelligence in Multicriteria Decision Making (IEEE MCDM 2009). 2009 IEEE Symposium Series on Computational Intelligence (SSCI 2009), Nashville (USA), March-April 2009.
72. 2009 IEEE Swarm Intelligence Symposium (IEEE SIS 2009). 2009 IEEE Symposium Series on Computational Intelligence (SSCI 2009), Nashville (USA), March-April 2009.
73. 11th European Workshop on Evolutionary Computation in Image Analysis and Signal Processing (EvoIASP 2009), European Workshops on Applications of Evolutionary Computation (EvoWorkshops 2009), EvoStar 2009. Tübingen (Germany), April 2009.
74. IEEE Congress on Evolutionary Computation (CEC2009), Trondheim (Norway), May 2009.
75. 22th International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems (IEA/AIE-2009), Tainan (Taiwan), June 2009.
76. 28th North American Fuzzy Information Processing Society Annual Conference (NAFIPS2009), Cincinnati (USA), June 2009.
77. 11th Annual Genetic and Evolutionary Computation Conference (GECCO 2009), Ant Colony Optimization and Swarm Intelligence Track, Montreal (Canada), July 2009.
78. Joint International Fuzzy Systems Association – European Society for Fuzzy Logic and Technologies International Conference (IFSA-EUSFLAT 2009), Lisbon (Portugal), July 2009. **Finance co-Chair.**
79. 9th Hybrid Intelligent Systems Conference (HIS2009), Shenyang Liaoning (China), August 2009.
80. 3rd International Workshop on Computational Forensics (IWCF2009), The Hague (The Netherlands), August 2009.
81. 1st International Conference on Computational Collective Intelligence - Semantic Web, Social Networks & Multiagent Systems (ICCCI09). Wrocław (Poland), October 2009.
82. 14th Online World Conference on Soft Computing in Industrial Applications (WSC2008), The Internet, October 2009.
83. 9th International Conference on Intelligent Systems Design and Applications (ISDA'09), Pisa (Italy), November 2009. **Advisory Board member.**
84. XIII Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA'09). Sevilla (Spain), Noviembre 2009.
85. Workshop en Metaheurísticas Inteligentes en Planificación Logística (MIPL09). XIII Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA'09). Sevilla (Spain), Noviembre 2009.
86. World Congress on Nature and Biologically Inspired Computing (NaBIC'09). New Delhi (India), December 2009.
87. 15th Spanish Conference on Fuzzy Logic and Technologies (ESTYLF'2010), Huelva (Spain), February 2010.
88. 25h ACM Symposium on Applied Computing (SAC 2010), Evolutionary Computation Track, Sierre (Switzerland), March, 2010.
89. 12th European Workshop on Evolutionary Computation in Image Analysis and Signal Processing (EvoIASP 2010), European Conference on the Applications of Evolutionary Computation (EvoApplications 2010), EvoStar 2010. Istanbul (Turkey), April 2010.
90. 10th International Conference on Artificial Intelligence and Soft Computing (ICAISC 2010). Zakopane (Poland), June 2010.
91. 23rd International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems (IEA/AIE 2010). Córdoba (Spain), June 2010.
92. 1st International Conference on Swarm Intelligence (ICSI'2010). Beijing (China), June 2010.
93. 5th International Workshop on Hybrid Artificial Intelligence Systems (HAIS 2010). San

- Sebastian (Spain), June 2010.
94. Thirteenth International Conference on Information Processing and Management of Uncertainty in Knowledge-based Systems (IPMU 2010), Dortmund (Germany), June-July 2010. **Evolutionary Algorithms IPC Area Chair.**
 95. 12th Genetic and Evolutionary Computation Conference (GECCO 2010), Swarm Intelligence Track, Portland (USA), July 2010.
 96. 2010 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE2010), IEEE World Congress on Computational Intelligence (WCCI2010), Barcelona (Spain), July 2010.
 97. 2010 IEEE Congress on Evolutionary Computation (CEC2010), IEEE World Congress on Computational Intelligence (WCCI2010), Barcelona (Spain), July 2010.
 98. Tenth International Conference on Hybrid Intelligent Systems (HIS 2010). Atlanta (USA), August 2010.
 99. 7th International Conference on Swarm Intelligence (ANTS 2010), Brussels (Belgium), September 2010.
 100. Tercer Simposio sobre Lógica Fuzzy y Soft Computing (LFSC'2010). Tercer Congreso Español de Informática (CEDI'2010), Valencia (Spain), September 2010.
 101. Séptimo Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (MAEB'2010). Tercer Congreso Español de Informática (CEDI'2010), Valencia (Spain), September 2010.
 102. 2010 IEEE International Conference on Systems, Man, and Cybernetics (SMC2010), Istanbul (Turkey), October 2010.
 103. 4th International Workshop on Computational Forensics (IWCF2010), Tokyo (Japan), November 2010.
 104. 9th Mexican International Conference on Artificial Intelligence (MICAI 2010), Pachuca (Mexico), November, 2010.
 105. 26h ACM Symposium on Applied Computing (SAC 2011), Evolutionary Computation Track, Taichung (Taiwan), March, 2011.
 106. 26h ACM Symposium on Applied Computing (SAC 2011), Information Access and Retrieval Track, Taichung (Taiwan), March, 2011.
 107. 13th European Workshop on Evolutionary Computation in Image Analysis and Signal Processing (EvoIASP 2011), European Conference on the Applications of Evolutionary Computation (EvoApplications 2011), EvoStar 2011. Torino (Italy), April 2011.
 108. 2011 IEEE Workshop on Computational Intelligence in Production and Logistics Systems (CIPLS 2011), IEEE Symposium Series on Computational Intelligence - SSCI 2011, Paris (France), April 2011.
 109. 3rd International Workshop on Computational Intelligence in Medical Imaging (CIMI2011), IEEE Symposium Series on Computational Intelligence - SSCI 2011, Paris (France), April 2011.
 110. 5th IEEE International Workshop on Genetic and Evolutionary Fuzzy Systems (IEEE GEFS 2011), IEEE Symposium Series on Computational Intelligence - SSCI 2011, Paris (France), April 2011.
 111. 2011 IEEE Symposium of Computational Intelligence in Multicriteria Decision Making (IEEE MCDM 2011). IEEE Symposium Series on Computational Intelligence - SSCI 2011, Paris (France), April 2011.
 112. 2011 IEEE Symposium on Swarm Intelligence (IEEE SIS 2011), IEEE Symposium Series on Computational Intelligence - SSCI 2011, Paris (France), April 2011.
 113. 2011 IEEE Symposium on Foundations of Computational Intelligence (FOCI 2011), IEEE Symposium Series on Computational Intelligence - SSCI 2011, Paris (France), April 2011.

114. 2011 IEEE Congress on Evolutionary Computation (CEC2011), New Orleans (USA), June 2011.
115. International Work Conference on Artificial Neural Networks (IWANN2011), Torremolinos (Spain), June 2011.
116. 2nd International Conference on Swarm Intelligence (ICSI'2011). Chongqing (China), June 2011.
117. 2011 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE2011), Taipei (Taiwan), June 2011. **Fuzzy image, speech, vision and signal processing IPC Area Chair.**
118. 13th Genetic and Evolutionary Computation Conference (GECCO 2011), Swarm Intelligence Track, Dublin (Ireland), July 2011.
119. 7th International Conference of the European Society for Fuzzy Logic and Technologies and “les rencontres francophones sur la Logique Floue et ses Applications” (EUSFLAT-LFA 2011), Aix-les-Bains (France), September 2011.
120. XIV Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA'11). San Cristóbal de La Laguna (Spain), Noviembre 2011. **Soft Computing Track Chair.**
121. 2011 IEEE International Conference on Systems, Man, and Cybernetics (SMC2011), Anchorage (USA), October 2011.
122. EUROFUSE Workshop 2011 on Fuzzy Methods for Knowledge- Based Systems, Régua (Portugal), September 2011.
123. 11th International Conference on Intelligent Systems Design and Applications (ISDA'2011), Córdoba (Spain), November 2011.
124. 16th Spanish Conference on Fuzzy Logic and Technologies (ESTYLF'2012), Valladolid (Spain), February 2012.
125. Octavo Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (MAEB'2012), Albacete (Spain), February 2012.
126. 13th Ibero-American Conference on Artificial Intelligence, Cartagena de Indias (Colombia), November 2012.
127. 14th European Workshop on Evolutionary Computation in Image Analysis and Signal Processing (EvoIASP 2012), European Conference on the Applications of Evolutionary Computation (EvoApplications 2012), EvoStar 2012. Málaga (Spain), April 2012.
128. 2012 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE2012), IEEE World Congress on Computational Intelligence (WCCI2012), Brisbane (Australia), June 2012.
129. 2012 IEEE Congress on Evolutionary Computation (CEC2012), IEEE World Congress on Computational Intelligence (WCCI2012), Brisbane (Australia), June 2012.
130. 14th Genetic and Evolutionary Computation Conference (GECCO 2012), Ant Colony Optimization and Swarm Intelligence Track, Philadelphia (USA), July 2012.
131. 8th International Conference on Swarm Intelligence (ANTS 2012), Brussels (Belgium), September 2012.
132. 5th International Workshop on Computational Forensics (IWCF2012), Tsukuba (Japan), November 2012.
133. 2013 IEEE Symposium on Swarm Intelligence (IEEE SIS 2013), IEEE Symposium Series on Computational Intelligence - SSCI 2013, Singapore, April 2013.
134. 6th IEEE International Workshop on Genetic and Evolutionary Fuzzy Systems (IEEE GEFS 2013), IEEE Symposium Series on Computational Intelligence - SSCI 2013, Singapore, April 2013.
135. 15th European Workshop on Evolutionary Computation in Image Analysis and Signal Processing (EvoIASP 2013), European Conference on the Applications of Evolutionary Computation (EvoApplications 2013), EvoStar 2013. Vienna (Austria), April 2013.

136. 2013 IEEE Congress on Evolutionary Computation (CEC2013), Cancun (Mexico), June 2013.
137. International Work Conference on Artificial Neural Networks (IWANN2013), Tenerife (Spain), June 2013.
138. 2013 Joint IFSA World Congress- NAFIPS Annual Meeting (IFSA-NAFIPS 2013), Edmonton (Canada), June 2013.
139. 2013 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE2013), Hyderabad (India), July 2013. **Special Session Chair.**
140. 15th Genetic and Evolutionary Computation Conference (GECCO 2013), Ant Colony Optimization and Swarm Intelligence Track, Amsterdam (The Netherlands), July 2013.
141. 8th International Conference of the European Society for Fuzzy Logic and Technologies (EUSFLAT 2013), Milano (Italy), September 2013.
142. Multiconference CAEPIA 2013. Cuarto Congreso Español de Informática (CEDI'2013), Madrid (Spain), September 2013.
143. 18th Annual conference of the Taiwanese Association for Artificial Intelligence, 2013 Conference on Technologies and Applications of Artificial Intelligence (TAAI2013), Taipei (Taiwan), December 2013.
144. 17th Spanish Conference on Fuzzy Logic and Technologies (ESTYLF'2014), Zaragoza (Spain), February 2014.
145. 2014 IEEE International Symposium on Innovations in Intelligent Systems and Applications (IEEE INISTA 2014), Alberobello (Italy), June 2014.
146. 2014 IEEE Congress on Evolutionary Computation (CEC2014), IEEE World Congress on Computational Intelligence (WCCI2014), Beijing (China), July 2014.
147. 15th International Conference on Information Processing and Management of Uncertainty in Knowledge-based Systems (IPMU 2014), Montpellier (France), July 2014.
148. 2014 Joint Rough Set Symposium (JRS 2014), Joint conference of the 9th International Conference on Rough Sets and Current Trends in Computing (RSCTC 2014) and the 2nd International Conference on Rough Sets and Intelligent Systems Paradigms (RSEISP 2014), Granada-Madrid (Spain), July, 2014.
149. 16th Genetic and Evolutionary Computation Conference (GECCO 2014), Ant Colony Optimization and Swarm Intelligence Track, Vancouver (Canada), July 2014.
150. 9th International Conference on Swarm Intelligence (ANTS 2014), Brussels (Belgium), September 2014.
151. 2015 IEEE Congress on Evolutionary Computation (CEC2015), Sendai (Japan), May 2015. **Program Co-chair.**
152. 2015 Joint International Fuzzy Systems Association – European Society for Fuzzy Logic and Technologies International Conference (IFSA-EUSFLAT 2015), Gijón (Spain), June-July 2015. **Program Co-chair.**
153. 16th Genetic and Evolutionary Computation Conference (GECCO 2015), Ant Colony Optimization and Swarm Intelligence Track, Madrid (Spain), July 2015.
154. 2015 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE2015), Istanbul (Turkey), August 2015.
155. Annual Conference of the North American Fuzzy Information Processing Society and 5th World Conference on Soft Computing (NAFIPS2015), Redmond (USA), August 2015.
156. 9th IEEE International Conference on Big Data Science and Engineering (IEEE BigDataSE-15), Helsinki (Finland), August 2015.
157. XVI Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA 2015). Albacete (Spain), November 2015.
158. 1er Workshop en Big Data y Análisis de Datos Escalable (BigDADE I), XVI Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA 2015).

- Albacete (Spain), November 2015.
159. II Jornadas sobre Algoritmos Evolutivos y Metaheurísticas (JAEM 2015), XVI Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA 2015). Albacete (Spain), November 2015.
 160. II Jornadas de Fusión de la Información y ensembles (FINO 2015), XVI Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA 2015). Albacete (Spain), November 2015.
 161. V Simposio sobre Lógica Fuzzy y Soft Computing (LFSC 2015), XVI Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA 2015). Albacete (Spain), November 2015.
 162. VII Simposio Teoría y Aplicaciones de Minería de Datos (TAMIDA 2015), XVI Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA 2015). Albacete (Spain), November 2015.
 163. 4th International Conference on the Theory and Practice of Natural Computing (TPNC 2015). Mieres (Spain), December 2015.
 164. 2015 IEEE Workshop on Computational Intelligence in Production and Logistics Systems (CIPLS 2015), IEEE Symposium Series on Computational Intelligence - SSCI 2015, Cape Town (South Africa), December 2015.
 165. 2016 IEEE Congress on Evolutionary Computation (CEC2016), 2016 IEEE World Congress on Computational Intelligence (WCCI2016), Vancouver (Canada), July 2016.
 166. Multiconference CAEPIA 2016. Quinto Congreso Español de Informática (CEDI'2016), Salamanca (Spain), September 2016.
 167. Undécimo Congreso Español de Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (MAEB'2016), Quinto Congreso Español de Informática (CEDI'2016), Salamanca (Spain), September 2016.
 168. III Jornadas de Fusión de la Información y ensembles (FINO 2016), Multiconference CAEPIA 2016. Quinto Congreso Español de Informática (CEDI'2016), Salamanca (Spain), September 2016.
 169. VI Simposio sobre Lógica Fuzzy y Soft Computing (LFSC 2016), Multiconference CAEPIA 2016. Quinto Congreso Español de Informática (CEDI'2016), Salamanca (Spain), September 2016.
 170. VIII Simposio Teoría y Aplicaciones de Minería de Datos (TAMIDA 2016), Multiconference CAEPIA 2016. Quinto Congreso Español de Informática (CEDI'2016), Salamanca (Spain), September 2016.
 171. 5th International Conference on the Theory and Practice of Natural Computing (TPNC 2015). Sendai (Japan), December 2016.
 172. 2016 IEEE Workshop on Computational Intelligence in Production and Logistics Systems (CIPLS 2016), IEEE Symposium Series on Computational Intelligence - SSCI 2016, Athens (Greece), December 2016.
 173. 2016 IEEE Symposium of Computational Intelligence in Multicriteria Decision Making (IEEE MCDM 2016), IEEE Symposium Series on Computational Intelligence - SSCI 2016, Athens (Greece), December 2016.

12. SEMINARS, TALKS, TUTORIALS, AND ROUND TABLES

Seminars:

- **Improving the Accuracy of Fuzzy Linguistic Modeling.** University of California-Berkeley. Berkeley, California (EEUU). February 1999.
- **Algoritmos de Optimización mediante Colonias de Hormigas: Aspectos Básicos y Aplicaciones (Ant Colony Optimization Algorithms: Basics and Applications).** Edificio Politécnico. University of Vigo. Orense (Spain). December 1999.
- **Algoritmos Genéticos para Sistemas de Recuperación de Información (Genetic Algorithms for Information Retrieval).** Edificio Politécnico. University of Vigo. Orense (Spain). December 2000.
- **Genetic Fuzzy Systems and Improvements of Accuracy in Fuzzy Linguistic Modeling.** European Space Agency (ESA). Leiden (Netherlands). April 2002.
- **Algoritmos de Optimización basada en Colonias de Hormigas: Modelos y Aplicaciones (Ant Colony Optimization Algorithms: Models and Applications).** E.T.S.I. Informática. University of Castilla La Mancha. Albacete (Spain). May 2002.
- **Diseño de Sistemas Difusos para Modelado y Clasificación. Aplicaciones (Design of Fuzzy Systems for Modeling and Classification. Applications).** E.T.S.I. Informática. Technical University of Cataluña. Barcelona (Spain). January 2003.
- **Diseño Avanzado de Sistemas Difusos. El Equilibrio entre Interpretabilidad y Precisión (Advanced Design of Fuzzy Systems. The Interpretability-Accuracy Trade-off).** E.T.S.I. Informática. Technical University of Cataluña. Barcelona (Spain). January 2003.
- **Modelos en Vida Artificial: Algoritmos de Hormigas (Artificial Life Models: Ant Algorithms).** Summer University. Campus TI Ciencia y Tecnología. Seminar within the Course “Vida Artificial: Una Perspectiva Actual” (“Artificial Life: A Current Perspective”). University of Valencia. Ciudad de las Artes y las Ciencias. Valencia (Spain). July 2003.
- **Otros Algoritmos Metaheurísticos: Optimización basada en Colonias de Hormigas y Optimización basada en Nubes de Partículas (Other Metaheuristics: Ant Colony Optimization and Particle Swarm Optimization).** Seminario dentro del Curso “Sistemas Complejos, Algoritmos Evolutivos y Bioinspirados”. International University of Andalucía. Baeza (Spain). March 2006.
- **Informática Bioinspirada: La Influencia de la Biología en la Informática (Bioinspired Computer Science: The Influence of Biology in Computer Science).** Open Classroom of the University of Oviedo. Edificio Científico-Tecnológico. Campus de Mieres. Mieres (España). January 2007.
- **Genetic Fuzzy Systems: Fuzzy Knowledge Extraction by Evolutionary Algorithms.** First summer course on Future Directions in Soft Computing. European Centre for Soft Computing. Mieres (España). July 2007.
- **Soft Computing en Identificación Forense (Soft Computing in Forensic Identification).** University of Valladolid. E.T.S.I. Industriales. February 2008.
- **Algoritmos Evolutivos y Registrado de Imágenes (Evolutionary Image Registration).** Master on Information Technologies. University of Huelva. March 2008.

- **Evolutionary Computation and Genetic Fuzzy Systems** (including three one hour lectures: Evolutionary Computation, Genetic Fuzzy Systems, and Applications of Evolutionary Computation and Genetic Fuzzy Systems). Second summer course on Soft Computing: Intelligent Data Analysis. European Centre for Soft Computing. Mieres (Spain). July 2008.
- **Informática Bioinspirada: Hormigas Cibernéticas y Evolución Artificial (Bioinspired Computing: Cybernetic Ants and Artificial Evolution)**. Dos Días de Ciencia – Conferencias. Programa CajAstur y la Ciencia. Avilés (Spain), October 2008.
- **Métodos de Identificación Forense: Algunas Verdades y Mentiras de las Series de Televisión (Forensic Identification Methods: Several Truths and Lies of TV Shows)**. *Maratón Científico: CSI. ¿Realidad o Ficción? Métodos Científicos de Identificación Forense. Scientific Marathon organized by Oscar Cerdón and Sergio Damas within the Program CajAstur and Science with the participation of the European Centre for Soft Computing, the Physical Anthropology Lab of the University of Granada, the CSI of Guardia Civil, and the Anthropology Unit of the Spanish Scientific Police.* Oviedo (Spain), December 2008.
- **Identificación Forense Asistida por Ordenador mediante Técnicas de Inteligencia Artificial (Computer-assisted Forensic Identification by Artificial Intelligence Techniques)** (with Sergio Damas). *Maratón Científico: CSI. ¿Realidad o Ficción? Métodos Científicos de Identificación Forense. Scientific Marathon organized by Oscar Cerdón and Sergio Damas within the Program CajAstur and Science.* Oviedo (Spain), December 2008.
- **Identificación Forense por Superposición Craneofacial Mediante Algoritmos Evolutivos y Lógica Fuzzy (Forensic Identification by Craniofacial Superimposition Using Evolutionary Algorithms and Fuzzy Logic)**. University of Santiago. E.T.S.I. Informática. Departamento de Electrónica e Computación. Santiago de Compostela (Spain). February 2009.
- **Intelligent Systems Course. 1 ECTS. Máster in Research on Process and Systems Engineering. Course 2008-09. Official master on ICT adapted to the HERA. Quality mark MCD2003-00303 of the Spain's Ministry of Education and Science (since 2003).** E.T.S. de Ingenieros Industriales. University of Valladolid. May 2009.
- **Genetic Algorithms and Fuzzy Logic in Forensic Identification.** University of Wroclaw. Wroclaw (Poland). March 2009.
- **Genetic Fuzzy Systems. Fuzzy Knowledge Extraction by Evolutionary Algorithms. 6 hours.** University of Wroclaw. Wrocław Information Technology Initiative. Wroclaw (Poland). March 2009.
- **Hormigas, Pájaros y Peces. Modelos de Enjambre Aplicados a Problemas de Optimización (Ants, Birds and Fishes. Swarm Models for Optimization Problems)**. Jornadas de Convergencia Ciencia-Tecnología. Fundación Vodafone España. Universidad de Alcalá. Escuela Politécnica Superior. Alcalá (Spain). March 2009.
- **Inteligencia Colectiva: Modelos de Enjambre Aplicados a Problemas de Optimización (Collective Intelligence. Swarm Models Applied to Optimization Problems)**. Summer course on “Inteligencia Artificial: ¿ciencia, tecnología, ficción o marketing?”. University of Santiago. E.T.S. Ingeniería. Departamento de Electrónica e Computación. Santiago (Spain). July 2010.
- **Algunas Aplicaciones Reales de los Algoritmos Bioinspirados (Some Real-world Applications of Bioinspired Algorithms)**. Summer course on “La naturaleza en un

chip: Inteligencia Computacional y Sistemas Bioinspirados”. Universidad Complutense de Madrid, El Escorial (Spain). July, 2011.

- **Algoritmos de Optimización basados en Colonias de Hormigas (Ant Colony Optimization Algorithms)**. Primer Hackathon Reto de Inteligencia Artificial de Google en la Universidad de Granada. Oficina de Software Libre de la Universidad de Granada. E.T.S. I. Informática y Telecomunicación. Granada (Spain). November 2011.
- **An automatic method for forensic identification based on soft computing techniques**. Webinar for the IEEE Computational Intelligence Society Education Center (<http://education.ieee-cis.org/webinars>). The Internet. December 2012.
- **An automatic method for craniofacial superimposition based on computer vision and soft computing**. International Workshop on Craniofacial Superimposition. Granada (Spain). May 2013.
- **Método automático para identificación forense basado en técnicas de visión por ordenador e inteligencia artificial (Automatic method for forensic identification based on computer vision and artificial intelligence techniques)** (<http://lanochedelosinvestigadores.fundaciondescubre.es/programacion/noche-de-los-investigadores-2013-universidad-de-granada/#2>). *La Noche de los Investigadores 2013* (<http://lanochedelosinvestigadores.fundaciondescubre.es/granada/>). *European Science Dissemination event*. Granada (Spain), September 2013.
- **Redes Sociales y Modelado Basado en Agentes. Aplicaciones en Marketing (Social Networks and Agent-based Modeling. Applications in Marketing Science)**. Escuela de Verano de Inteligencia Artificial (Summer course on Artificial Intelligence) (EVIA 2014). Asociación Española para la Inteligencia Artificial (AEPIA). A Coruña (Spain), September 2014.
- **Método automático para identificación forense basado en técnicas de visión por ordenador e inteligencia artificial (Automatic method for forensic identification based on computer vision and artificial intelligence techniques)** (<http://lanochedelosinvestigadores.fundaciondescubre.es/programacion/facultad-de-ciencias-de-la-universidad-de-granada/#27>). *La Noche de los Investigadores 2014* (<http://lanochedelosinvestigadores.fundaciondescubre.es/granada/>). *European Science Dissemination event*. Granada (Spain), September 2014.
- **Genetic Fuzzy Systems: Aprendizaje Automático de Sistemas Difusos con Algoritmos Evolutivos y Aplicaciones**. Seminario de Introducción a Big-Data. University of the Basque Country. Bilbao (Spain). November 2015.
- **Modelado de Procesos de Difusión en Redes Sociales. Aplicación a Procesos de Marketing Viral (Modeling Spreading Processes in Social Networks. Application in Viral Marketing)**. Escuela de Verano de Inteligencia Artificial (Summer course on Artificial Intelligence) (EVIA 2016). Asociación Española para la Inteligencia Artificial (AEPIA). Carmona (Spain), June 2016.
- **Information Diffusion, Social Networks and Genetic Algorithms for Social Simulation of Marketing and Electoral Processes**. Third European Summer School on Fuzzy Logic and Applications (SFLA 2017). European Society for Fuzzy Logic and Technology (EUSFLAT). Santiago de Compostela (Spain), July 2016.

Tutorials:

- **Evolutionary Image Registration: Fundamentals, Approaches, Methods, and Real-World Applications**. 2010 IEEE Conference on Evolutionary Computation (CEC 2010),

IEEE World Conference on Computational Intelligence (WCCI 2010), Barcelona (Spain), July 2010.

Plenary Talks:

- **Formación a través de Internet: Nuevos Roles de la Comunicación en el Siglo XXI (Formation through the Internet: New Roles of Communication in the 21st Century).** Primer Congreso sobre Medios de Comunicación Social. Palacio de Congresos de Granada. Granada (Spain). November 2002.
- **El Centro de Enseñanzas Virtuales de la Universidad de Granada (The Virtual Learning Center of the University of Granada).** Simposio Internacional sobre Posibilidades y Límites de la Enseñanza Virtual en el Ámbito Universitario. La Experiencia de las Universidades Andaluzas. Universidad Internacional de Andalucía. Baeza, Jaén (Spain). December 2002.
- **Enseñanza a través de Internet: Fundamentos, Requisitos y Plataformas de Teleformación... ¿de Software Libre? (Learning through the Internet: Fundamentals, Requirements and Free Software Learning Management Systems?)** *Plenary talk* of the III Jornadas Andaluzas de Software Libre. E.T.S.I. Informática. University of Granada. Granada (Spain). November 2003.
- **La Enseñanza vía Internet en la Universidad de Granada: El Centro de Enseñanzas Virtuales (Learning through the Internet in the University of Granada: The Virtual Learning Center).** *Opening talk* of the III Fin de Semana para Profesionales de la Informática de Granada (FISEPIG). Almuñecar, Granada (Spain). November 2003.
- **Enseñanza Virtual: Fundamentos, Perspectivas Actuales y Visión de la Universidad de Granada (eLearning: Fundamentals, Current Perspectives and View of the University of Granada).** *Plenary talk* at the X Jornadas de Investigación en el Aula de Matemáticas. Nuevas Tecnologías de la Información y la Comunicación. Facultad de Ciencias de la Educación. University of Granada. Granada (Spain). November 2004.
- **Enfoques Evolutivos para el Registrado de Imágenes (Evolutionary approaches for Image Registration).** *Plenary talk* at the Segundo Simposio sobre Inteligencia Computacional (SICO'2007). Segundo Congreso Español de Informática (CEDI'2007). Zaragoza (Spain). September 2007.
- **Líneas de Investigación en el European Centre for Soft Computing: Soft Computing en Identificación Forense (Research Lines at the European Centre for Soft Computing: Soft Computing in Forensic Identification).** *Plenary talk* at the XII Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA-TTIA 2007). Salamanca (Spain). November 2007.
- **Genetic Fuzzy Systems. A Historical View** *Overview talk* at the Third International Workshop on Genetic and Evolving Fuzzy Systems (GEFS08), IEEE, Witten-Bommerholz (Germany). March, 2008.
- **Genetic Algorithms and Fuzzy Logic in Forensic Identification.** *Plenary talk* of the Twenty Third International Conference on Industrial, Engineering & Other Applications of Applied Intelligent Systems (IEA-AIE 2010), Cordoba (Spain). June, 2010.
- **An automatic method for forensic identification based on soft computing techniques.** *Plenary talk* at the Seventh Joint European Society for Fuzzy Logic and Technologies – “les rencontres francophones sur la Logique Floue et ses Applications” (EUSFLAT-LFA) Conference, Aix-Les-Bains (France). July, 2011.

- **New Developments on the Hybridizations of Fuzzy Systems and Evolutionary Algorithms.** *Plenary talk* at the XVI Congreso Español Sobre Tecnologías y Lógica Fuzzy (ESTYLF 2012), Valladolid, February 2012.
- **Some Real-world Applications of Soft Artificial Intelligence: Scientogram Mining, Assembly Line Balancing, and Forensic Identification.** *Plenary talk* of the Fifteenth International Conference of the Catalan Association of Artificial Intelligence (CCIA 2012), Alicante, October 2012.
- **A Novel Framework to Design Fuzzy Rule-based Ensembles using Diversity Induction Methods and Evolutionary Algorithm-based Classifier Selection and Fusion.** *Plenary talk* at the International Work Conference on Artificial Neural Networks (IWANN2013), Tenerife (Spain), June 2013.
- **Minería de Grafos Multiobjetivo usando Algoritmos Evolutivos. Aplicación al Análisis de Mapas Visuales de la Ciencia.** *Plenary talk* at the Séptimo Simposio sobre Teoría y Aplicaciones de Minería de Datos (TAMIDA2013) and the Octavo Congreso Español sobre Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (MAEB2013). Cuarto Congreso Español de Informática (CEDI'2013). Madrid (Spain). September 2013.
- **Intelligent System Applications in Different Domains: Visual Information Systems, Industrial Engineering, and Forensic Identification.** *Plenary talk* at the International Symposium on INnovations in Intelligent SysTems and Applications (INISTA2015), Madrid (Spain), September 2015.
- **Using Computational Intelligence to automate Craniofacial Superimposition for Skeleton-based Human Identification.** *Plenary talk* at the IEEE International Conference on Fuzzy Systems (FuzzIEEE2017), Naples (Italy), July 2017.

Round Tables:

- **La Enseñanza Virtual en la Universidad de Granada (eLearning in the University of Granada).** Primer Foro de la Innovación y el Desarrollo Tecnológico. Feria de Muestras. Armilla, Granada (Spain). November 2001.
- **E-learning.** III Jornadas Andaluzas de Documentación. Universidad Pablo de Olavide. Sevilla (Spain). November 2003.
- **Genetic Fuzzy Systems: What's Next?** First International Workshop on Genetic Fuzzy Systems. E.T.S.I. Informática. University of Granada. Granada (Spain). March 2005.
- **Genetic Fuzzy Systems: What's Next?** 2006 International Symposium on Evolving Fuzzy Systems. Lancaster University, Ambleside (UK). September 2006.
- **Future Directions in Soft Computing.** First summer course on Future Directions in Soft Computing. European Centre for Soft Computing. Mieres (España). July 2007.

13. AWARDS

- **Young Researcher Career Award. University of Granada Council.** 2004 edition.
- **IEEE Transactions on Fuzzy Systems Outstanding Associate Editor Award.** 2008.
- **IEEE Computational Intelligence Society Outstanding Early Career Award.** 2011. *It was the first such award conferred.*
- **IFSA Award for Outstanding Applications of Fuzzy Technology.** 2011. Title: “Forensic Identification System Using Craniofacial Superimposition Based on Fuzzy Sets and Evolutionary Algorithms”. Authors: **O. Cordón**, S. Damas, O. Ibáñez, J. Santamaría, I. Alemán, M. Botella, F. Navarro.
- **EUSFLAT Best Ph.D. Thesis Award.** 2010. Dissertation title: “Forensic Identification by Craniofacial Superimposition using Soft Computing”. Author: Dr. Oscar Ibáñez. Advisors: **Drs. Cordón** and Damas.
- **Spanish National Award on Computer Science ARITMEL to the “Spanish Engineer on Computer Science”.** 2014. Awarded by the Sociedad Científica Informática de España (*Spanish Computer Science Scientific Society, SCIE*).
- **2006 World Congress on Computational Intelligence (WCCI),** Vancouver, Canada. Session WedAM-7 SS-S1: Soft Computing in Image Processing: Recent Advances. **Best Session Presentation Award:** J. Santamaría, O. Cordón, S. Damas, I. Alemán, M. Botella. 3D Forensic Model Reconstruction by Scatter Search-based Pair-wise Image Registration.
- **2006 IEEE International Symposium on Evolving Fuzzy Systems (EFS06),** Ambleside, UK. **Runner-up Best Application Paper Award:** O. Cordón, E. Herrera-Viedma, M. Luque, Fuzzy Linguistic Query-based User Profile Learning by Multiobjective Genetic Algorithms.
- **Engineering Applications of Artificial Intelligence. Elsevier. Top Cited Article 2005-2010:** R. Alcalá, J. Casillas, O. Cordón, A. González, F. Herrera, A genetic rule weighting and selection process for Fuzzy Control of HVAC Systems, *Engineering Applications of Artificial Intelligence* 18:3 (2005) 279-296.
- **IEEE Computational Intelligence Society 5th IEEE International Workshop on Genetic and Evolutionary Fuzzy Systems. IEEE Symposium Series on Computational Intelligence 2011 (SSCI 2011),** Paris, France. **GEFS 2011 Outstanding Paper Award:** A. Álvarez-Álvarez, G. Triviño, O. Cordón. Body Posture Recognition by means of a Genetic Fuzzy Finite State Machine.

- **VIII Congreso Español sobre Metaheurísticas, Algoritmos Evolutivos y Bioinspirados (MAEB 2012)**, Albacete, February 2012. **Best Application Paper Award**: M. Chica, O. Cordón, S. Damas, J. Bautista. Análisis del NSGA-II para el TSALBP-1/3 cuando existe variación de demanda en una producción mixta.
- **2016 IEEE Computational Intelligence Society Outstanding Computational Intelligence Magazine Paper Award**. N. Bova, O. Ibañez, O. Cordón. Image segmentation using Extended Topological Active Nets optimized by Scatter Search. IEEE Computational Intelligence Magazine 8:1 (2013) 16-32.

14. INDEXING IN SCIENTIFIC DATA BASES AND IMPACT FACTORS

14.1. THOMSON ISI WEB OF KNOWLEDGE: ESSENTIAL SCIENCE INDICATORS

CURRENT SITUATION (Query done on December, 09, 2016):

Number of citations: 644 (All fields), 384 (Computer Science)

Position: Top 1%, 83063 of a total of 86471 in the 1% of the most cited authors list in All fields.

Position: Top 1% 2174 of a total of 3093 in the 1% of the most cited authors list in Computer Science.

HIGHLY CITED PAPERS

Top Papers for O. Cordón in Engineering (on the Top 1%)

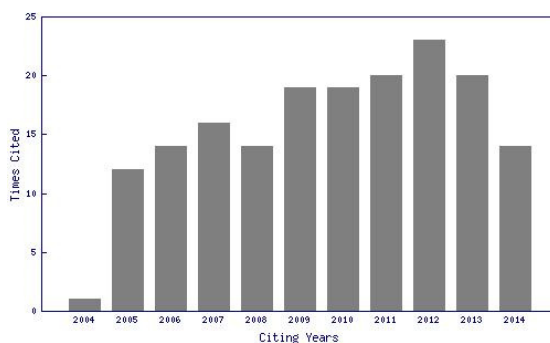
PREVIOUS PAPERS (Query done on January, 12, 2015):

1. Citations: 172. Position: 670 of 9623 (Top 1%)

Title: TEN YEARS OF GENETIC FUZZY SYSTEMS: CURRENT FRAMEWORK AND NEW TRENDS

Authors: CORDON O; GOMIDE F; HERRERA F; HOFFMANN F; MAGDALENA L

Source: FUZZY SET SYSTEM 141 (1): 5-31 JAN 1 2004



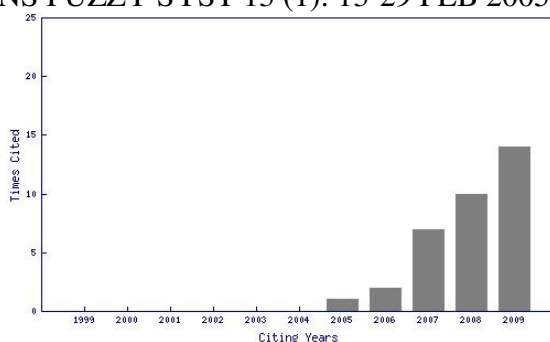
PREVIOUS PAPERS (Query done on February, 20, 2010):

2. Citations: 34. Position: 5065 of 6601 (Top 1%)

Title: GENETIC TUNING OF FUZZY RULE DEEP STRUCTURES PRESERVING INTERPRETABILITY AND ITS INTERACTION WITH FUZZY RULE SET REDUCTION

Authors: CASILLAS J; CORDON O; DEL JESUS MJ; HERRERA F

Source: IEEE TRANS FUZZY SYST 13 (1): 13-29 FEB 2005

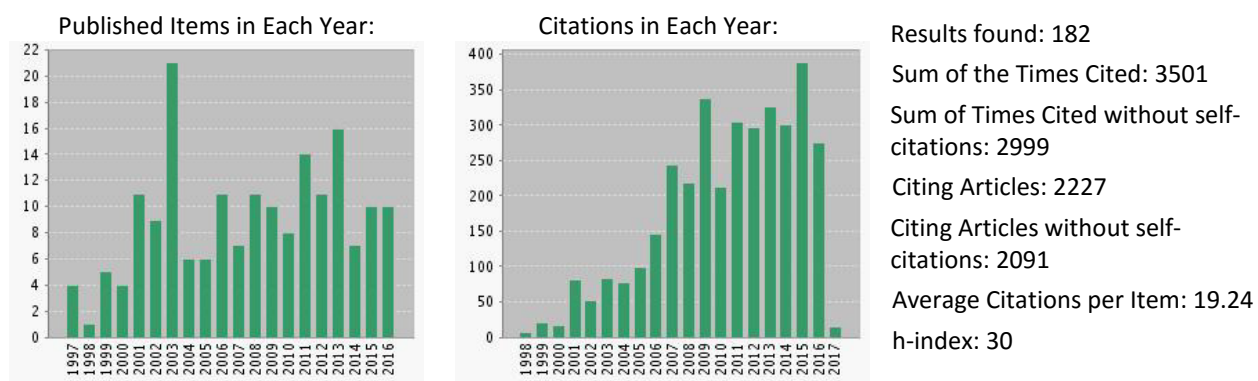


14.2. h INDEX

The h index is a world-wide accepted indicator to evaluate an individual's scientific production.

OSCAR CORDON's h Index (Thomson-Reuters (ISI) Web of Science): 30 (09 Febr 2017)

Thomson's ResearchID Profile: <http://www.researcherid.com/rid/F-6672-2011>



OSCAR CORDON's h Index (Google Scholar): 49 (9 February 2017)

Sum of the Times Cited: 10906

Scholar Google Research Profile:

<http://scholar.google.es/citations?user=oUmv8xgAAAAJ&hl=es>

List of papers associated to the h index and number of citations collected in the Thomson-Reuters (ISI) Web of Science (ordered by citation number):

1. Cordon O, Gomide F, Herrera F, et al.
Ten years of genetic fuzzy systems: current framework and new trends
FUZZY SETS AND SYSTEMS 141 (1): 5-31 JAN 1 2004
Number of citations: 399
2. Cordon O, del Jesus MJ, Herrera F
A proposal on reasoning methods in fuzzy rule-based classification systems
INTERNATIONAL JOURNAL OF APPROXIMATE REASONING 20 (1): 21-45 JAN 1999
Number of citations: 198
3. Cordon O, Herrera F, Villar P
Generating the knowledge base of a fuzzy rule-based system by the genetic learning of the data base
IEEE TRANSACTIONS ON FUZZY SYSTEMS 9 (4): 667-674 AUG 2001
Number of citations: 144
4. Casillas J, Cordon O, del Jesus MJ, et al.
Genetic tuning of fuzzy rule deep structures preserving interpretability and its interaction with fuzzy rule set reduction
IEEE TRANSACTIONS ON FUZZY SYSTEMS 13 (1): 13-29 FEB 2005
Number of citations: 137
5. Cordon O, Herrera F
A three-stage evolutionary process for learning descriptive and approximate fuzzy-logic-controller knowledge bases from examples
INTERNATIONAL JOURNAL OF APPROXIMATE REASONING 17 (4): 369-407 NOV 1997
Number of citations: 120
6. Garcia-Martinez C, Cordon O, Herrera F
A taxonomy and an empirical analysis of multiple objective ant colony optimization algorithms for the bi-criteria TSP
EUROPEAN JOURNAL OF OPERATIONAL RESEARCH 180 (1): 116-148 JUL 1 2007
Number of citations: 103
7. Cordon, O.
A historical review of evolutionary learning methods for Mamdani-type fuzzy rule-based systems: Designing interpretable genetic fuzzy systems
INTERNATIONAL JOURNAL OF APPROXIMATE REASONING 52 (6): 894-913 SEP 2011
Number of citations: 97
8. Cordon O, Herrera F, Peregrin A
Applicability of the fuzzy operators in the design of fuzzy logic controllers
FUZZY SETS AND SYSTEMS 86 (1): 15-41 FEB 16 1997
Number of citations: 91
9. Cordon O, Herrera F, Zwir I
Linguistic modeling by hierarchical systems of linguistic rules
IEEE TRANSACTIONS ON FUZZY SYSTEMS 10 (1): 2-20 FEB 2002
Number of citations: 84
10. Herrera-Viedma E, Cordon O, Luque M, et al.
A model of fuzzy linguistic IRS based on multi-granular linguistic information
INTERNATIONAL JOURNAL OF APPROXIMATE REASONING 34 (2-3): 221-239 NOV 2003
Number of citations: 83
11. Casillas J, Cordon O, Del Jesus MJ, et al.
Genetic feature selection in a fuzzy rule-based classification system learning process for high-dimensional problems
INFORMATION SCIENCES 136 (1-4): 135-157 AUG 2001
Number of citations: 78

12. Cordon O, Herrera F
A proposal for improving the accuracy of linguistic modeling
IEEE TRANSACTIONS ON FUZZY SYSTEMS 8 (3): 335-344 JUN 2000
Number of citations: 77

13. Cordon O, Herrera F
A two-stage evolutionary process for designing TSK fuzzy rule-based systems
IEEE TRANS. ON SYSTEMS MAN AND CYBERNETICS PART B-CYBERNETICS 29 (6): 703-715 DEC 1999
Number of citations: 74

14. Cordon O, Herrera F, Sanchez L
Solving electrical distribution problems using hybrid evolutionary data analysis techniques
APPLIED INTELLIGENCE 10 (1): 5-24 JAN 1999
Number of citations: 71

15. Cordon O, Herrera F, Villar P
Analysis and guidelines to obtain a good uniform fuzzy partition granularity for fuzzy rule-based systems using simulated annealing
INTERNATIONAL JOURNAL OF APPROXIMATE REASONING 25 (3): 187-215 NOV 2000
Number of citations: 67

16. Cordon O, del Jesus MJ, Herrera F
Genetic learning of fuzzy rule-based classification systems cooperating with fuzzy reasoning methods
INTERNATIONAL JOURNAL OF INTELLIGENT SYSTEMS 13 (10-11): 1025-1053 OCT-NOV 1998
Number of citations: 66

17. Cordon O, Herrera F, Magdalena L, et al.
A genetic learning process for the scaling factors, granularity and contexts of the fuzzy rule-based system data base
INFORMATION SCIENCES 136 (1-4): 85-107 AUG 2001
Number of citations: 64

18. Cordon O, del Jesus MJ, Herrera F, Lozano M
MOGUL: A methodology to obtain genetic fuzzy rule-based systems under the iterative rule learning approach
INTERNATIONAL JOURNAL OF INTELLIGENT SYSTEMS 14 (11): 1123-1153 NOV 1999
Number of citations: 63

19. Alcalá R, Casillas J, Cordon O, et al.
A genetic rule weighting and selection process for fuzzy control of heating, ventilating and air conditioning systems
ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE 18(3): 279-296 APR 2005
Number of citations: 58

20. Casillas J, Cordon O, Herrera F
COR: A methodology to improve ad hoc data-driven linguistic rule learning methods by inducing cooperation among rules
IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS PART B-CYBERNETICS 32 (4): 526-537 AUG 2002
Number of citations: 55

21. Alcalá R, Alcalá-Fdez J, Casillas J, et al.
Hybrid learning models to get the interpretability-accuracy trade-off in fuzzy modeling
SOFT COMPUTING 10 (9): 717-734 JUL 2006
Number of citations: 52

22. Cordon O, Herrera F
Hybridizing genetic algorithms with sharing scheme and evolution strategies for designing approximate fuzzy rule-based systems
FUZZY SETS AND SYSTEMS 118 (2): 235-255 MAR 1 2001
Number of citations: 51

23. Alcalá, R; Benítez, JM; Casillas, J; Cordon, O, et ál.
Fuzzy control of HVAC systems optimized by genetic algorithms
APPLIED INTELLIGENCE 18 (2): 155-177 MAR-APR 2003
Number of citations: 46
24. Santamaria, J.; Cordon, O.; Damas, S.; et al.
Performance evaluation of memetic approaches in 3D reconstruction of forensic objects
SOFT COMPUTING 13 (8-9): 883-904 JUL 2009
Number of citations: 42
25. Cordon O, Herrera-Viedma E, Lopez-Pujalte C, et al.
A review on the application of evolutionary computation to information retrieval
INTERNATIONAL JOURNAL OF APPROXIMATE REASONING 34 (2-3): 241-264 NOV 2003
Number of citations: 40
26. Cordon O, Herrera F, Gomide F, et al.
Genetic fuzzy systems. New developments
FUZZY SETS AND SYSTEMS 141 (1): 1-3 JAN 1 2004
Number of citations: 38
27. Damas, S.; Cordon, O.; Santamaria, J.
Medical Image Registration Using Evolutionary Computation: An Experimental Survey
IEEE COMPUTATIONAL INTELLIGENCE MAGAZINE 6 (4): 26-42 NOV 2011
Number of citations: 37
28. Chica, Manuel; Cordon, Oscar; Damas, Sergio; et ál.
Multiobjective constructive heuristics for the 1/3 variant of the time and space assembly line balancing problem: ACO and random greedy search
INFORMATION SCIENCES 180 (18): 3465-3487 SEP 15 2010
Number of citations: 34
29. Alvarez-Alvarez, Alberto; Trivino, Gracian; Cordon, Oscar
Human Gait Modeling Using a Genetic Fuzzy Finite State Machine
IEEE TRANSACTIONS ON FUZZY SYSTEMS 20 (2): 205-223 APR 2012
Number of citations: 34
30. Cordon, O; Damas, S; Santamaria, J
A fast and accurate approach for 3D image registration using the scatter search evolutionary algorithm
PATTERN RECOGNITION LETTERS 27 (11): 1191-1200 AUG 2006
Number of citations: 31

15. OTHER MERITS

- *Owns the accreditation for Full Professor in Computer Science from the Spain's National Quality Evaluation Agency (ANECA) since December 2008.*
- **Member of the Research Group** “Soft Computing and Intelligent Information Systems” (SCI2S) (<http://sci2s.ugr.es>). Group code TIC-186 in the Andalusian Research Plan, ICT. Researcher PAI code: INV032825. **Best Research Group Award. University of Granada Council.** 2013 edition.
- **Member of** the European Association of Fuzzy Logic and Technology (EUSFLAT) (Member number: 62) and the Spanish Association for Artificial Intelligence (AEPIA).
- **Member of** the Institute of Electrical and Electronics Engineers (IEEE) since 2004 (Member number: 80436203), and **Senior Member** since 2011.
- **Reviewer for the journals:** IEEE Transactions on Fuzzy Systems; IEEE Transactions on Evolutionary Computation, IEEE Transactions on Neural Networks; IEEE Transactions on Systems, Man and Cybernetics; International Journal on Approximate Reasoning; Fuzzy Sets and Systems; International Journal of Intelligent Systems; Information Sciences; Mathware & Soft Computing; Artificial Intelligence in Medicine; Applied Soft Computing; Image and Vision Computing; Soft Computing; Applied Intelligence; International Journal of Applied Mathematics and Computer Science; Journal of Zhejiang University Science; International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems; Swarm Intelligence; European Journal of Operational Research, Advances in Fuzzy Systems, Journal of Global Optimization, International Journal of General Systems, International Journal of Innovative Computing and Applications, Evolutionary Intelligence, International Journal of Computer-Aided Engineering, Information Processing and Management, Engineering Applications of Artificial Intelligence, Central European Journal of Computer Science, International Journal of Advanced Operations Management, Engineering Optimization, International Journal of Machine Learning and Cybernetics, Progress in Artificial Intelligence, and Journal of Artificial Societies and Social Simulation.
- **Member of the Evaluation Committee for the Spain's R&D Plan, Computer Science Technologies (TIN) Comission, 2007 and 2014.**
- **Member of the Evaluation Committee for the Project Review Workshop in Informatics (JspTIN2010)** (<http://www.ia.urjc.es/jspTIN2010/>), Spain's R&D Plan, Ministry of Science and Technology, March 2010.
- **Reviewer of Spain's R&D Plan research projects for ANEP (Spanish Agency for Evaluation and Prospective).**
- **Reviewer for the European Science Foundation since April 2006. Reviewer for the Fundamental Research Programme of the Université Libre de Bruxelles (Belgium).**
- **External examiner for five PhD committees (vivas)** at Bond University, Queensland, Australia (candidate: Erin James Montgomery, October 2005), at the University of the West of England, Bristol, UK (candidate: Antony James Waldock, October 2007), at the University of Pisa, Italy (candidate: Alessio Bota, March 2008), at the University of Milan (candidate: Mauro Dragoni, March 2010), and at the University of Parma (candidates: Pablo Mesejo, Lara González, Youssef Shady, and Pouya Ahmadian, March 2014).

- **Owens three Research Skills from the Spanish Research Ministry and three Academic Skills from the University of Granada.**