

<b>Part A. PERSONAL INFORMATION</b>		<b>CV date</b>		16/03/2020
First and Family name	Sergio Damas Arroyo			
ID number		Age		
Researcher numbers	Researcher ID	D-8556-2012		
	Orcid code	0000-0002-8377-8349		

### A.1. Current position

Name of University/Institution	University of Granada			
Department	Software Engineering Dpt.			
Address and Country	Periodista Daniel Saucedo Aranda sn, 18071, Granada, SPAIN			
Phone number	+34958243465	E-mail	<a href="mailto:sdamas@ugr.es">sdamas@ugr.es</a>	
Current position	Full Professor	From	14/11/2018	
UNESCO # Specialty	120304			
Keywords	Evolutionary Computation, Metaheuristics, Optimization, Soft Computing Applications, Agent Based Modeling in Marketing, Computational Forensics, Computational Forensic Anthropology, Evolutionary Computer Vision, Evolutionary Medical Imaging			

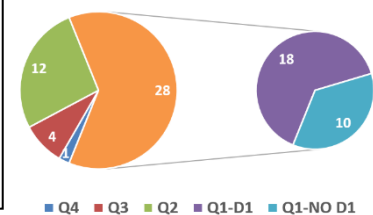
### A.2. Education

MSc Computer Science	University of Granada	1995
PhD Computer Science	University of Granada	2003

### A.3. Quality Indicators in Scientific Production (JCR articles, h-index, thesis supervised)

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| <p>a) total no. of citations (WOS): 1020 (ScholarGoogle): 2225<br/>average no. of citations during the last 5 years (WOS 2015-19): 119, (G. Scholar): 222</p> <p>b) total number of JCR publications: 45 (28 in the first quartile, Q1, 18 in the first decile, D1).</p> <p>c) h-index (WOS): 22; h-index (ScholarGoogle): 27</p> <p>d) PhD thesis supervised: 7 (6 in the last 10 years)</p> |
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PUBLICACIONES JCR: DISTRIBUCIÓN POR CUARTILES (DETALLE DE PRIMER DECIL ENTRE LAS Q1)



### Part B. CV SUMMARY (max. 3500 characters, including spaces)

Sergio Damas received the MSc and PhD in Computer Science from the University of Granada (Spain) where he was Assistant Professor 1995-2006. He was granted with a temporal leave to start working as Deputy Principal Researcher at the European Centre for Soft Computing (ECSC) in 2006. In 2011, he was promoted to Principal Researcher of the "Fuzzy-Evolutionary Applications" research unit at the ECSC. He led the research unit at the ECSC until 2016. In 2017, he was back to the University of Granada where he is currently Full Professor.

Dr. Damas research interests are focused on two main lines related to the application of Soft Computing to support the decision maker in complex and very different environments. The first one includes the design of different kinds of economic models for strategic branding using **agent-based modeling to recreate competitive markets** for modeling and predicting sales, touchpoints, perceptions, awareness, and word-of-mouth. The second research line is focused on **forensic ID of skeletal remains** using both Soft Computing and Computer Vision.

He has published +100 peer-reviewed scientific publications, including **45 SCI-JCR-indexed** journal papers (**28 Q1**). His **h-index is 22 and 27** (Web of Science and Google Scholar, respectively). He has published in prestigious journals as IEEE Transactions on Evolutionary Computation, IEEE Transact. on Fuzzy Systems, IEEE Transactions on Information Forensics and Security, and ACM Comput Surveys. He has edited two special issues on "Computational Intelligence in Computer Vision and Image Processing" in two SCI-JCR journals: Intl. Journal of Approximate Reasoning and Computational Intelligence Magazine.

He has supervised **seven PhD dissertations (three of them in the last 5 years)**; one of them received the “**Best PhD Thesis Award**” by the European Society for Fuzzy Logic and Technology (**EUSFLAT**). He owns an international patent on an intelligent system for forensic identification using Soft Computing. The corresponding software (named Face2Skull) is currently commercialized in México and received the “**Outstanding applications of fuzzy technology**” award by the International Fuzzy Systems Association (**IFSA**).

He was the general chair of the 2014 International Conference on Craniofacial Superimposition, the leading event in the field. He is the President of the Organizing Committee of the 2018 Spanish Conference on AI (CAEPIA-2018). He has also organized different international workshops, special sessions and tutorials at CEC, SSCI, WCCI and other national and international events.

He has participated in **more than 30 research projects and contracts** in European, National, and Regional calls. At a **European** level, he has been **global coordinator** (MEPROCS, 1M€), **Principal Investigator** (I-PAN, 4M€) and a project participant (MIBISOC, ENGINE).

Dr. Damas was the founder and chair for 7 years (2011-2018) of the IEEE Task Force on "Evolutionary Computer Vision and Image Processing (ECVIP)". He was also member of the "IEEE-CIS Evolutionary Computation Technical Committee" for 7 years. He is a Senior Member of IEEE CIS. He is member of the "Soft Computing in Image Processing" (SCIP) WG

He has been an **external evaluator of different research panels** for the Spanish Agencies (ANEP and “Comision Científico Técnica Tecnologías Informáticas TIN” – AEI) and “Science Foundation Ireland”.

## Part C. RELEVANT MERITS

### C.1. Publications (including books)

1. S. Damas, O. Cerdón, O. Ibáñez. **Handbook on Craniofacial Superimposition**. ISBN 978-3-319-11136-0. **Springer**. 2020.
2. A. Valsecchi, S. Damas, O. Cerdón. **A robust and efficient method for skull-face overlay in computerized craniofacial superimposition**. IEEE Transactions on Information Forensics & Security 13:8 (2018) 1960-1974. Impact factor 2018: 6.211. Category: COMPUTER SCIENCE, THEORY & METHODS. Ranking: 5/104. **D1. Q1**.
3. E. Bermejo, M. Chica, S. Damas, S. Salcedo, O.Cerdón. **Coral Reef Optimization with Substrate Layers for Medical Image Registration**. Swarm and Evolutionary Computation 42 (2018) 138-159. Impact factor 2018: 6.330. Category: COMPUTER SCIENCE, THEORY & METHODS. Order: 4/104. **D1. Q1**.
4. K. Trawinski, M. Chica, D.P. Pancho, S. Damas, O. Cerdón. **moGrams: A Network-based Methodology for Visualizing the Set of Non-dominated Solutions in Multiobjective Optimization**. IEEE Transactions on Cybernetics 48:2 (2018) 474-485. Impact factor 2018: 10.387. Category: COMPUTER SCIENCE, CYBERNETICS. Ranking: 1/23. **D1. Q1**.
5. M. Chica, J. Barranquero, T. Kajdanowicz, S. Damas, O. Cerdón. **Multimodal optimization: An effective framework for model calibration**. Information Sciences 375 (2017), 79-97. Impact factor 2017: 4.305. Category: COMPUTER SCIENCE, INFORMATION SYSTEMS. Ranking: 12/148. **D1. Q1**.
6. B.R. Campomanes-Álvarez, O. Ibáñez, C. Campomanes-Álvarez, S. Damas, O. Cerdón. **Modeling Facial Soft Tissue Thickness for Automatic Skull-Face Overlay**. IEEE Transactions on Information Forensics & Security 10:10 (2015) 2057-2070. Impact factor

2015: 2.441. Category: COMPUTER SCIENCE, THEORY & METHODS. Ranking: 10/105.  
**D1. Q1.**

7. 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) 27:1-27:27. Impact factor: 4.529. Category: COMPUTER SCIENCE, THEORY & METHODS. Ranking: 1/99. **D1. Q1.**
8. J. Santamaría, S. Damas, O. Cordón, A. Escámez. **Self-Adaptive Evolution: Towards New Parameter Free Image Registration Methods.** IEEE Transactions on Evolutionary Computation 17:4 (2013) 545-557. Factor de impacto: 5.545. Categoría: COMPUTER SCIENCE, THEORY & METHODS. Ranking: **1/102. D1. Q1.**
9. S. Damas, O. Cordón, J. Santamaría. **Medical Image Registration Using Evolutionary Computation: An Experimental Survey.** IEEE Computational Intelligence Magazine 6:4 (2011) 26-42. Impact factor: 3.368. Category: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE. Ranking: 8/111. **D1. Q1.**
10. O. Ibáñez, O. Cordón, S. Damas, J. Santamaría. **Modeling the skull-face overlay uncertainty using fuzzy sets.** IEEE Transactions on Fuzzy Systems 19:5 (2011) 946-959. Factor de impacto: 4.260. Categoría: COMPUTER SCIENCE, ARTIFICIAL INTELLIGENCE. Ranking: **5/111. D1. Q1.**

## C.2. Research projects and grants

### Principal Investigator in European projects

1. MEPROCS: New METHodologies and PROtocols of forensic identification by Craniofacial Superimposition. European Commission. FP7 Security Call. FP7-SEC-2011-1, Contract GA n. 285624. 1.005.800€ (219.350 € ECSC). Feb 2012 - Jul 2014. **Global coordinator-PI:** Sergio Damas
2. I-PAN: Innovative Poplar Low Density Structural Panel. European Commission. FP7 Collaborative project. ENV.2012.6.3-1. Prop. Contract GA n.: 308630. 4.107.915€ (371.200€ ECSC). Nov. 2012 – Oct. 2015. **PI at the ECSC:** Sergio Damas

### Principal Investigator in National projects

1. EXASOCO: Soluciones EXplicables y precisAs para problemas complejos mediante SOft Computing. Ministerio de Ciencia, Innovación y Universidades PGC2018-101216-B-I00. 112.530€. Enero 2019 – Diciembre 2021. IPs: O. Cordón, S. Damas

## C.3. Contracts

### Principal Investigator in research contracts

1. Desarrollo de algoritmia de inteligencia artificial para aprendizaje sobre datos complejos y datos dinámicos complejos. Contrato Inv. 7353 de la Universidad de Granada con Repsol S.A. Feb. 2018 – Mar. 2019. Pls: Francisco Herrera, Salvador García, Sergio Damas. 264.472 €
2. Inteligencia Artificial y Ciencia de Datos para el análisis de Problemas Complejos. Contrato Inv. 4135 de la Universidad de Granada con Repsol S.A. Apr. 2019 – Mar. 2020. Pls: Francisco Herrera, Salvador García, Sergio Damas. 335.682 €
3. Asesoramiento en Modelado Basado en Agentes y Ciencia de Datos. Contrato Inv. 4382 de la Fundación Empresa-Universidad de Granada (FEUGR) con R0d Brand Consultants S.L. Ene 2017–Dic 2019. PI: Oscar Cordón, Sergio Damas. 40.000€

4. TOXDTECT: Innovative Packaging For The Detection Of Fresh Meat Quality And Prediction Of Shelf-Life. Research Contratct IDI.PA4005 ECSC and Inspiralía SA. Jan. 2014 – Jan 2016. PIs: Manuel Chica, Sergio Damas. 75.625€

5. IDENTIMOD-ZIO: Herramienta de Apoyo a la Toma de Decisiones Estratégicas en Sistemas de Imagen Corporativa. Contrato Inv. IDI.PA4005 entre R0d Brand Consultants y ECSC. Feb 2013–May 2014. PIs: Oscar Cordón, Sergio Damas y Manuel Chica. 169.400€

## C.4. Patents and other IPR

1. Cordón, O., Damas, S., Ibáñez, O., Santamaría, J., Alemán, I., Botella, M. Método y Sistema de Identificación Forense por Superposición Craniofacial. Fundación Progreso del Soft Computing y UGR. Commercialized patent. Distributed in México by Aspelab.

a. Publication No.: P200901732/3. Application date: 30/07/2009. Publication No.: P200901732. Publication date: 15/02/2011. Priority Country: Spain

b. Pub No.: WO/2011/01274. Pub date: 03/02/2011. Intl appl No.: PCT/ES2010/00350. Intl fill date: 30/07/2010. Priority Data: P200901732 30.07.2009 ES. Designated States: Internation.

c. Application No.: MX/a/2012/000942. Publication No.: 315500. Publication date: 20/11/2013. Priority Country: México. Renewal: antes Jul 2018. Maximum validity: 20 años

2. Gómez, O., Ibáñez, O., Mesejo, P., Cordón, O., Damas, S., Valsecchi, A. Procedimiento de Identificación de Imágenes Óseas (Osseous Images Identification Procedure). Application No.: P201831303, Application date: 29/12/2018, Int. Application No.: PCT/ES2019/070887, Int. filling date: 26/12/2019, Priority: Spain, Owning Inst.: UGR, Exploitation rights: Panacea

## C.5 Awards and recognitions

1. EUSFLAT Best Ph.D. Thesis Award. 2011. Title: Forensic Identification by Craniofacial Superimposition using Soft Computing. Author: O. Ibáñez. Advisors: O. Cordón, S. Damas.

2. IFSA Award for Outstanding Applications of Fuzzy Technology. 2011. Title: Forensic Identification System Using CFS Based on FS and EA. Authors: O. Cordón, S. Damas et al.

3. Best Application Paper MAEB 2012.

## C.6. International Representations

1. Founder and chair of the IEEE CIS Task Force on "Evolutionary Computer Vision and Image Processing (ECVIP)" (2011-2018).

2. Member of the "IEEE-CIS Evolutionary Computation Technical Committee" (2011-18).

3. Senior Member of IEEE CIS since 2016.

4. External evaluator of different research panels for the Spanish Agencies (ANEP and "Comision Científico Técnica Tecnologías Informáticas TIN" – AEI) and "Science Foundation Ireland".