

CURRICULUM VITAE ABREVIADO (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

First name	Juan Antonio		
Family name	Ortega Ramírez		
Gender (*)	Male		
e-mail	jortega@us.es	URL Web	https://bibliometria.us.es/prisma/investigador/3082
Open Researcher and Contributor ID (ORCID) (*)	0000-0001-9095-7241		

(*) Mandatory

A.1. Current position

Position	Catedrático de Universidad		
Initial date	Nov 2016		
Institution	University of Seville		
Department/Center	Computer Science and Systems Department	School of Computer Engineering Avda. Reina Mercedes, s/n 41012 – Sevilla - Spain	
Country	Spain	Teleph. number	+34954553869
Key words	Health Informatics, Artificial Intelligence and Computer Science		

A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
None	I was diagnosed with stage II colon cancer in June 2012, but I kept working

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Computer Science Graduate	Sevilla/Spain	1992
Computer Science PhD	Sevilla/Spain	2000

(Include all the necessary rows)

Part B. CV SUMMARY (max. 5000 characters, including spaces)

Number of research six-year terms	4	Last six-year terms	2015-2020
Theses supervised total/last 10 years	11 / 6	H index(WoS/GS)	15/19
International theses	3	Ranked Conferences	12
Sum Cites WoS/Google (W/GS)	629 / 1335	Registered software	1
Sum Cites/years 2018-Now(W/GS)	258 / 501	IP Contracts R&D	26
JCR papers	56 (17 Q1)	Patents	2

Juan Antonio Ortega holds a 5-year Bachelor's degree in Computer Science and a Ph.D. in Computer Science in 2000, both at the University of Seville in Spain. He has been a full-time professor since 1992 in the Department of Languages and Computer Systems at the University of Seville. He obtained a position as full professor (Catedrático) through public competition in 2016.

He has participated in Computer Science Bachelors and Masters programmes at the University of Seville, and he has supervised more than a hundred final master projects. He has participated in several doctoral programmes. He is a member of the Academic Commission of several Master and Bachelor degrees in Computer Science (University of Seville).



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He has a broad research experience in various disciplines due to his education and professional experience in Computer Science, which allows one to interact with different fields of knowledge: artificial intelligence, medicine, mathematics, engineering, IT, etc.

The research fields have focused initially on problems related to the analysis of time series and, especially, to learning machine theory, the theme area in which he obtained his Ph.D., and that has given me the possibility to continue this research, having published more than 10 papers in JCR indexed journals on this field. Later, he worked on new lines of research related to health informatics, Assisted Information Systems, Mobile solutions, and Energy Efficiency. He has been main research in various projects in competitive calls and participating with researchers from other universities both Spanish (Sevilla, Barcelona, Madrid, Vigo, Santiago de Compostela, Huelva, Girona, Castellón, etc.) and international (Germany, France, US, Mexico, Argentina, etc.). As a result of these investigations, he has co-supervised eleven Ph.D. He has made stays at the University of Konstanz (Germany), Reutlingen (Germany), Rosario (Argentina), and UPC (Catalonia).

Head of the Excellence Research Group IDINFOR (TIC223), Research, Development and Innovation on Computing Science. Former Director of the Center for Computer Scientific in Andalusia (Spain) www.cica.es .

He is a reviewer for several Indexed International Journals. He belongs to more than ten Committee Program of International Conferences. He has been the Director of more than ten Spanish Conferences on several topics related to artificial intelligence.

He is an evaluator and reviewer for several Spanish Grants and Project Research Committees. Another relevant aspect of his work as a researcher is his relationship with the business world. He has directed and participated in a large number of transfer projects of knowledge and technology in recent years, which have provided a great feedback to the research work, and they have allowed one to produce a large number of publications.

He has published more than 35 papers in indexed journals and has been the main researcher in more than 60 research projects and knowledge transfer projects to companies and industry. More than 200 research papers and contributions to international conferences

More detailed information on projects and publications can be found at <https://bibliometria.us.es/prisma/investigador/3082>

ORCID: 0000-0001-9095-7241 ResearcherID: F-2457-2010

Part C. RELEVANT MERITS (*sorted by typology*)

C.1. Publications (*see instructions*)

Maksym, G.; et al; **Ortega J.A.** Estimation of Sleep Stages Analyzing Respiratory and Movement Signals," in *IEEE Journal of Biomedical and Health Informatics*, vol. 26, no. 2, pp. 505-514, Feb. 2022, doi: 10.1109/JBHI.2021.3099295. JCR: 7.021 Q1

Gonzalez-Abril, L.; Angulo, C.; **Ortega, J.A.**; Lopez-Guerra, J.-L. Statistical Validation of Synthetic Data for Lung Cancer Patients Generated by Using Generative Adversarial Networks. *Electronics* 2022, 11, 3277. <https://doi.org/10.3390/electronics11203277> JCR:2.690 Q3

Gonzalez-Abril L, Angulo C, **Ortega J-A**, Lopez-Guerra J-L. Generative Adversarial Networks for Anonymized Healthcare of Lung Cancer Patients. *Electronics*. 2021; 10(18):2220. <https://doi.org/10.3390/electronics10182220> JCR:2.690 Q3

Lopez-Guerra, J.-L.; **Ortega, J.A.**; Angulo, C.; Delgado-León, D.; Muñoz-Muñoz, O.; Gonzalez-Abril, L. Digital twins in healthcare: an application in radiation oncology. *Clinical and translational oncology* 23, 73-74. <https://www.springer.com/journal/1209> 2021 JCR: 3.340 Q3

Gaiduk, M.; Seepold R; Martinez N.; **Ortega, J.-A.**; Digital health and care study on elderly monitoring. *Sustainability*, 13, 23. <https://doi.org/10.3390/su132313376> 2021 JCR: 3.889 Q2



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Angulo, C.; **Ortega, J-A** y Gonzalez-Abril, L. 2019. Towards a Healthcare Digital Twin. ISI Proceedings Series: Frontiers in Artificial Intelligence and Applications. Volume 319: Artificial Intelligence Research and Development. Pages: 312 – 315. DOI: 10.3233/FAIA190139

Gaiduk, M.; Seepold R; Martinez N.; **Ortega, J.-A.**; Automatic sleep stages classification using respiratory, heart rate and movement signals, Physiological Measurement Vol 32 (12) DOI 10.1088/1361-6579/aaf5d4 JCR: 2.246 Q3

D. Fernández-Cerero, A. Fernandez-Montes, **J.A. Ortega** (2018) Energy Policies for Data-Center Monolithic Schedulers. En: Expert Systems with Applications. pp. 170-181 DOI: 10.1016/j.eswa.2018.06.007 JCR: 4.292 Q1

L.M. Soria, J.A.Álvarez, L. González-Abril, **J.A. Ortega** (2016) Discrete classification technique applied to TV advertisements liking recognition system based on low-cost EEG headsets. Biomedical Engineering Online (1475-925X) Vol 15 DOI 10.1186/s12938-016-0181-2 JCR: 1.683 Q3

C.2. Congress, indicating the modality of their participation (invited conference, oral presentation, poster)

M. Gaiduk, R. Seepold, N. Martínez, S. Orcioni, M.Conti & **J.A. Ortega**, Initial evaluation of substituting a sleep diary by smartwatch measurement, Procedia Computer Science (2022), vol. 207, pp 3376-3383, ISSN 1877-0509, DOI [10.1016/j.procs.2022.09.396](https://doi.org/10.1016/j.procs.2022.09.396)

Ángela Troncoso, **J.A. Ortega**, Ralf Seepold, Natividad Martínez Madrid, Non-invasive devices for respiratory sound monitoring, Procedia Computer Science 2021; 192, pp 3040-3048, ISSN 1877-0509, DOI [10.1016/j.procs.2021.09.076](https://doi.org/10.1016/j.procs.2021.09.076)

J.A. Ortega, L. Gonzalez-Abril, C. Angulo, J.L. López. Research on the evolution of digital twins in healthcare in the Symposium Telemedicine enabling person-centered telecare included in 42nd Annual International Conf. IEEE Engineering in Medicine and Biology Society (EMBC 2020)

Angulo, C.; González Abril, L.; Raya, C.; **Ortega, J.A.** “A Proposal to Evolving Towards Digital Twins in Healthcare”. En: Bioinformatics and Biomedical Engineering 8th International Work-Conference, IWBBIO 2020, Granada, Spain, May 6-8, 2020, Proceedings. pp.418-426. Springer, 2020. ISBN 978-3-030-45385-5 DOI: 10.1007/978-3-030-45385-5_37

Gaiduk, M.; et al.; **Ortega, J.-A.**; Embedded system for non-obtrusive sleep apnea detection. IEEE Engineering in Medicine and Biology Society Conference Proceedings. <https://doi.org/10.1109/EMBC44109.2020.9176075> 2020 CiteScore: 1500 Q3

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C.3. Research projects, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

- EDITH - Evolucionando Hacia los Gemelos Digitales en el Ámbito de la Salud ([PGC2018-102145-B-C21](#))#
- Healthy and Efficient Routes in Massive Open-Data Based Smart Cities-Citizen ([TIN2013-46801-C4-1-R](#))#
- Simon. Saving Energy by Intelligent Monitoring ([P11-TIC-8052](#))#
- Arquitectura para la eficiencia energética y sostenibilidad en entornos residenciales ([TIN2009-14378-C02-01](#))#
- ATENEA, Arquitectura Middleware y Herramientas. ([FIT-340503-2007-1](#))#
- Sistema de Cuidados UBICuOs y asistencia controlado por familiares y centros médicos para personas con dependencias-CUBICO ([P06-TIC-02141](#))#
- Plataforma integral para la interacción entre familiares y centros médicos para la atención telemática a personas con dependencias ([TSI2006-13390-C02-02](#))#



- DOMOWEB: Metodologías para el Diseño y Desarrollo de Sistemas Demóticos Controlados Via Web ([SC/AT/0108/2003](#))#
- Network of Excellence on Model Based Systems and Qualitative Reasoning (MONET 2) ([IST-2001-33540](#))#

C.4. Contracts, technological or transfer merits, Include patents and other industrial or intellectual property activities (contracts, licenses, agreements, etc.) in which you have collaborated. Indicate: a) the order of signature of authors; b) reference; c) title; d) priority countries; e) date; f) Entity and companies that exploit the patent or similar information, if any

Patents

- Sci (Simple Cluster Interface): Architecture For Managing User Tasks In A Cluster Via The Web. **J. A. Ortega**, Alejandro Fdez., L. González, F. Velasco, J. Torres, M. J. Escalona, J. A. Alvarez, M. A. Álvarez, D. Fuentes, C. Angulo. Pub. No.: WO/2012/052581 □ International Application No.: PCT/ES2011/000310 Fecha de publicación: 26.04.2012 □ International Filing Date: 21.10.2011
- Energy-Efficient Monitoring and Localisation Device, System And Method. L. M. Soria, J.A. Álvarez, Alejandro Fdez., **J. A. Ortega**, L. González. Pub. No.: WO2012/010727. International Application No.: PCT/ES2011/000237 Fecha de publicación: 26.01.2012 . International Filing Date: 22.07.2011

Contracts or transfer (Complete list <https://bibliometria.us.es/prisma/investigador/3082>)

- GO-BOT: Inteligencia Artificial como Facilitador de la Interacción Ciudadana: Generador de Ontologías ([P025-19/E05](#))#
- Tratamiento de los datos de los escenarios climáticos de Andalucía para su explotación y divulgación en el marco de la elaboración del Plan Andaluz por el Clima ([P030-19/E05](#))#
- Block-Procurement ([P036-17/E05](#))#
- Metodología, Análisis y Evaluación del Rendimiento y la Eficiencia de Estaciones de Trabajo ([P024-14/E05](#))#
- Sistema Integral para el Mantenimiento Interno y el Aprovisionamiento de Servicios (SimiaS) ([P030-11/E05](#))#
- Plataforma de Diseño de Instalaciones de Energías Renovables (PDIER) ([P045-12/E05](#))#
- Investigación de Nuevas Tecnologías de la Información Aplicadas al Medio Ambiente ([P054-11/E05](#))#
- Servicio de Apoyo a la Administración de Sistemas de la Plataforma SAU-WOK ([FECYT/FT2010/103](#))#
- OSAMI-Commons Open Source Infraestructure Ambient Inteligence Com. ([P024-08/E05](#))#
- ACORDE - Solución para la productividad, reutilización y normalización de arquitecturas software en las Administraciones Públicas ([P034-07/E05](#))#
- Operación y Desarrollo Evolutivo del Sistema de Acceso Universal a la Web del Conocimiento ([FECY 2006/017](#))#

Institutional responsibilities, memberships of scientific societies...

- Former Director of the Centre of Computer Scientific in Andalusia (Spain) since 2004 www.cica.es until Nov. 2019 which gives support to R&D&I projects and research groups. #
- Main Research of the Excellence Research Group IDINFOR (TIC223) - Research, Development and Innovation on Computing Science <http://madeirasic.us.es/idinfor/>#