

## Part A. PERSONAL INFORMATION

CV date 30/09/2020

First and Family name	Joaquín Ordieres		
Social Security,			
Passport, ID number	1	Researcher ID	
Researcher numbers		Orcid code	0000-0002-9677-6764

### A.1. Current position

Name of University	Universidad Politécnica de Madrid		
Department	Ingeniería de Organización, Administración de Empresas y Estadística / Escuela Técnica Superior de Ingenieros Industriales		
Address and Country			
Phone number			
Current position	Full Professor	From	1997
Keywords	Industrial Research		

### A.2. Education

PhD	University	Year
Industrial Engineer	University of Oviedo	1985
PhD Industrial Engineer	National Distance University (UNED)	1988
Master in Industrial Safety	Industrial Engineers Council. La Rioja (Spain)	1999
IPMA Project Manager	AEIPRO	2003
PMP Project Manager	PMI	2009

### A.3. JCR articles, h Index, thesis supervised...

Number of recognized six yearly research periods = 5. Latest one: 31/12/2016

Citation data gathered from gscholar <https://scholar.google.es/citations?user=Jmr2JHQAAAAJ>

Total cites: 6130; h= 23; i10 = 49

From 2015, cites=5490; h=19; i10=34

JCR Q1 number of papers = 37; Number of patents= 12

Number of thesis advised = 25

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

The interest of the candidate's research focuses on the improvement of knowledge management in processes of various types, through the data emerging from them.

There have been contributions to the Business Analytics field both algorithmic (AMORE or TAO) and scope of application (Prediction of pollutants or improvement of industrial processes), as towards LEAN management in industrial and social processes.

Currently, significant contributions are being made related to the human integration in industry 4.0, including human activity recognition, and blockchain technologies.

In parallel, it has been tried to apply similar techniques to improve the educational processes in the teaching area as shown by the publications in this field (British Journal of Educational Technology, International Journal of Engineering Education: Computers & Education).

## Part C. RELEVANT MERITS

### C.1. Publications (including books) (Last four years)

- Artículo científico.** Sun, Shengjing; Zheng, Xiaochen; Villalba-Díez, Javier; and Joaquín Ordieres-Meré. Data Handling in Industry 4.0: Interoperability Based on Distributed Ledger Technology Sensors. Multidisciplinary Digital Publishing Institute. 20-11, pp.3046-3046.
- Artículo científico.** Ordieres-Meré, Joaquín; Remón, Tomás Prieto; Rubio, Jesús. 2020. Digitalization: An opportunity for contributing to sustainability from knowledge creation Sustainability. Multidisciplinary Digital Publishing Institute. 12-4, pp.1460-1460.

- 3 **Artículo científico.** Liu, Yang; Fei, Hao; Zeng, Qingguo; et al. 2020. Electronic word-of-mouth effects on studio performance leveraging attention-based model Neural Computing and Applications. Springer. pp.1-22.
- 4 **Artículo científico.** Hetemi, Eral; Gem{\u}nden, Hans Georg; Meré, Joaquín Ordieres. 2020. Embeddedness and Actors' Behaviors in Large-Scale Project Life Cycle: Lessons Learned from a High-Speed Rail Project in Spain Journal of Management in Engineering. American Society of Civil Engineers. 36-6, pp.05020014-05020014.
- 5 **Artículo científico.** Hetemi, Eral; Jerbrant, Anna; Ordieres Mere, Joaquin. 2020. Exploring the emergence of lock-in in large-scale projects: A process view International Journal of Project Management. Elsevier. 38-1, pp.47-63.
- 6 **Artículo científico.** Villalba-Díez, Javier; Molina, Martin; Ordieres-Meré, Joaquín; et al. 2020. Geometric Deep Lean Learning: Deep Learning in Industry 4.0 Cyber--Physical Complex Networks Sensors. Multidisciplinary Digital Publishing Institute. 20-3, pp.763-763.
- 7 **Artículo científico.** Sun, Shengjing; Zheng, Xiaochen; Gong, Bing; et al. 2020. Healthy Operator 4.0: A Human Cyber--Physical System Architecture for Smart Workplaces Sensors. Multidisciplinary Digital Publishing Institute. 20-7, pp.2011-2011.
- 8 **Artículo científico.** Ramírez-Aragón, Cristina; Alba-Elías, Fernando; González-Marcos, Ana; et al. 2020. Improving the feeder shoe design of an eccentric tablet press machine Powder Technology. 372, pp.542-562. ISSN 0032-5910.
- 9 **Artículo científico.** Schmidt, Daniel; Villalba Díez, Javier; Ordieres-Meré, Joaquín; et al. 2020. Industry 4.0 Lean Shopfloor Management Characterization Using EEG Sensors and Deep Learning Sensors. Multidisciplinary Digital Publishing Institute. 20-10, pp.2860-2860.
- 10 **Artículo científico.** Antomarioni, Sara; Bevilacqua, Maurizio; Ciarapica, Filippo Emanuele; et al. 2020. Lean projects' evaluation: the perceived level of success and barriers Total Quality Management & Business Excellence. Taylor & Francis. pp.1-25.
- 11 **Artículo científico.** Ramírez-Aragón, Cristina; Ordieres-Meré, Joaquín; Alba-Elías, Fernando; et al. 2020. Numerical Modeling for Simulation of Compaction of Refractory Materials for Secondary Steelmaking Materials. Multidisciplinary Digital Publishing Institute. 13-1, pp.224-224.
- 12 **Artículo científico.** Nicanor Franco Riquelme, Jose; Lemus Aguilar, Isaac; Ordieres Meré, Joaquin; et al. 2020. SDGs & Innovation: The Discourse of FinTech Companies through Social Media Analysis Academy of Management Global Proceedings. Academy of Management Briarcliff Manor, NY 10510. 2020, pp.183-183.
- 13 **Artículo científico.** {Passegger, V. M.}; {Bello-García, A.}; {Ordieres-Meré, J.}; et al. 2020. The CARMENES search for exoplanets around M dwarfs - A deep learning approach to determine fundamental parameters of target stars A&A. 642, pp.A22-A22.
- 14 **Artículo científico.** Zheng, Xiaochen; Sun, Shengjing; Rao Mukkamala, Raghava; et al. 2019. Accelerating Health Data Sharing: A Solution Based on the Internet of Things and Distributed Ledger Technologies Journal of medical Internet research. JMIR Publications Inc., Toronto, Canada. 21-6, pp.e13583-e13583.
- 15 **Artículo científico.** Liu, Yang; Zeng, Qingguo; {Ordieres Meré}, Joaquín; et al. 2019. Anticipating Stock Market of the Renowned Companies: A Knowledge Graph Approach Complexity. Hindawi. 2019.
- 16 **Artículo científico.** Villalba-Díez, Javier; Schmidt, Daniel; Gevers, Roman; et al. 2019. Deep Learning for Industrial Computer Vision Quality Control in the Printing Industry 4.0 Sensors. Multidisciplinary Digital Publishing Institute. 19-18, pp.3987-3987.
- 17 **Artículo científico.** N Franco-Riquelme, Jose; Bello-García, Antonio; Ordieres-Meré, Joaquín. 2019. Indicator Proposal for Measuring Regional Political Support for the Electoral Process on Twitter: The Case of Spain's 2015 and 2016 General Elections IEEE Access. IEEE. 7, pp.62545-62560.
- 18 **Artículo científico.** Sun, Shengjing; Zheng, Xiaochen; Villalba-Díez, Javier; et al. 2019. Indoor Air-Quality Data-Monitoring System: Long-Term Monitoring Benefits Sensors. Multidisciplinary Digital Publishing Institute. 19-19, pp.4157-4157.
- 19 **Artículo científico.** Boenzi, Francesco; Ordieres-Meré, Joaquín; Iavagnilio, Raffaello. 2019. Life

- Cycle Assessment Comparison of Two Refractory Brick Product Systems for Ladle Lining in Secondary Steelmaking Sustainability. Multidisciplinary Digital Publishing Institute. 11-5, pp.1295-1295.
- 20 Artículo científico.** Ángel Antón, Miguel; Ordieres-Meré, Joaquín; Saralegui, Unai; et al. 2019. Non-Invasive Ambient Intelligence in Real Life: Dealing with Noisy Patterns to Help Older People Sensors. Multidisciplinary Digital Publishing Institute. 19-14, pp.3113-3113.
- 21 Artículo científico.** April G Arano, Keith; Sun, Shengjing; Ordieres-Mere, Joaquin; et al. 2019. The Use of the Internet of Things for Estimating Personal Pollution Exposure International journal of environmental research and public health. Multidisciplinary Digital Publishing Institute. 16-17, pp.3130-3130.
- 22 Artículo científico.** Antomarioni, Sara; Emanuele Ciarapica, Filippo; De Sanctis, Ilaria; et al. 2019. The influence of cultural dimensions on lean projects success and barriers International Journal of Management and Decision Making. Inderscience Publishers (IEL). 18-2, pp.151-182.
- 23 Artículo científico.** Xiaochen Zheng; Alba Vieira; Sergio Labrador Marcos; et al. 2018. Activity-aware essential tremor evaluation using deep learning method based on acceleration data Parkinsonism & Related Disorders. Elsevier.
- 24 Artículo científico.** Zheng, Xiaochen; Wang, Meiqing; Ordieres-Meré, Joaquín. 2018. Comparison of Data Preprocessing Approaches for Applying Deep Learning to Human Activity Recognition in the Context of Industry 4.0 Sensors (Basel, Switzerland). Multidisciplinary Digital Publishing Institute (MDPI). 18-7.
- 25 Artículo científico.** Sarro, LM; Ordieres-Meré, J; Bello-García, Antonio; et al. 2018. Estimates of the atmospheric parameters of M-type stars: a machine-learning perspective Monthly Notices of the Royal Astronomical Society. Oxford University Press. 476-1, pp.1120-1139.
- 26 Artículo científico.** De Sanctis, Ilaria; Ordieres Meré, Joaquín; Ciarapica, Filippo Emanuele. 2018. Resilience for lean organisational network International Journal of Production Research. Taylor & Francis. pp.1-20.
- 27 Artículo científico.** Ramírez-Aragón, Cristina; Alba-Elías, Fernando; González-Marcos, Ana; et al. 2018. Segregation in the tank of a rotary tablet press machine using experimental and discrete element methods Powder Technology. Elsevier. 328, pp.452-469.
- 28 Artículo científico.** Ordieres Meré, Joaquín Bienvenido; Franco Riquelme, José Nicanor. 2017. Análisis de Opinión en Redes Sociales y Valor para el análisis de producto Revista Economía Industrial. Ministerio de Energía, Turismo y Agenda Digital (MINETAD). 405, pp.65-74.
- 29 Artículo científico.** Zheng, Xiaochen; Vieira Campos, Alba; Ordieres-Meré, Joaquín; et al. 2017. Continuous Monitoring of Essential Tremor Using a Portable System Based on Smartwatch Frontiers in Neurology. 8, pp.96-96. ISSN 1664-2295.
- 30 Artículo científico.** De Rivas, Beatriz Leal; Vivancos, José-Luis; Ordieres-Meré, Joaquín; et al. 2017. Determination of the total acid number (TAN) of used mineral oils in aviation engines by FTIR using regression models Chemometrics and Intelligent Laboratory Systems. Elsevier. 160, pp.32-39.
- 31 Artículo científico.** Van Leeuwen, F; Vallenari, A; Jordi, C; et al. 2017. Gaia Data Release 1-Open cluster astrometry: performance, limitations, and future prospects Astronomy & Astrophysics. EDP Sciences. 601, pp.A19-A19.
- 32 Artículo científico.** Clementini, G; Eyer, L; Ripepi, V; et al. 2017. Gaia Data Release 1-Testing parallaxes with local Cepheids and RR Lyrae stars Astronomy & Astrophysics. EDP Sciences. 605, pp.A79-A79.
- 33 Artículo científico.** Van Leeuwen, F.; Vallenari, A.; Jordi, C.; et al. 2017. Gaia Data Release 1: Open cluster astrometry: Performance, limitations, and future prospects Astronomy and Astrophysics. 601.
- 34 Artículo científico.** Sánchez, L.; Alfonso-Cendón, Javier; Oliveira, Tiago; et al. 2017. Information System for Image Classification based on FrequencyCurve Proximity Information Systems. 64, pp.12-21. ISSN 0306-4379.
- 35 Artículo científico.** Shrouf, Fadi; Gong, Bing; Ordieres-Meré, Joaquin. 2017. Multi-level awareness of energy used in production processes Journal of cleaner production. Elsevier. 142, pp.2570-2585.
- 36 Artículo científico.** Shrouf, Fadi; Gong, Bing; Ordieres-Meré, Joaquin. 2017. Multi-level awareness of energy used in production processes Journal of Cleaner Production. 142, Part 4, pp.2570-2585. ISSN

0959-6526.

- 37 Artículo científico.** Galvez, Edelmira Ahumada; Ordieres, Joaquin B; Capuz-Rizo, Salvador F. 2017. On uncertainty and sensitivity analyses in project duration based on dependency information The Journal of Modern Project Management. 4-3.
- 38 Artículo científico.** Gong, Bing; Ordieres-Meré, Joaquín. 2017. Reconfiguring existing pollutant monitoring stations by increasing the value of the gathered information Environmental Modelling & Software. Elsevier. 96, pp.106-122.
- 39 Artículo científico.** Zheng, Xiaochen; Vieira Campos, Alba; Ordieres-Meré, Joaquín; et al. 2017. continuous Monitoring of essential Tremor Using a Portable system Based on smartwatch Frontiers in neurology. Frontiers. 8, pp.96-96.
- 40 Artículo científico.** Ana González-Marcos; Fernando Alba-Elías; Joaquín Ordieres-Meré. 2016. An analytical method for measuring competence in project management British Journal of Educational Technology. Wiley-Blackwell. 47-6, pp.1324-1339.
- 41 Artículo científico.** Beatriz Leal de Rivas; José-Luis Vivancos; Joaquin Ordieres-Meré; et al. 2016. Determination of the total acid number (TAN) of used mineral oils in aviation engines by FTIR using regression models Chemometrics and Intelligent Laboratory Systems. Elsevier. 160-15, pp.32-39.
- 42 Artículo científico.** A. González-Marcos; L.M. Sarro; J. Ordieres-Meré; et al. 2016. Evaluation of data compression techniques for the inference of stellar atmospheric parameters from high resolution spectra Monthly Notes of the Royal Astronomical Society. Oxford University Press. 465-4, pp.4556-4571.
- 43 Artículo científico.** 2016. HOSHIN KANRI Visualization with Neo4j. Empowering Leaders to Operationalize Lean Structural Networks Elsevier.
- 44 Artículo científico.** 2016. Lean Learning Patterns.(CPD) n A vs. KATA Elsevier.
- 45 Artículo científico.** Gonz\'alez-Marcos, A.; Alba-El\'ias, F.; Ordieres-Mer\'e, J.; et al. 2016. Learning Project Management Skills in Engineering through a Transversal Coordination Model International Journal of Engineering Education. 32-2, pp.894-904.
- 46 Artículo científico.** Gong, Bing; Ordieres-Mer \'e, Joaquín. 2016. Prediction of daily maximum ozone threshold exceedances by preprocessing and ensemble artificial intelligence techniques: Case study of Hong Kong Environmental Modelling & Software. Elsevier. 84, pp.290-303.
- 47 Artículo científico.** Javier Villalba-Diez; Joaquín B. Ordieres-Meré. 2016. Strategic Lean Organizational Design: Towards Lean World-Small World Configurations through Discrete Dynamic Organizational Motifs Mathematical Problems in Engineering. Hindawi Publishing Corporation. 2016, pp.1-10.
- 48 Artículo científico.** Gonz\'alez-Marcos, Ana; Alba-El\'ias, Fernando; Navaridas-Nalda, Ferm\'in; et al. 2016. Student evaluation of a virtual experience for project management learning: An empirical study for learning improvement Computers & Education. 102, pp.172-187. ISSN 0360-1315.
- 49 Artículo científico.** Collaboration}, {Gaia; {Prusti, T.}; {de Bruijne, J. H. J.}; et al. 2016. The Gaia mission? A&A. 595, pp.A1-A1.

## C.2. Research projects and grants (Last Five Years)

- 1 Smashing.- ANALÍTICA DE DATOS CON INTERNET INDUSTRIAL DE LAS COSAS Y TECNOLOGÍA BLOCKCHAIN PARA ESTABLECER ESTRATEGIAS DE MANTENIMIENTO INTELIGENTE. Plan Nacional de Investigación. Retos de la sociedad. RTI2018-094614-B-I00. 70000 €
- 2 Autosurveillance.- AUTOMATIC SURVEILLANCE OF HOT ROLLING AREA AGAINST INTERNATIONAL ATTACKS AND FAULTS. EU research. Program RFCS. (Universidad Politécnica de Madrid). 01/07/2019-31/12/2022. 128719,44 €
- 3 DynReact.- REFINEMENT OF PRODUCTION SCHEDULING THROUGH DYNAMIC PRODUCT ROUTING, CONSIDERING REAL-TIME PLANT MONITORING AND OPTIMAL REACTION STRATEGIES. EU research. Program RFCS. (Universidad Politécnica de Madrid). 01/07/2019-31/12/2022. 147633 € 156600 €

- 4 IE3.- Erasmus+ EPPKA2 “IE3: Industrial Engineering and Management of European Higher Education” (612402-EPP-1-2019-1-IT-EPPKA2-KA, desde Nov. 2019 a Oct. 2022). 114339 €
- 5 Wisest.- Improvement of steel cleanliness by reducing refractory contamination in secondary steelmaking EU research. Program RFCS. (Universidad Politécnica de Madrid). 01/09/2018-28/02/2022. 147633 €
- 6 LeanStory.- Improvement of steel cleanliness by reducing refractory contamination in secondary steelmaking EU research. Program RFCS. (Universidad Politécnica de Madrid). 01/07/2015-21/12/2018. 1.041.112 €

### **C.3. Patents (Last five years)**

P201300551. Feeding carriage for compressor machine and use of same. PCT Patent, US and Japan granted. 04/06/2020.

P201600551.- Procedimiento de aplicación de recubrimientos antifricción. 24/06/2016.

### **C.5, C.6, C.7... (e. g., Institutional responsibilities, memberships of scientific societies...)**

Member of IPMA; Member of PMI; Member of European Academy of Management; Member of ISO TC258 committee. Member of Editorial Board of

- Frontiers in Built Environment,
- Sensors, and
- International Journal of Data Mining, Modelling and Management.