ELENA GARCÍA BARRIOCANAL

CATEDRÁTICA DE UNIVERSIDAD

RESUMEN DE LOS PRINCIPALES MÉRITOS

Dpto: Ciencias de la Computación.

Área de Conocimiento: Lenguajes y Sistemas Informáticos.

Tramos de investigación reconocidos: 3 investigación (2000-2005, 2006-2011, 2012-2017) + 1 transferencia (2005-2010)

Tramos de docencia reconocidos: 3 (feb2000-feb2005, feb2005-feb2010, feb2010-feb2015)

1. MÉRITOS DE INVESTIGACIÓN

Listado de artículos publicados en revistas indexadas en Journal of Citation Report

PUBLICACION	JCR EDITION	FACTOR IMPACTO	CUARTO
Sicilia, M.A., García-Barriocanal, E., Díaz, P., Aedo, I. and Díaz, P. (2003) A LiteratureBased Approach to the Annotation and Browsing of Domain-Specific Web Resources. Information Research 8(2)	ISI JCR Social Sciences Edition 2004	Information Science & Library Science. (0.841)	2
Sicilia, M.A. and García-Barriocanal, E. (2003). On the Concepts of Usability and Reusability of Learning Objects. International Review of Research in Open and Distance Learning, 4(2).	ISI JCR Social Science Edition 2011	Education & educational research (0.687)	2
Sicilia, M. A., García-Barriocanal, E. and Calvo,.T. (2004) An Inquiry-Based Method for Choquet Integral-Based Aggregation of Interface Usability Parameters. Kybernetika, 39(5), 159-164	ISI JCR Science Edition 2004	Cybernetics (0.224)	3
Sicilia, M.A., Cuadrado, J.J., Crespo, J., García, E. (2005) Software Cost Estimation with Fuzzy Inputs: Fuzzy Modelling And Aggregation Of Cost Drivers. Kybernetika 41(2), 249-264	ISI JCR Science Edition 2005	Cybernetics (0.343)	3
García, E, Sicilia, M.A., Sánchez, S. (2005) Usability evaluation of ontology editors. Knowledge Organization 32(1),1-9.	ISI JCR Social Sciences Edition 2005	Information Science & Library Science. (0.533)	2
Sicilia, M. A., Lytras. M., Rodríguez, E. García, E. (2006) Integrating Descriptions of Knowledge Management Learning Activities into Large Ontological Structures: A case Study. Data and Knowledge Engineering 57(2), 111-121	ISI JCR Science Edition 2006	Information Science and Library Science (1,367)	2

Sánchez-Alonso, S. and García, E. (2006) Making use of upper ontologies to foster interoperability between SKOS concept schemes. Online Information Review, 30, (3), 263-277.	ISI JCR Social Sciences Edition 2006	Information Science and Library Science (0,750)	2
Sicilia, M.A., García, E. González-Sotos, L. (2006). Introducing fuzziness in object models and database interfaces through aspects. International Journal of Intelligent Systems 21(12), 1199 – 1216	ISI JCR Science Edition 2006	Artificial Intelligence (0.429)	3
Sicilia, M.A. and García-Barriocanal, E. (2006). Extending Object Database Interfaces with Fuzziness through Aspect-Oriented Design. ACM SIGMOD Record 35(2), 4-9.	ISI JCR Science Edition 2006	Software Engineering (1.455)	1
García, E., Sicilia, M.A. (2007) Representing Evidence about Interpersonal Relationships of Public People in the Semantic Web. Aslib Proceedings 59(6), 550564	ISI JCR Science Edition 2007	Information Systems (0.413)	4
García, E., Sicilia, M.A., Lytras, M. (2007) Pedagogical clasification frameworks for learning objects: A case study. Computers in Human Behaviour 23(6), 2641-2655	ISI JCR Social Science 2007	Psychology: Multidisciplinary (1.344)	1
Sicilia, M.A., García, E., Sanchez, S. (2008) Empirical assessment of a collaborative filtering algorithm based on OWA operators. International Journal on Intelligent Systems 23(12), pp.1251-1263	ISI JCR Science Edition 2008	Artificial Intelligence (0.860)	3
Aroba, J., Cuadrado, JJ., Sicilia, M.A., Ramos, I., García Barriocanal, E. (2008) Segmented software cost estimation models based on fuzzy clustering. The journal of systems and software 81(11), pp. 1944-1950	ISI JCR Science Edition 2008	Software Engineering (1.241)	2
Sicilia, J.J., Sicilia, M.A., Sánchez-Alonso, S., García-Barriocanal, E. and Pontikaki, M. (2009) Knowledge Representation Issues in Ontology-based Clinical Knowledge Management Systems. International Journal of Technology Management 47(1-3), 191-206	ISI JCR Science Edition 2008	Engineering: Multidiciplinary (0.526)	3
Sicilia, M.A. García-Barriocanal, E. Sánchez-Alonso, S. Rodríguez-García, D. (2009) Ontologies of engineering knowledge: general structure and the case of Software Engineering. Knowledge Engineering Review 24(3), 309-326.	ISI JCR Science Edition 2009	Artificial Intelligence (1,588)	2
Sicilia, M.A., Sánchez-Alonso, S., García-Barriocanal, E. and Zapata, M. (2011) Modeling instructional-design theories with ontologies: using methods to check, generate and search learning designs. Computers and Human Behavior, 27(4), pp. 1389-1398	ISI JCR Social Science 2010	Psychology: Multidisciplinary (1,865)	1
Sanchez-Alonso, S., Sicilia, M.A., Garcia-Barriocanal, E., Pages-Arevalo, C., Lezcano, L. (2010) Social models in open learning object repositories: A simulation approach for sustainable collections, Simulation Modelling Practice and Theory, 19(1), pp. 110-120.	ISI JCR Science Edition 2010	Software Engineering (0,736)	3
Rodríguez, D., García, E., Sánchez, S., Rodríguez-Solano, C. (2010) Defining software process model constraints with rules using OWL and SWRL. International Journal of Software Engineering and Knowledge Engineering 20(4), 533-548 http://dx.doi.org/10.1142/S0218194010004876	ISI JCR Science Edition 2010	Software Engineering (0,248)	4
Rodríguez, D., Sicilia, M.A., Sanchez-Alonso, S., Lezcano, L. and García-Barriocanal, E. (2011) Exploring affiliation network models as a collaborative filtering mechanism in e-learning. International Journal of Interactive Learning Environments, Interactive Learning Environments, 19(4), pp. 317-331	ISI JCR Social Science 2010	Education and Ed. Research (0,707)	2
García, E., Sanchez, S., Rodríguez, D., (2011) Devising instruction from empirical findings on student errors: a case in usability engineering education. International Journal on Engineering Education 27(1), pp. 1-7	JCR Science Edition 2008	Engineering Multidisciplinary (0,552)	3
Sicilia, M.A., Sánchez-Alonso, S. and García-Barriocanal, E. (2011). Comparing impact factors from two different citation databases: the case of computer science. Journal of Informetrics, 5(4), 698-704. https://doi.org/10.1016/j.joi.2011.01.007	ISI JCR Social Science Edition 2011	Information Science and Library Science (4.229)	1
Segura, A., Sánchez, S., García, E., Prieto, M. (2011) An empirical analysis of ontology-based query expansion for learning resource searches using MERLOT and the Gene ontology. Knowledge-Based Systems, 24(1), 119-133. http://dx.doi.org/10.1016/j.knosys.2010.07.012	ISI JCR Science Edition 2011	Artificial Intelligence (2,422)	1
Cechinel, C., García, E., Sánchez, S., (2011) Statistical Profiles of Highly-Rated Learning Objects. Computers & Education, 57(1), 1255-1269. http://dx.doi.org/10.1016/j.compedu.2011.01.012	ISI JCR Science Edition 2011	interdisplinary applications (2,621)	1

García-Barriocanal, E., Sicilia, M.A., Sánchez-Alonso, S. and Lytras, M. (2011). Semantic annotation of video fragments as learning objects: a case study with YouTube videos and the Gene Ontology. Interactive Learning Environments 19(1), 22-44. https://doi.org/10.1080/10494820.2011.528879	ISI JCR Social Science 2011	Education and Ed. Reearch (1.163)	1
Pavlis, M., García, E. (2008) Development of personalized learning objects for training adult educators of special groups, Journal of Knowledge Management, 12(6), 89-101 https://doi.org/10.1108/13673270810913649	ISI JCR Social Science Edition 2011	Information Science and Library Science (1.248)	2
Valiente, M.C., García, E. and Sicilia, M.A. (2012) Applying ontology-based models for supporting integrated software development and IT service processes IEEE Transactions on Systems, Man and Cybernetics Part C, 42(1), 61-74. http://dx.doi.org/10.1109/TSMCC.2011.2132717	ISI JCR Science Edition 2012	Artificial intelligence (2.548)	1
Korfiatis, N., García, E, Sanchez, S. (2012) Evaluating content quality and helpfulness of online product reviews: The interplay of review helpfulness vs. review content. Electronic Commerce Research and Applications 11(3), 205-217. http://dx.doi.org/10.1016/j.elerap.2011.10.003	ISI JCR Science Edition 2012	Artificial intelligence (1,480)	2
Samaras, L, García, E., Sicilia, M.A (2012) Syndromic surveillance models using Web data: the case of scarlet fever in the UK. Informatics for Health and Social Care 37(2), 106-124. http://dx.doi.org/10.3109/ 17538157.2011.647934	ISI JCR Science Edition 2012	Health care and informatics (1,273)	4
Valiente, MC, Sicilia, M.A., García, E. (2012) Applying an Ontology Approach to IT Service Management for Business-IT Integration. Knowledge-Based Systems, 28, 76-87. http://dx.doi.org/10.1016/j.knosys.2011.12.003	ISI JCR Science Edition 2012	Artificial intelligence (4.104)	1
Sicilia, M.A., Rodríguez, D., Garcia, E., Harrison , R (2012) Empirical findings on the effect of team size and productivity in software development. Journal of Systems and Software, 85(3), 562-570. http://dx.doi.org/10.1016/j.jss.2011.09.009	ISI JCR Science Edition 20012	Software Engineering (1.135)	2
Sicilia, M.A., Rodríguez, D., García, E., Sánchez, S. (2012) Empirical Findings on Ontology Metrics. Expert Systems with Applications 39(8), 6706-6711. http://dx.doi.org/10.1016/j.eswa.2011.11.094	ISI JCR Science Edition 2012	Software Engineering (1,854)	2
García, E., Sicilia, M.A., Sánchez-Alonso, S. (2012) Computing with competencies: modelling organizational capacities. Expert Systems with Applications, 39(16), 12310-12318. http://dx.doi.org/10.1016/j.eswa.2012.02.194	ISI JCR Science Edition 2012	Software Engineering (1,854)	2
Lezcano, L., García, E. Sicilia, M.A. (2012) Bridging informal tagging and formal semantics via hybrid navigation. Journal of Information Science 38(2) 140–155. http://dx.doi.org/10.1177/0165551511435882	ISI JCR Science Edition 2012	Information Systems (1.238)	2
García, E., Sicilia, M.A., Sánchez, S. (2012) Social network-aware interfaces as facilitators of innovation Journal of Computer Science and Technology, 27(6), 12111221. http://dx.doi.org/10.1007/s11390-012-1297-x	ISI JCR Science Edition 2012	Software Engineering (0.477)	4
Joerg, B., Ruiz-Rube, I., Sicilia, M.A., Dvořák, J., Jeffery, K., Hoellrigl, T., Rasmussen, H.A., Engfer, A., Vestdam, T., Garcia, E. (2012) Connecting closed world research information systems through the linked open data web. International Journal of Software Engineering and Knowledge Engineering, 22(3), 345-364. http://dx.doi.org/10.1142/S0218194012400074	ISI JCR Science Edition 2012	Artificial Intelligence (0,295)	4
Garre, M., García, E. ,Siakas, K., Sicilia, M.A.,Koinig, S., Messnarz, R., Clarke, A. (2012) Analyzing the Corporate Responsibility Web Pages of Consumer Electronics Companies: implications for process improvement IET Software 6(5), 451-460. http://dx.doi.org/10.1049/iet-sen.2011.0207	ISI JCR Science Edition 2012	Software Engineering (0.658)	3
García-Barriocanal, E., Sicilia, M.A., Sánchez-Alonso, S. (2013). Providing semantic metadata to on-line learning resources on sustainable agriculture and farming: combining values and technical knowledge. Interactive Learning Environments 21(3), 301-318. Publicado primero online nov 2011 https://doi.org/10.1080/10494820.2011.559170	ISI JCR Social Science 2011	Education and Ed. Reearch (1.163)	1
Cechinel, C., Sanchez, S., García, E., Sicilia, M.A. (2013) Evaluating Collaborative Filtering Recommendations inside Large Learning Object Repositories. Information Processing & Management 49(1), 34-50. http://dx.doi.org/10.1016/j.ipm.2012.07.004	ISI JCR Science Edition 2013	Information Systems (1.069)	3

Lezcano, L., Santos, L., García, E. (2013) Semantic integration of sensor data and disaster management systems - The Emergency Archetype approach. International Journal of Distributed Sensor Networks, 9(5), 1-11. http://dx.doi.org/10.1155/2013/424821	ISI JCR Science Edition 2013	Telecommunications (0.923)	3
Messnarz, R., Sicilia, M.A. Biro, M., García-Barriocanal, E., Garre-Rubio, M., Siakas, K., Clarke, A. (2013) Social responsibility aspects supporting the success of SPI. Journal Of Software Maintenance And Evolution-Research And Practice, 26(3), 284-294 http://dx.doi.org/10.1002/smr.1586	ISI JCR Science Edition 2013	Software Engineering (1.320)	2
Rius, A., Conesa, J., García, E. Sicilia, M.A. (2013) Specifying Patterns of Educational Settings by means of Ontologies. Journal of Universal Computer Science, 19(3), 353-382. http://dx.doi.org/10.3217/jucs-019-03-0353	ISI JCR Science Edition 2013	Software Engineering (0.401)	4
Rius, A., Conesa, J., García, E. Sicilia, M.A (2014) Automating educational processes implementation by means of an ontological framework. Computer Standards & Interfaces, 36(2), 335-348. http://dx.doi.org/10.1016/j.csi.2013.08.003	ISI JCR Science Edition 2014	Software Engineering (0,879)	3
Valiente, M.A., Sicilia, M.A., Garcia-Barriocanal, E., Rajabi, E. (2015) Adopting the metadata approach to improve the search and analysis of educational resources for online learning. Computers in Human Behavior, 51, 1134-1141	ISI JCR Social Science Edition 2015	Social Science: Multidisciplinary (2.880)	1
Martin, D., Sanchez, S., Sicilia, M.A., García, E. (2015) Evaluating the degree of domain specificity of terms in large terminologies: the case of AGROVOC. Online Information review, 39(3), 326 – 345. http://dx.doi.org/10.1108/OIR-02-2015-0052	SI JCR Science Edition 2015	Information Systems (1.152)	3
Martin, D., Sanchez, S., Sicilia, M.A., García, E. (2015) Evaluating the practical applicability of thesaurus-based keyphrase extraction in the agricultural domain: A pilot exploratory study in the VOA3R Project. Knowledge Organization, 42(2), 76-89	ISI JCR Social Science Edition 2016	Social Science: Information Science & Library Science (0.522)	3
Nogales, A., Sicilia, M.A., García E., Sánchez, S. (2016) Linking from Schema.org microdata to the Web of Linked Data: an empirical assessment. Computer Standards & Interfaces, 45, 90-99. http://dx.doi.org/10.1016/j.csi.2015.12.003	ISI JCR Science Edition 2016	Software Engineering (1.366)	2
Nogales, A., Sicilia, M. A., García-Barriocanal, E. (2017) Measuring vocabulary use in the Linked Data Cloud. Online Information Review 41(2), 252-271. https://doi.org/10.1108/OIR-06-2015-0183	ISI JCR Science Edition 2016	Information Systems (1.534)	3
Rius, A., Conesa, J., García-Barriocanal, E., Sicilia, M.A. (2017) An ontology-driven framework for specifying, adapting and implementing educational settings. Applied Ontology,12(1), 33-58. https://doi.org/10.3233/AO-170176	ISI JCR Science Edition 2016	Artificial Intelligence (1.296)	3
Martin, D., García, E., Sicilia, M-A, Stracke, C. M. (2017). Evaluating the concept specialization distance from an end-user perspective: The case of AGROVOC. Online Information Review, 41(6), 860-876. https://doi.org/10.1108/OIR-03-2016-0094	ISI JCR Science Edition 2016	Information Systems (0.918)	3
Samaras, L., García, E., Sicilia, M.A. (2017) Syndromic Surveillance Models Using Web Data: The Case of Influenza in Greece and Italy Using Google Trends. Journal of Medical Internet Research (Public Health Surveillance) 3(4). http://dx.doi.org/10.2196/publichealth.8015	ISI JCR Science Edition 2016	Medical Informatics (5.175)	1
Nogales, A. Sicilia,M.A., Garcia, E. (2018) On the graph structure of the Web of Linked Data. International Journal on Semantic Web and Information Systems, 14(2), 70-85. http://dx.doi.org/10.4018/IJSWIS.2018040104	ISI JCR Science Edition 2018	Artificial Intelligence (1.833)	3
Santos, L., Sicilia, M.A., García, E. (2019) Ontology-Based Modeling of Effect-Based Knowledge in Disaster Response. International Journal on Semantic Web and Information Systems, 15(1), 102-118 https://doi.org/10.4018/IJSWIS.2019010105.	ISI JCR Science Edition 2019	Artificial Intelligence (1,742)	3
Mora, M., Sanchez, S. García, E. (2019) A systematic literature review on Wikidata. Data Technologies and Applications, 53(3), 250-268. https://doi.org/10.1108/DTA-12-2018-0110.	ISI JCR Science Edition 2019	Information systems (0,704)	4

Publicación	Edición	Categoría	Cuartil
Mora, M., Sicilia, M.A., García, E., Sanchez, S.(2020) Evolution and prospects of the Comprehensive R Archive Network (CRAN) package ecosystem. Journal of Software: Evolution and Process. DOI: 10.1002/smr.2270	ISI JCR Science Edition 2017	Software Engineering (1,178)	3
Samaras, L., García, E., Sicilia, M.A. (2020) Comparing Social media and Google to detect and predict severe epidemics. Scientific Reports, 10(4747). https://doi.org/10.1038/s41598-020-61686-9	ISI JCR Science Edition 2019	Multidisciplinary Science (3.998)	1
Mora, M. Sánchez, S., García, E., Sicilia, M.A. (2020) Authority-based flexible conversation tracking in Twitter: an unattended methodological approach. Applied Sciences 10(9), 3273. https://doi.org/10.3390/app10093273	ISI JCR Science Edition 2019	Multidisciplinary Science (2.474)	2
Mora, M., Sicilia, M.A., García, E., Sanchez, S.(2020) A complex network analysis of the Comprehensive R Archive Network (CRAN) package ecosystem. Journal of Systems and Software, 170, 110744. https://doi.org/10.1016/j.jss.2020.110744	ISI JCR Science Edition 2019	Software Engineering (2.450)	2
Samaras, L., Sicilia, MA. & García-Barriocanal, E. Predicting epidemics using search engine data: a comparative study on measles in the largest countries of Europe. BMC Public Health 21, 100 (2021). https://doi.org/10.1186/s12889-020-10106-8	ISI JCR Science Edition 2019	Public, environmental & occupational health (2,521)	2
Puentes, J., Sanchez, S., Sicilia, MA, García, E. (2021) Predicting length of stay across hospital departments. IEEE Access (en prensa)	ISI JCR Science Edition 2019	Information systems (3.745)	1

Listado de proyectos de financiación pública competitiva como investigadora principal

Nombre	Referencia	Cuantía subvención	Duración
MARIA: Medición y Análisis de Recursos para el acceso a la Información y el Aprendizaje	CAM+ UAH (CCG08-UAH/TIC4178)	17.400,00 €	2009
INTEGRA: Fusión y explotación de datos para el control de fronteras no vigiladas	CDTI (CENIT-2008: 1018)	540.033,08 €	2008-2011
eCultura: Desarrollo de una Plataforma Semántica para la Preservación y Explotación de Contenido Cultural	PROFIT Ministerio de Industria (TSI020501-2008-53)	129.887,00 €	2008-2010
SOCIRES: Development of Social Responsibility Training and Certification	EUROPEAN UNION (510098-2010-LLPSI-LEONARDOLMP)	49.285,00 €	2011-2013
VOA³Rr: Virtual Open Access Agriculture & Aquaculture Repository: Sharing Scientific and Scholarly Research related to Agriculture, Food, and Environment	European Union (CIP-ICTPSP.2009.2.4: 250525 - VOA3R)	400.000,00 €	01/06/2010 31/05/2013
Organic.Balkanet: Developing the skills of Organic agricultural for the Balkans	European Union (2009-1-RO1LEO05-03584/LLP-LdV-TOI-2009-RO008)	59.162,00 €	10/12/2009 09/12/2011
agINFRA: A data infrastructure to support agricultural scientific communities Promoting data sharing and development of trust in agricultural sciences	European Union (FP7-2011-2283770	610.000,00 €	01/10/2011 30/09/2014

Nombre		Cuantía	Duración
HEDECAMA: Modelo semántico y algoritmos de Data Mining aplicados al tratamiento del Cáncer de Mama en centros de Atención Especializada	Ministerio de Ciencia e Innovación (IPT2011-1126-900000)	98.135,00 €	01/10/2011 31/03/2014
SLROUTE (Spanish Language Route): Plataforma tecnológica de gestión, soporte y administración de contenidos digitales focalizados a videojuegos educativos tipos NMOG	Ministerio de Industria, Turismo y Comercio (TSI090302-2011-22)	90.062,00 €	01/10/2011 31/03/2014
SemAGROw: Data Intensive Techniques to Boost the Real-Time Performance of Global Agricultural Data Infrastructures	European Union (FP7-318497)	462.981,00 €	01/11/2012 01/11/2015

Listado de contratos como investigadora principal

Nombre	Empresa	Cuantía subvención	Duración
Diseño plataforma de intercambio de información de sistemas de Historia Clínica Electrónica	Alamo Consulting en convocatoria pública PIE de la CAM	56.000,00 €	2009-2010
eAvatar: Búsqueda semántica y análisis del lenguaje natural	Mnemon Consultores	15.000,00 €	26/7/2010 25/7/2011
Desarrollo de un entorno de interoperabilidad semántica para el mando y control militar	Instituto Tecnológico Militar de la Marañosa	32.220,00 €	01/12/2012 30/3/2014
Creación del modelo de expresión de necesidades del proyecto atas (adquisición de talento mediante objetos de aprendizaje semánticos)	XIMDEX	3.630,00 €	11/03/2015 10/12/2015
Mailtrack: intelligent mail delivery	Mailtrack	48.400,00 €	01/12/2014 30/11/2017
Búsqueda semántica y análisis del lenguaje natural	Inneria	17.700,00 €	28/07/2010 27/04/2011

2. MÉRITOS DE DOCENCIA

- Investigadora principal del Proyecto Erasmus+, KA3 Initiatives for policy innovation "PBL3.0: Integrating Learning Analytics and Semantics in Problem Based Learning". 2016-2018 (79.584,0 €)
- Co-investigadora principal del Proyecto Erasmus+, Knowledge Alliances "SME ClusterGrowth". 2021-2023 (84.500,0 €)
- Investigadora de los proyectos Erasmus+, KA2:
    o "Digital Skills Accelerator" (Miguel A. Sicilia, IP). 2017-2019
    o "Heal+: Master in Health Informatics" (Salvador Sánchez, IP). 2016-2018
    o "Data Set – Data skills for business" (Miguel A. Sicilia, IP) 2018-2020
    o "Digital Wellbeing educators" (Miguel A. Sicilia, IP) 2018-2020
    o "BEGIN - Blockhain Enabling Growth in New Enterprises" (Miguel A. Sicilia, IP) 2020-2022
    o "TrustAI - Trustworthy AI" (Marçal Mora, IP) 2020-2022
- Evaluación docente *Muy Favorable* en programa DOCENTIA (2011/12 – 2014/15)

3. MÉRITOS DE GESTIÓN ACADÉMICA

- Cargos unipersonales de gestión:

    11/2008 – 10/2016: Secretaria del departamento de Ciencias de la Computación

    11/2016 – 12/2017: Subdirectora del departamento de Ciencias de la Computación

    02/2015 - : Directora académica de la Oficina de Proyectos Europeos, Vicerrectorado de Investigación y Transferencia

- Coordinación académica:

    2017/18 – 2019/20: Directora del M.U. Analítica del Negocio y Grandes Volúmenes de Datos.

    2014/15: Coordinadora del programa de doctorado Ingeniería de la Información y del Conocimiento.

- Coordinación en investigación:
    2010 - : Journal on Information Science and Engineering (factor de impacto: 0.541)
    2013 - : Journal of Universal Computer Science (factor de impacto: 0. 701)
    2007 - 2021 : Coordinación del grupo de investigación Information Engineering Research Group

Part A. PERSONAL INFORMATION

CV date	08/03/2021

First and Family name	Tomás Robles Valladares
Social Security, Passport, ID number		Age	

Researcher codes	WoS Researcher ID *(*)*	H-8809-2015
	SCOPUS Author ID*(*)*	6602110833
	Open Researcher and Contributor ID (ORCID) **	orcid.org/0000-0002-6940-8421

(*) At least one of these is mandatory
(**) Mandatory

A.1. Current position

Name of University/Institution	Universidad Politécnica de Madrid
Department	Departamento de Sistemas Informáticos
Address and Country	
Phone number		E-mail	
Current position	Catedrático de Universidad	From	31/03/2016
Key words	Telemática

A.2. Education

PhD	University	Year
Doctor Ingeniero de Telecomunicación	Universidad Politécnica de Madrid	1991
Ingeniero de Telecomunicación	Universidad Politécnica de Madrid	1987

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

38 indexed scientific articles (JCR)
According to Web Of science: Publications in Web of Science: 49; Sum of Times Cited: 20; H-Index: 9; Average citations per item: 4.1; Average Citation per year: 11.1

According to Scopus: Documents: 80; Total Citations: 447; h-index: 10

According to Google Scholar: References: 977; Index h: 16 Index i10: 30

6 Doctoral Thesis supervised

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

Telecommunication Engineer (1987), and Doctor in Telecommunication Engineering (1991), both from the Technical University of Madrid. PhD Thesis on Testing using LOTOS. Since 1991 associate professor and since 2016 full professor on Telematics Engineering at the E.T.S.I. Telecomunicación of the Technical University of Madrid. Current research areas are on communication protocols, Cyber-Physical systems, 5G applications and services and Blockchain

During this period, Professor D. Tomás Robles Valladares reached sufficient capacities for:
• Managing, initiating and maintaining lines of research, managing the research staff of the research group with a coherent and sustained line of projects that allows the achievement of scientific objectives supports the training of junior researchers.
• Defining and implementing new curricula, developing new subjects and deploying them in these new curricula, in addition to maintaining a suitable update of legacy and basic subjects. This academic activity is also combined with work with formative actions in subjects of grade postgraduate, master and more personalized training such as PFC, TFG and TFM, all this complemented with a teaching activity and teaching innovation that allowed him to stay at the

forefront of new methodologies and teaching methodologies. Moreover, he has also actively participated in educational innovation tasks, projects and publications.

• Acquiring the management skills necessary to actively participate in management tasks of the University, and more specifically in the management, has main responsible, of a research group in the University. At this point it is noteworthy that since January 2013 the candidate is the principal investigator of the Consolidated Group of the UPM: "Telecommunications Engineering Network and Advanced Services Group- GISAI"

The most remarkable achievements of the Professor Tomás Robles CV:

- *3 "sexenios de investigación" currently recognised. The fourth "sexenio de investigación" is going to be claimed at the end of 2019, and since the end of last period, (December 31, 2013) there are accumulated publications in Journal with JCR are: 18 Journals JCR indexed JCR (8 Q1 and 6 de Q2) and several international conferences.*
- *38 indexed scientific articles; 69 research projects, 21 acting as main researcher; 32 contracts with companies.*
- *6 recognised "quinquenios docentes"; more than 62 courses given.*
- *6 Doctoral Thesis supervised; 43 "proyectos fin de carrera" supervised.*
- *Integrated into the "grupo de innovación educativa CyberAula" and participation in 5 project of education innovation 3 projects of teaching innovation and elaboration of material, both for master class and laboratories, exercises and projects at more than 78 courses.*
- *Integration on management activities of University: 38 months as Deputy Director of Human Resources and Infrastructure (Subdirector de Recursos Humanos e Infraestructuras) and 52 months as Deputy Director of Department (Subdirector de Departamento).*
- *Creation as Main Researcher (January 2013) of the "grupo de investigación consolidado de la UPM: Grupo de Ingeniería de Redes y servicios Avanzados de Telecomunicación".*

Part C. RELEVANT MERITS

C.1. Publications (including books)

B Bordel, R Alcarria, T Robles, D Sánchez-de-Rivera. "Service management in virtualization-based architectures for 5G systems with network slicing". Integrated Computer-Aided Engineering, IOS, 2019. doi:10.3233/ICA-190609. JCR-Indexed (IF 2018 = 4.904 Q1)

B Bordel, R Alcarria, T Robles. "Industry 4.0 Paradigm on Teaching and Learning Engineering" INTERNATIONAL JOURNAL OF ENGINEERING EDUCATION 35 (4), 1018-1036
JCR-Indexed (IF 2018 =0.611 Q4)

Sánchez-de-Rivera, Diego, Bordel, Borja, Alcarria, Ramón, and Robles, Tomás. "Enabling Efficient Communications with Resource Constrained Information Endpoints in Smart Homes", *Sensors 2019,.* doi:10.3390/S19081779. JCR-Indexed (IF 2018 = 3.031 Q1)

Borja Bordel Sanchez; Ramon Pablo Alcarria Garrido; Carlos Miguel Nieto; Tomas Enrique Robles Valladares. "A Hardware-Supported Algorithm for Self-Managed and Choreographed Task Execution in Sensor Networks." Sensors. pp. 1 - 33. 10/2018. ISSN 1424-8220. JCR-Indexed (JCR 2018= 2,677 Q1)

Borja Bordel Sanchez; Tomas Enrique Robles Valladares; Ramon Pablo Alcarria Garrido; Diego Sanchez de Rivera Cordoba. "Process execution in Cyber-Physical Systems using cloud and Cyber-Physical Internet services." *The Journal of Supercomputing*, *Springer US*, may, 2018. doi:10.1007/s11227-018-2416-4. JCR-Indexed (IF 2018 = 2.157 Q2).

Ramón Alcarria; Miguel-Angel Manso-Callejo; Borja Bordel; Tomás Robles; Diego Martín. "A Blockchain-Based Authorization System for Trustworthy Resource Monitoring and Trading in Smart Communities". SENSORS. 2018. ISSN 1424-8220. JCR-Indexed (IF 2018=2,677 Q1)

Borja Bordel; Carlos Miguel Nieto; Tomás Robles; Ramón Alcarria. "A Hardware-Supported Algorithm for Self-Managed and Choreographed Task Execution in Sensor Networks. SENSORS. 18 - 3, pp. 0 - 33. 2018. ISSN 1424-8220. JCR-Indexed (IF 2018=2,677 Q1)

Borja Bordel; Diego Sánchez de Rivera; Tomás Robles; Ramon Alcarria. "Process execution in Cyber-Physical Systems using cloud and Cyber-Physical Internet services". Journal of Supercomputing, 2018. doi:10.1007/s11227-018-2416-4. JCR-Indexed (IF 2018 = 2.157 Q2)

Borja Bordel; Tomás Robles; Alvaro Sánchez-Picot; Ramón Alcarria. "Stochastic and Information Theory Techniques to Reduce Large Datasets and Detect Cyberattacks in Ambient Intelligence Environments". *IEEE Access* , 2018. ISSN 2169-3536, doi:10.1109/ACCESS.2018.2848100. JCR-Indexed (IF 2018 = 4.098 Q1).

Bordel, B., Alcarria, R., Robles, T., Martín, D., Cyber-physical systems: Extending pervasive sensing from control theory to the Internet of Things Pervasive and Mobile Computing doi:10.1016/j.pmcj.2017.06.011 JCR-Indexed (IF 2017 = 2,974 Q1).

Alcarria, R., Martín, D., Robles, T., Manso, M.A. A SPQR-tree Decomposition Technique for Efficient Cloud Inter-domain Execution. Journal of Internet Technology (JIT), vol. 18, no. 1 , Jan. 2017 doi: 10.6138/JIT.2017.18.1.20120512. JCR-Indexed (IF 2017 = 1,301 Q3).

Robles, T., Bordel, B., Alcarria, R., and Martín, D. "Mobile wireless sensor networks: Modeling and analysis of three-dimensional scenarios and neighbor discovery in mobile data collection", *Ad-Hoc and Sensor Wireless Networks*, 35, (1-2), 2017. JCR-Indexed (IF 2017 = 0,753 Q4).

Robles, T., Alcarria, R., Morales, A., Martín, D. Supporting variability dependencies for rule-based service compositions in prosumer environments International Journal of Web and Grid Services, 2015, doi:10.1504/IJWGS.2015.067160 JCR-Indexed (IF 2015 = 1.229 Q2)

Robles, T., Alcarria, R., Morales, A., Martín, D. Supporting variability dependencies for rule-based service compositions in prosumer environments International. Journal of Web and Grid Services Vol 10, no 2/3, 2014. JCR-Indexed (IF 2015 = 1.229 Q2)

Morales, A., Alcarria, R., Martín, D., Robles, T. Enhancing Evacuation Plans with a Situation Awareness System Based on End-User Knowledge Provision SENSORS 2014, 14(6)doi:10.3390/s140611153. JCR Indexed (IF 2014 = 2.241 Q1)

Augusto Aquilino Morales Dominguez; Tomas Enrique Robles Valladares; Ramon Pablo Alcarria Garrido; Edwin Juvenal Cedeño Herrera. On the Support of Scientific Workflows over Pub/Sub Brokers. Sensors.. ISSN 1424-8220. JCR Indexed (IF 2013=2.048 Q1)

C.2. Research projects and grants

DEMETER- Agricultural Digital Hubs for an inclusive Europe (H2020-DT-2018-2) H2020-Unión Europea, Responsible: Jose Fernán Martín Ortega & Ramón Alcarria. 01/09/2019 to 31/08/2022 (36 months)

DATAQUEST adscrito al proyecto FIESTA-IOT (EH1709520189), Unión Europea. Responsible: Tomás Robles. 01-01-201 to 31-06-2018 (6 months)

SEMOLA: Tecnologías de análisis de sentimientos y emociones para agentes sociales empáticos en inteligencia ambiental. Ministerio de Economía (TEC2015-68284-R), Responsable/es: Carlos A. Iglesias & Tomás Robles. 12/05/2016 al 31/12/1029 (40 months)

Inpaink: Infraestructura para presentación de información visual de bajo consumo y mantenimiento basado en pantallas de tinta electrónica (RTC161257001). MINECO. Esponsible: Ramón Alcarria, Octubre-2016 a diciembre 2018 (27 months)

MOSI-AGIL-CM. Modelado Social de Inteligencia Ambiental Aplicado a Grandes Instalaciones (M140952001). Responsible: Carlos A. Iglesias & Tomás Robles, 01/10/2015 to 31/10/2017 (24 months)

CALISTA - Agents Technology and Services Engineering for diagnostics and configuration of home network using a mobile phone. Proyecto del programa Nacional de Investigacion (TEC2012-32457). Responsible: Tomás Robles, 01/10/2012-31/12/2015

FIspace: Future Internet Business Collaboration Networks in Agri-Food, Transport and Logistics . European Commission (FP7-2012-ICT-FI-604123), Responsible: Tomas Enrique Robles Valladares . 01/03/2013-31/08/2015

SMARKET. Sistema de Información Inteligente Aplicado a la Compra Asistida y Personalizada de Alimentos . MINISTERIO DE ECONOMÍA Y COMPETITIVIDAD (IPT-13-0925-03), Responsible: Tomas Enrique Robles Valladares. 01/06/2012-21-12-2015

SmartOpenData - Open Linked Data for environment protection in Smart Regions. European Union (FP7-ENV.2013-603824). Responsible Tomás Robles. 01/09/2013 to 01/09/2015 (24 months)

SmartAgriFood: Smart Food and Agribusiness: Future Internet for Safe and Healthy Food from Farm to Fork . European Commission (FP7-2011-ICT-FU-285326). Responsible: Tomas Robles Valladares . 23/06/2011-23/07/2013.

C.3. Contracts

PERIMETER SECURITY: Sistema de Entorno Seguro para Grandes Vehículos y maquinaria Pesada. Responsible: Tomás Robles Valladares. Contractors: Solutio Outsourcing SL, Espacios Castellanos de Innovación SL y Generaciones Fotovoltaicas de la Mancha SL. 01/01/2016- 31/12/2018 (24 months).

Desarrollo de un Modelo Estándar de Gestión del Agua aplicado al regadío (MEGA). Responsable: Tomas Robles Valladares. Contractor: TRAGSA. 01/01/2013 to 31/04/2018 (28 Months)

WINSTAND-Estándar de interoperabilidad para sistemas de control y gestión del agua en zonas regables. Responsable: Tomas Robles ValladaresContractor: TRAGSA. 01/01/2018 to 31/12/2019 (24 months)

C.4. Patents

Procedimiento y sistema de comunicaciones para sensors. Patente de invención. Número de solicitud: P201630171. Fecha: 15/02/2016

C.5. Institutional responsibilities

38 months as Deputy Director of Human Resources and Infrastructure (Subdirector de Recursos Humanos e Infraestructuras) of ETSI Telecomunicación-UPM

52 months as Deputy Director of Department (Subdirector de Departamento) of Dept. de Ingeniería de Sistemas Telemáticos of ETSIT-UPM

Part A. PERSONAL INFORMATION

			CV date	2020/12

First and Family name	M. Celeste Campo Vázquez		
Social Security, Passport, ID number		Age	
Researcher codes	Open Researcher and Contributor ID (ORCID**)	0000-0003-1788-890X	
	SCOPUS Author ID (*)	8725302500	
	WoS Researcher ID (*)	L-1824-2014	

(*) Optional
(**) Mandatory

A.1. Current position

Name of University/Institution	University Carlos III of Madrid		
Department	Telematic Engineering Department / School of Engineering		
Address and Country			
Phone number		E-mail	
Current position	Associate Professor	From	2007/12/28
Key words	Telematic engineering, Design and performance evaluation of communications protocols		

A.2. Education

PhD, Licensed, Graduate	University	Year
Doctorado en Tecnologías de las Comunicaciones	University Carlos III of Madrid	2004
Ingeniera de Telecomunicación	University of Vigo	1998

A.3. General indicators of quality of scientific production *(see instructions)*

Number of research "*sexenios*": 3 (last term 2013-18) Number
of knowledge transfer "*sexenios*": 1 (2002-18)
Number of PhD thesis completed (last 10 years): 4 (2 of them with international mention)
Citations: 866 (Google Scholar), 299 (Scopus), 154 (WoS).
Average cites per year: 10.3 (WoS).
Index h: 15 (Google Scholar), 10.0 (Scopus), 7.0 (WoS).
Number of journal papers in Q1/Q2 (last 10 years): 12.

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

Celeste Campo is a Telecommunications Engineering from the University of Vigo (Spain) in 1998, and a PhD from the University Carlos III of Madrid (Spain) in 2004. She worked in Telefónica I+D from 1998 to 2000. She is currently working as a research and associate professor at the University Carlos III of Madrid (UC3M). Her Ph.D. received the national award

for best thesis on mobility and multimedia in Telecommunications granted by the Professional Association of Telecommunication Engineers and Alcatel.

Her research interests include user mobility and behavior modeling and prediction, locationbased services, vehicular networks, smart cities, and ubiquitous computing systems in general. She also works in the design and performance evaluation of communication protocols for mobile ad-hoc networks, centered on transport and application layer protocols. In these fields, she has participated in 5 European projects, and 9 Spanish national projects (one as principal investigator, budget 68.486 €), besides several regional projects and R&D contracts with Telefonica I+D (as principal investigator, budget 192.060 €), Nokia Spain S.A., Gamesa Innovation and Technology SLU, Nokia Corporation, and Deimos SPACE, SLU. She has co-authored 23 articles in JCR journals (12 in the last 10 years), 3 book chapters and 50 papers in international and national congress proceedings. She has 3 research "*sexenios*" and 1 knowledge transfer "*sexenio*". Nowadays, she is expert to advise the *Comisión Nacional Evaluadora de la Actividad Investigadora* (CNEAI) from ANECA.

She has supervised 3 doctoral thesis, and co-supervised 1, 2 of them with International Mention.

She has collaborated in several initiatives that aim to increase the participation of women in STEM studies, highlighting being the coordinator of STEM4GilrsUC3M activities (https://www.uc3m.es/secondary/disclosure-science/stem-girls-uc3m) that have received funding from the FECYT (Grants for the promotion of scientific, technological and innovation culture, 2018), the IMIO (2018, 2019 and 2020) and the Social Council of the Universidad Carlos III de Madrid (2018). This project has been awarded by the ASTI Foundation with the STG Award "STEM educational programs" 2020. She has published 2 articles in The Conversation Spain with more than 75.000 readers.

She currently holds the position of Deputy Vice Rector for Promotion within the Vice Rector's Office for Students and Equality. In the last 10 years she has held various university management positions, including being Deputy Director of Laboratories of the Department of Telematics Engineering (2012-2015), Director of the Degree in Telematics Engineering and the Degree in Audiovisual Systems Engineering (2015-2017) and Director of the UC3M Open Degree in Engineering and Assistant Director of Student Orientation (2017-2019).

Part C. RELEVANT MERITS *(sorted by typology, last 10 years)*

C.1. Publications *(10 selected)*

1. R. P. Díaz Redondo, C. Garcia-Rubio, A. Fernández Vilas, **C. Campo**, A. RodriguezCarrion. (**2020**). "A hybrid analysis of LBSN data to early detect anomalies in crowd dynamics", in *Future Generation Computer Systems*, vol. 109, pp. 83-94. DOI: 10.1016/j.future.2020.03.038. IF (JCR 2019):6.125. CATEGORY: COMPUTER SCIENCE, THEORY & METHODS (Q1).

2. C. García-Rubio, R.P. Díaz Redondo, **C. Campo**, A. Fernández-Vilas. (**2018**). "Using Entropy of Social Media Location Data for the Detection of Crowd Dynamics Anomalies", in *Electronics 2018*, 7, 380. DOI: 10.3390/electronics7120380. IF (JCR 2018): 1.764. CATEGORY: ENGINEERING, ELECTRICAL & ELECTRONIC (Q3).

3. A. Rodriguez-Carrión, C. García-Rubio **C. Campo**. (**2018**). "Detecting and Reducing Biases in Cellular-Based Mobility Data Sets", in *Entropy*, 20, 736. DOI: 10.3390/e20100736. IF (JCR 2018): 2.419 . CATEGORY: PHYSICS, MULTIDISCIPLINARY (Q2).

4. M. García-Lozano, **C. Campo**, C. García-Rubio, A. Rodriguez-Carrión. (**2016**). "A Bandwidth-Efficient Dissemination Scheme of Non-Safety Information in Urban VANETs",

in *Sensors 2016,* 16, 988. DOI: 10.3390/s16070988. IF (JCR 2016): 2.677. CATEGORY: INSTRUMENTS & INSTRUMENTATION (Q1).

5. A. Rodriguez-Carrion, D. Rebollo-Monedero, J. Forné, **C. Campo**, C. Garcia-Rubio, J. Parra-Arnau, S.K. Das. (**2015**). "Entropy-Based Privacy against Profiling of User Mobility", in *Entropy 2015*, 17, pp. 3913-3946. DOI: 10.3390/e17063913. IF (JCR 2015): 1.743. CATEGORY: PHYSICS, MULTIDISCIPLINARY (Q2).

6. M.I. Vara, **C. Campo**. (**2015**). "Cross-Layer Service Discovery Mechanism for OLSRv2 Mobile Ad Hoc Networks", in *Sensors 2015*, 15, pp. 17621-17648. DOI: 10.3390/s150717621. IF (JCR 2015): 2.033. CATEGORY: INSTRUMENTS & INSTRUMENTATION (Q1).

7. E. García-Lozano, **C. Campo**, C. García-Rubio, A. Cortés-Martín, A. Rodriguez-Carrion, P. Noriega-Vivas. (**2013**). "A Bandwidth Efficient Service for Local Information Dissemination in Sparse to Dense Roadways ", in *Sensors 2013*, 13, pp. 8612-8639. DOI: 10.3390/s130708612. IF (JCR 2013): 2.048, CATEGORY: INSTRUMENTS & INSTRUMENTATION (Q1).

8. A. Rodriguez-Carrion, C. García-Rubio, **C. Campo**, A. Cortés-Martín, E. García-Lozano, P. Noriega-Vivas. (**2012**). "Study of LZ-Based Location Prediction and Its Application to Transportation Recommender Systems", in *Sensors 2012*, 12, pp. 7496-7517. DOI: 10.3390/s120607496. IF (JCR 2012): 1.953, CATEGORY: INSTRUMENTS & INSTRUMENTATION (Q1).

9. E. Yndurain Gil, D. Bernhardt, and **C. Campo**. (**2012**). "Augmenting Mobile Search Engines to Leverage Context Awareness", in *IEEE Internet Computing*, vol. 16, no. 2, pp. 17-25. DOI: 10.1109/MIC.2012.17. IF (JCR 2012): 2.039, CATEGORY: COMPUTER SCIENCE, SOFTWARE ENGINEERING (Q1).

10. F. Almenárez Mendoza, A. Marín, D. Díaz Sánchez, A. Cortes, **C. Campo**, C. GarcíaRubio. (**2011**). "Trust management for multimedia P2P applications in autonomic networking", in *Ad Hoc Networks*, vol. 9, no. 4, pp. 687-697. DOI: j.adhoc.2010.09.005. IF (JCR 2011): 2.110, CATEGORY: TELECOMMUNICATIONS (Q1).

C.2. Research projects

1. Cybersecurity, Network Analysis and Monitoring for the Next Generation Internet (S2018/TCS-4566). CAM-Consejería de Educación e Investigación. Tecnologías 2018. PI: Daniel Díaz Sánchez. Duration: 01/01/2019-31/12/2020. Budget: 71.585,2 €.

2. Inteligencia de Fuentes Abiertas para Redes Eléctricas Inteligentes Seguras (TEC201784197-C4-1-R). Ministerio de Economía, Industria y Competitivity. Proyectos de I+D+I del programa estatal de Investigación, Desarrollo e Innovación orientada a los retos de la sociedad. PI1: Andrés Marín López. PI2: Daniel Díaz Sánchez. Duration: 01/01/2018-

   30/09/2021. Budget: 61.710 €.

3. Monitorización de incidentes en comunidades inteligentes (INRISCO): seguridad y movilidad (TEC2014-54335-C4-2-R). Ministerio de Ciencia e Innovación. Proyectos de I+D+I del programa estatal de Investigación, Desarrollo e Innovación orientada a los retos de la sociedad. PI: Florina Almenárez Mendoza. Duration: 01/01/2015-30/06/2019. Budget: 68.365 €.

4. EMRISCO: Seguridad y movilidad. (TEC2013-47665-C4-4-R). Ministerio de Ciencia e Innovación. Proyectos de I+D+I del programa estatal de Investigación, Desarrollo e Innovación orientada a los retos de la sociedad. PI: Florina Almenárez Mendoza.

   Duration: 01/01/2014-30/06/2015. Budget: 10.000 €.

5. TransITS: Modelling Public Transport Passenger Flows in the Era of Intelligent Transport Systems (Action TU 1004). COST – European Cooperation in Science and Technology. PI: Carlos García-Rubio. Duration: 05/2011 – 05/2015.

6. Plataforma avanzada de gestión de redes de móviles y heterogéneas de nueva generación con localización de usuarios en interiores (MONOLOC) (IPT-2011-1272430000). Ministerio de Ciencia e Innovación. PI: Carlos García-Rubio. Duration: 02/09/2011 – 31/12/2014. Budget: 126.346,66 €.
7. CONSEQUENCE: Continuity of Service, Security and QoS for Transportation Systems. (TEC2010-20572-C02-01). Ministerio de Educación y Ciencia. **PI: Celeste Campo**. Duration: 01/01/2011-30/04/2015. Budget: 68.486 €.

C.3. Contracts, technological or transfer merits

1. Tecnologías para la asequibilidad del acceso de banda ancha, TREFOIL. NOKIA SPAIN S.A. PI: Eva Rajo Iglesias. Duration: 01/04/2020-01/02/2022. Budget: 70.380 €.
2. JANO (Joint Action Towards Digital Transformation), subproject "Research on using Edge Computing/Devices". CIEN – CDTI Projects. Duration: 03/11/2019-31/08/2023. PI: Andrés Marín López. Budget: 179.634,12 €.
3. Desarrollo software de prototipos de servicio basados en la tecnología UICC-Near Field Communication (UICC-NFC). Telefónica I+D SAU. Duration: 01/08/2009-31/12/2010. **PI: Celeste Campo**. Budget: 104.566 €.

C.4. PhD thesis supervisor

1. "Contributions to understanding of Human Mobility and Its Impact on the Improvement of Lightweight Mobility Prediction Algorithms". Alicia Rodríguez Carrión. International Mention. January, 2016. Co-supervised with Prof. Dr. Carlos García Rubio. Nowadays, Alicia is Senior Research at Fujitsu Laboratories of Europe.
2. "Schemes for Multi-Hop Dissemination of Non-Safety Information in VANETs". Estrella M. García Lozano. January 2016. Nowadays, Estrella is teacher at Secondary School.
3. "Descubrimiento de servicio cross-layer basado en OLSR para redes MANET". María Isabel Vara Lorenzo. January 2016. Nowadays, Isabel is Presale Engineer at MASMOVIL.
4. "Contribution to improve mobility uses through context-awareness". Elena Yndurain Gil. International Mention. December 2012. Nowadays, Elena is Adjunct Professor at IE Business School and Entrepreneur Mentor. Previously, she works at IBM Q Quantum Computing in Washington.

C.5. Dissemination projects and publications

1. STEM4GirlsUC3M: programa UC3M para el fomento de vocaciones STEM en niñas y jóvenes. **PI: Celeste Campo**. Duration: 16/09/2019-31/12/2020. Budget: 18.000 €. This project has also obtained budget from the IMIO (*Instituto de la Mujer y para la Igualdad de Oportunidades*) in 2018 (7.000 €), 2019 (11.729,65 €) and 2020 (13.021,47 €).
2. ¿Se convertirán los Huawei en (muy buenas) cámaras de fotos? **Celeste Campo** and Carlos García Rubio. (2019). The Conversation. 29.206 readers.
3. ¿Por qué se actualizan tanto las aplicaciones de mi móvil? **Celeste Campo**. (2019). The Conversation. 46.125 readers. Republished (among others) by El País (17/02/2019).

C.6. Institutional responsibilities

1. Deputy Vice Rector for Promotion within the Vice Rector's Office for Students and Equality (since 2019).
2. Director of the UC3M Open Degree in Engineering and Assistant Director of Student Orientation (2017-2019).
3. Director of the Degree in Telematics Engineering and the Degree in Audiovisual Systems Engineering (2015-2017).
4. Deputy Director of Laboratories of the Department of Telematics Engineering (20122015).

C.7. Others

1. **Expert to advise** Comisión Nacional Evaluadora de la Actividad Investigadora (**CNEAI**) from ANECA (Resolución 28 de mayo de 2020, BOE 6 de junio de 2020).
2. **Evaluator and reviewer of research projects** for national and international institutions: ANEP, AENOR, Xunta de Galicia, Agencia Canaria, SENACYT (Gobierno de Panamá).
3. **Awards**: the project STEM4GilrsUC3M has been awarded by the ASTI Foundation with the STG Award "STEM educational programs" (2020).
4. **Collaborator** in the **Woman and Engineering program** from **Royal Academy of Engineering of Spain**.
5. **Regular reviewer of scientific publications**.

Parte A. DATOS PERSONALES

Nombre y Apellidos	Juan Antonio Carral Pelayo		
DNI		Edad	
Núm. identificación del investigador	Researcher ID		
	Scopus Author ID		
	* Código ORCID	0000-0002-5545-9463	

* Obligatorio

A.1. Situación profesional actual

Organismo	Universidad de Alcalá		
Dpto. / Centro	Universidad de Alcalá / Universidad de Alcalá		
Dirección	Edificio Politécnico, Depto. Automática, DE342, 28805, Madrid		
Teléfono		Correo electrónico	
Categoría profesional	Profesor Titular Universidad	Fecha inicio	2013
Palabras clave			

A.2. Formación académica (titulo, institución, fecha)

Licenciatura/Grado/Doctorado	Universidad	Año
Ingeniero de Telecomunicación	Escuela Técnica Superior de Ingenieros de Telecomunicación	1993

A.3. Indicadores generales de calidad de la producción científica

14 artículos en JCR: Q1 (2), Q2 (8), Q3 (3), Q4 (1)

Estadísticas de Google Scholar:

Total: Citas: 376; índice-h: 10; índice-i10: 11

Desde 2016: Citas: 131; índice-h: 7; índice-i10: 6

Propiedad intelectual e industrial: 1 patente internacional y 2 patentes nacionales con estudio previo

Dos periodos de investigación reconocidos (último año evaluado: 2016)

Parte B. RESUMEN LIBRE DEL CURRÍCULUM

Dr. Juan Antonio Carral obtuvo el título de Ingeniero de Telecomunicaciones por la Universidad Politécnica de Madrid (UPM) en 1993, donde trabajó; como ayudante de investigación en el Departamento de Ingeniería de Sistemas Telemáticos y obtuvo una beca FPU del Ministerio de Educación (1994-1998). A finales de 1998, obtuvo una plaza de profesor ayudante en la Escuela Politécnica de la Universidad de Alcalá (UAH) y, posteriormente, una plaza de profesor titular, en 2001. Obtuvo su Tesis Doctoral en el campo de los conmutadores avanzados en 2013 por la Universidad de Alcalá. Ha participado en numerosos proyectos de investigación nacionales, internacionales (EU) y regionales tanto en la UPM como en la UAH. Ha publicado más de una docena de artículos en revistas internacionales de alto impacto del campo de las telecomunicaciones y ha participado en numerosas conferencias tanto nacionales como internacionales. Colabora con la Fundación Madri+d como experto del panel VERIFICA desde el año 2016 y con la Agencia Nacional de Evaluación de la Calidad y Acreditación (ANECA) como miembro del Programa de Evaluación de profesorado (PEP) desde el año 2020. Desde octubre de 2019 desempeña el puesto de Director de Transparencia de la Universidad de la Alcalá.

Parte C. MÉRITOS MÁS RELEVANTES (ordenados por tipología)

C.1. Publicaciones

AC: Autor de correspondencia; (nº x / nº y): posición firma solicitante / total autores

1 <u>**Artículo científico**</u>. Joaquín Álvarez Horcajo; Isaias Martinez Yelmo; Diego López Pajares; Juan Antonio Carral Pelayo; Marco Savi. (4/5). 2021. A Hybrid SDN switch based on Standard P4 Code IEEE Communications Letters. ISSN 1089-7798.

2 <u>**Artículo científico**</u>. Diego López Pajares; Joaquín Álvarez Horcajo; Elisa Rojas Sánchez; Juan Antonio Carral Pelayo; Isaias Martinez Yelmo. (4/5). 2020. One-Shot Multiple Disjoint Path Discovery Protocol (1S-MDP) IEEE Communications Letters. 24/8, pp.1660-1663. ISSN 1089-7798.

3 <u>**Artículo científico**</u>. Joaquín Álvarez Horcajo; Diego López Pajares; Isaias Martinez Yelmo; Juan Antonio Carral Pelayo; José Manuel Arco Rodríguez. (4/5). 2019. Improving multipath routing of TCP flows by network exploration IEEE Access. ISSN 2169-3536.

4 <u>**Artículo científico**</u>. Elisa Rojas Sánchez; Joaquín Álvarez Horcajo; Isaias Martinez Yelmo; Juan Antonio Carral Pelayo; José Manuel Arco Rodríguez. (4/5). 2018. TEDP: An enhanced topology discovery service for Software-Defined Networking IEEE Communications Letters. 22/8, pp.1540-1543. ISSN 1089-7798.

5 <u>**Artículo científico**</u>. Joaquín Álvarez Horcajo; Isaias Martinez Yelmo; Elisa Rojas Sánchez; Juan Antonio Carral Pelayo; Diego López Pajares. (4/5). 2017. New cooperative mechanisms for software defined networksbased on hybrid switches Transactions on Emerging Telecommunications Technologies. ISSN 2161-3915.

6 <u>**Artículo científico**</u>. Elisa Rojas Sánchez; Joaquín Álvarez Horcajo; Isaias Martinez Yelmo; José Manuel Arco Rodríguez; Juan Antonio Carral Pelayo. (5/5). 2017. GA3: scalable, distributed address assignment for dynamic data center networks Annales des Telecommunications. ISSN 0003-4347.

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8 <u>**Artículo científico**</u>. Iván Marsá Maestre; Miguel Ángel López Carmona; Juan Antonio Carral Pelayo; Guillermo Agustín Ibáñez Fernández. (3/4). 2013. A Recursive Protocol for Negotiating Contracts Under Non-monotonic Preference Structures Group Decision and Negotiation. 22/1, pp.1-43. ISSN 0926-2644.

C.2. Proyectos

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2 CM/JIN/2019-039, Integración de Redes IoT en entornos inteligentes basados en SDN/NFV y redes 5G COMUNIDAD AUTONOMA DE MADRID. Isaias Martinez Yelmo. 01/01/2020-31/12/2021. 15.000 €.

3 DEDENNE - Diseño de Encaminamiento para control óptimo en redes de Distribución de ENergía Eléctrica Universidad de Alcalá. Elisa Rojas Sánchez. 21/12/2020-20/12/2021. 5.500 €.

4 Servicios y protocolos para la integracio¿n de redes de baja capacidad en entornos inteligentes basados en SDN/NFV y redes 5G JUNTA DE COMUNIDADES DE CASTILLA-LA MANCHA. Elisa Rojas Sánchez. 01/01/2020-17/09/2021. 29.043 €.

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6 CCG2018/EXP-076, BISHOPS: Bondades de la Integración de Sistemas HíbridOs P4-SDN Universidad de Alcalá. Isaias Martinez Yelmo. 20/12/2018-19/12/2019. 3.000 €.

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9 S2013/ICE-2919, Tecnologías integradas de gestión y operación de red 5G (TIGRE5-CM) COMUNIDAD AUTONOMA DE MADRID. Juan Antonio Carral Pelayo. 01/10/2014-31/12/2018. 165.000 €.

10 EsPECIE - Evaluación de Protocolos basados en Exploración de CamInos mediante Equipamiento hardware específico compatible con el lenguaje p4. (11x NetFPGA-SUME Virtex-7 FPGA Development Board) Universidad de Alcalá. Isaias Martinez Yelmo. 16/11/2017-20/12/2018. 16.258,91 €.

11 CCGP2017-EXP/001, SIMPSONS: SDN Intelligent Management, ProviSioning and Optmization of NetworkS Universidad de Alcalá. Isaias Martinez Yelmo. 01/12/2017-30/11/2018. 3.000 €.

12 TEC2013-45183-R, Inteligencia colectiva para la navegación inteligente de tráfico vehicular MINISTERIO DE ECONOMIA Y COMPETITIVIDAD. Miguel Ángel López Carmona. (Universidad de Alcalá). 01/01/2014-31/12/2016. 61.831 €.

13 CCG2014/EXP-008, Ecosistema de Detección Ubicua basado en SENSores para diagnóstico y tratamiento de disfunciones motoras en niños (EDUSENS) Universidad de Alcalá. Isaias Martinez Yelmo. (Universidad de Alcalá). 15/12/2014-14/03/2016. 3.300 €.

C.3. Contratos

1 Asesoramiento en materia de desarrollos en sistemas centralizados. DANIEL DEL POZO PACHECA. Isaias Martinez Yelmo. 16/05/2018-30/11/2018. 7.260 €.

2 Realización del curso de especialización titulado "Introducción a SDN (Software-Defined Networking) y NFV (Network Function Virtualization)" INGENIERIA DE SISTEMAS PARA LA DEFENSA DE ESPAÑA SA SME MP. Juan Antonio Carral Pelayo. 20/09/2017-P2M2D. 1.452 €.

C.4. Patentes

1 Guillermo Agustín Ibáñez Fernández; Joaquín Álvarez Horcajo; Juan Antonio Carral Pelayo; Isaias Martinez Yelmo; Diego López Pajares. P201600207. Procedimiento de establecimiento y borrado de caminos múltiples disjuntos, de reenvío de tramas y puente de red España. 10/04/2018. Universidad de Alcalá.

2 Elisa Rojas Sánchez; Guillermo Agustín Ibáñez Fernández; Juan Antonio Carral Pelayo. P201331139. Procedimiento de reparación agrupada de caminos en fallo y puente de red España. 30/11/2015. Universidad de Alcalá.

3 Elisa Rojas Sánchez; Diego Rivera Pinto; Guillermo Agustín Ibáñez Fernández; Juan Antonio Carral Pelayo; José Manuel Arco Rodríguez. PCT/ES2012/0702. Procedimiento de reparación de caminos de tramas de datos y puente de red / Method for repairing data frames routes and network bridge 27/04/2012. Universidad de Alcalá.