

**Part A. PERSONAL INFORMATION**

CV date 2023/06

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

(\*) 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	Avda. Universidad, 30 28911 Leganés (Madrid) Spain		
Phone number	91.624.84.39	E-mail	<a href="mailto:celeste@it.uc3m.es">celeste@it.uc3m.es</a>
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
<i>Doctorado en Tecnologías de las Comunicaciones</i>	University Carlos III of Madrid	2004
<i>Ingeniera de Telecomunicación</i>	University of Vigo	1998

**A.3. General indicators of quality of scientific production**

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: 1039 (Google Scholar), 369 (Scopus), 206 (WoS).  
 Average cites per year: 10.3 (WoS).  
 Index h: 17 (Google Scholar), 11.0 (Scopus), 8.0 (WoS).  
 Number of journal papers in Q1/Q2 (last 10 years): 14.

**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, location-based 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 26 articles in JCR journals (14 in the last 10 years), 4 book chapters and 53 papers in international and national congress proceedings. She has 3 research



“sexenios” and 1 knowledge transfer “sexenio”. She was an 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 STEM4GirlsUC3M 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

1. M. Moure-Garrido, **C. Campo**, C. Garcia-Rubio. “Entropy-Based Anomaly Detection in Household Electricity Consumption”. *Energies* 2022, 15, 1837. doi: [10.3390/en15051837](https://doi.org/10.3390/en15051837)
2. V. Seoane, C. Garcia-Rubio, F. Almenares, **C. Campo**, “Performance evaluation of CoAP and MQTT with security support for IoT environments”, *Computer Networks*, Volume 197, 2021, 108338, ISSN 1389-1286, doi: [10.1016/j.comnet.2021.108338](https://doi.org/10.1016/j.comnet.2021.108338).
3. M. A. Igartua, F. Almenares, R. P. Díaz Redondo, M. I. Martín Vicente, J. Forné, **C. Campo**, et al., “INRISCO: INcident monitoRING in Smart Communities”, in *IEEE Access*, vol. 8, pp. 72435-72460, 2020, doi: [10.1109/ACCESS.2020.2987483](https://doi.org/10.1109/ACCESS.2020.2987483).
4. R. P. Díaz Redondo, C. Garcia-Rubio, A. Fernández Vilas, **C. Campo**, A. Rodriguez-Carrion. (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](https://doi.org/10.1016/j.future.2020.03.038).
5. 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](https://doi.org/10.3390/electronics7120380).
6. A. Rodríguez-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](https://doi.org/10.3390/e20100736).
7. M. García-Lozano, **C. Campo**, C. García-Rubio, A. Rodríguez-Carrión. (2016). "A Bandwidth-Efficient Dissemination Scheme of Non-Safety Information in Urban VANETs", in *Sensors* 2016, 16, 988. DOI: [10.3390/s16070988](https://doi.org/10.3390/s16070988).
8. A. Rodríguez-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](https://doi.org/10.3390/e17063913).
9. 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](https://doi.org/10.3390/s150717621).
10. E. García-Lozano, **C. Campo**, C. García-Rubio, A. Cortés-Martín, A. Rodríguez-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](https://doi.org/10.3390/s130708612).
11. A. Rodríguez-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](https://doi.org/10.3390/s120607496).
12. 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](https://doi.org/10.1109/MIC.2012.17).
  13. F. Almenárez Mendoza, A. Marín, D. Díaz Sánchez, A. Cortes, **C. Campo**, C. García-Rubio. (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](https://doi.org/j.adhoc.2010.09.005).

## C.2. Research projects

1. QURSA - Arquitecturas y técnicas resistentes a computación cuántica: Seguridad post-cuántica (TED2021-130369B-C32). Agencia Estatal de Investigación (AEI). PI: Florina Almenares Mendoza. PI2: Andrés Marín. Duration: 01/12/2022 – 30/11/2024.
2. COMPROMISE - Mejorando la confidencialidad y privacidad en protocolos de comunicaciones (PID2020-113795RB-C32). PI1: **Celeste Campo**, P2: Carlos García-Rubio. Duration: 01/09/2021 – 31/08/2024)
3. 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.
4. Inteligencia de Fuentes Abiertas para Redes Eléctricas Inteligentes Seguras (TEC2017-84197-C4-1-R). Ministerio de Economía, Industria y Competitividad. 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.
5. 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.
6. 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.
7. 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.
8. Plataforma avanzada de gestión de redes de móviles y heterogéneas de nueva generación con localización de usuarios en interiores (MONOLOC) (IPT-2011-1272-430000). Ministerio de Ciencia e Innovación. PI: Carlos García-Rubio. Duration: 02/09/2011 – 31/12/2014.
9. 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.

## 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.
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.
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**.



#### 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 worked 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. "El sistema de nombres de dominio, un punto débil de Internet". **Celeste Campo** y Carlos García Rubio. (2022). The Conversation. 1.443 readers.
3. "Algoritmo: palabra del siglo, si la pandemia lo permite" **Celeste Campo**. The Conversation. (2022). The Conversation. 7.177 readers.
4. ¿En qué idioma hablas las 'cosas' conectadas a Internet? **Celeste Campo**. (2021) The Conversation. 11.013 readers.
5. ¿Se convertirán los Huawei en (muy buenas) cámaras de fotos? **Celeste Campo** and Carlos García Rubio. (2019). The Conversation. 29.536 readers.
6. ¿Por qué se actualizan tanto las aplicaciones de mi móvil? **Celeste Campo**. (2019). The Conversation. 54.179 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 (since 2023).
2. Deputy Vice Rector for Promotion within the Vice Rector's Office for Students and Equality (2019 - 2023).
3. Director of the UC3M Open Degree in Engineering and Assistant Director of Student Orientation (2017-2019).
4. Director of the Degree in Telematics Engineering and the Degree in Audiovisual Systems Engineering (2015-2017).
5. Deputy Director of Laboratories of the Department of Telematics Engineering (2012-2015).

#### 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 STEM4GilsUC3M has been awarded by (1) the ASTI Foundation with the STG Award “STEM educational programs” (2020), (2) Pioneras IT 2022 from the Professional Association of Telecommunication Engineers and (3) “STEAM Alliance 2022” from the Ministry of Education and Vocational Training (MEFP) of Spain.
4. **Collaborator** in the **Woman and Engineering program** from **Royal Academy of Engineering of Spain**.
5. **Regular reviewer of scientific publications.**