

Abbreviated Curriculum Vitae

Part A. PERSONAL INFORMATION

Name	José Antonio García Naya
ORCID	0000-0002-1944-4678
Researcher ID	K-2724-2015
Scopus ID	24467724500
Google Scholar	https://scholar.google.es/citations?user=ULVkyYAAAAJ
UDC's research portal	https://portalinvestigacion.udc.gal/investigadores/213378/detalle
UDC's file	http://pdi.udc.es/en/File/Pdi/ZB99G

A.1. Current position

Position	Associate Professor / Profesor Titular de Universidad	
Initial date	15 September 2022	
Institution	Universidade da Coruña (UDC) / University of A Coruña	
Department/Center	Ingeniería de Computadores	Facultad de Informática
Key words	Wireless engineering, measurements, time-modulated arrays, IoT	

A.2. Previous positions

Period	Position/Institution/Country/Interruption cause
19 Oct. 2011 – 14 Sept. 2022	Profesor Contratado Doctor at UDC (Assistant Prof.)
10 Oct. 2008 – 18 Oct. 2011	Profesor Ayudante LOU at UDC (Assistant Professor)
28 Dec. 2007 – 9 Oct. 2008	"Maria Barbeito" pre-doctoral grant at UDC

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
MSc Computer Engineering	University of A Coruña	2005
PhD in Computer Engineering	University of A Coruña	2010

Part B. CV SUMMARY

José Antonio García Naya ([UDC Researcher Portal](#), [UDC PDI](#), [ORCID](#), [Google Scholar](#)) is MSc (2005) and PhD (2010) in Computer Engineering from the University of A Coruña ([UDC](#)). Since 2007, he has been a faculty member of the UDC, being Tenured Associate Professor (Profesor Titular de Universidad) since September 2022 in the combined knowledge area of Electronics Technology and Signal Theory and Communications. Since 2005, he has been with the Electronics Technology and Communications Group ([GTEC](#)) at the UDC, where he carries out his research and technology-transfer activities related to wireless communications engineering, which have been recognized by the ANECA (Agencia Nacional de Evaluación de la Calidad y Acreditación) with the award of three six-year research terms.

Since 2019, José A. is permanent member of the Centre for Information and Communications Technology Research ([CITIC](#)) at the UDC, accredited by Xunta de Galicia as "Center of Excellence" and recognized as a "Member of the CIGUS Network" for the period 2024-2027.

José A. has co-supervised 6 doctoral theses and some of his former students are with the Tongji University (China) and with the UDC. José A. is co-author of a patent, more than 50 articles in

international peer-reviewed top journals, more than 70 conference papers in flagship conference proceedings, and several FAIR-compliant datasets published in Zenodo and IEEE Dataport repositories.

José A. has been co-IP of 3 projects funded by the Agencia Estatal de Investigación of Spain (MCIN/AEI/10.13039/501100011033). He participated in 5 international projects: HiPERFORM (DOI: [10.3030/783174](https://doi.org/10.3030/783174)), EDINAF (funded by the “European Defence Fund Programme”), and three Erasmus+ projects. In total, José A. has participated in 20 research projects (10 in the last 10 years) funded through competitive calls from public entities, in 4 research grants (2 in the last 10 years), in 2 thematic networks, as well as in 32 non-competitive contracts with private entities (14 in the last 10 years).

José A. is member of the editorial board of the Journal on Advances in Signal Processing since 2011 and he has been member of the editorial board of the Wireless Communications and Mobile Computing journal between 2018 and 2022. He has also been co-organizer of several special issues and special sessions related to the experimental evaluation of wireless communication systems.

His research interests include the experimental evaluation of wireless systems in realistic scenarios, Internet of things, indoor positioning systems, and time-modulated antenna arrays for wireless communication systems.

José A. is currently the head of the Centre for Educational Training and Innovation (CUFIE) at UDC, which offers training for graduate and postgraduate students, teaching staff, and PhD students. CUFIE also gives support to innovation in education, virtual and blended training activities.

Part C. RELEVANT MERITS

C.1. Publications

- [1] R. Maneiro-Catoira, G. Bogdan, K. Godziszewski, J. Brégains, José A. García-Naya, Y. Yashchyshyn, and L. Castedo, "**Joint Beam Steering and Direct Antenna Multimodulation using Time-Modulated Arrays**," IEEE Internet of Things Journal, vol. 12, no. 20, pp. 42702-42716, Oct 2025. DOI: <https://doi.org/10.1109/JIOT.2025.3594557>
- [2] V. B. Vales, T. Domínguez-Bolaño, C. J. Escudero, and J. A. García-Naya, "**An IoT System for Smart Building Combining Multiple mmWave FMCW Radars Applied to People Counting**," IEEE Internet of Things Journal, vol. 11, no. 21, pp. 35306-35316, Nov 2024. DOI: <https://doi.org/10.1109/JIOT.2024.3434707>
- [3] R. Maneiro-Catoira, J. Brégains, J. A. García-Naya, and L. Castedo, "**Directional Modulation with Artificial-Noise Injection into Time-Modulated Arrays**," IEEE Antennas and Wireless Propagation Letters, vol. 23, no. 8, pp. 2336-2340, Aug 2024. DOI: <https://doi.org/10.1109/LAWP.2024.3389460>
- [4] T. Domínguez-Bolaño, V. B. Vales, C. J. Escudero, and J. A. García-Naya, "**An IoT System for a Smart Campus: Challenges and Solutions Illustrated over Several Real-World Use Cases**," Internet of Things, vol. 25, pp. 1-21, Apr 2024. DOI: <https://doi.org/10.1016/j.iot.2024.101099>
- [5] T. Domínguez-Bolaño, O. Campos-Fernández, V. B. Vales, C. J. Escudero, and J. A. García-Naya, "**An overview of IoT architectures, technologies, and existing open-source**

- projects**," Elsevier Internet of Things, vol. 20, pp. 1-15, Nov 2022. DOI: <https://doi.org/10.1016/j.iot.2022.100626>
- [6] V. Barral, O. Campos-Fernández, T. Domínguez-Bolaño, C. J. Escudero, and J. A. García-Naya, "**Fine Time Measurement for the Internet of Things: a practical approach using ESP32**," IEEE Internet of Things Journal, vol. 9, no. 19, pp. 18305-18318, Oct. 2022. DOI: <https://doi.org/10.1109/JIOT.2022.3158701>
- [7] T. Domínguez-Bolaño, J. Rodríguez-Piñeiro, J. A. García-Naya, and L. Castedo, "**Bit Error Probability and Capacity Bound of OFDM Systems in Deterministic Doubly-Selective Channels**," IEEE Transactions on Vehicular Technology, vol. 69, no. 10, pp. 11458-11469, Oct 2020. DOI: <https://doi.org/10.1109/TVT.2020.3011365>
- [8] R. Maneiro-Catoira, J. Brégains, J. A. García-Naya, and L. Castedo, "**Time-modulated array beamforming with periodic stair-step pulses**," Signal Processing, vol. 166, pp. 1-10, Jan 2020. DOI: <https://doi.org/10.1016/j.sigpro.2019.107247>.
- [9] Chandra, A. U. Rahman, U. Ghosh, J. A. García-Naya, A. Prokes, J. Blumenstein, and C. F. Mecklenbräuker, "**60-GHz millimeter-wave propagation inside bus: Measurement, modeling, simulation and performance analysis**," IEEE Access, vol. 7, pp. 97 815–97 826, June 2019, DOI: [10.1109/ACCESS.2019.2924729](https://doi.org/10.1109/ACCESS.2019.2924729)
- [10] R. Maneiro Catoria, J. Brégains, J. A. Garcia-Naya, and L. Castedo, "**Enhanced time-modulated arrays for harmonic beamforming**," IEEE Journal of Selected Topics in Signal Processing, vol. 11, no. 2, pp. 259–270, Mar. 2017, DOI: [10.1109/jstsp.2016.2627178](https://doi.org/10.1109/jstsp.2016.2627178)

C.2. Congress

During the last 10 years, José A. García-Naya co-authored 45 papers published in peer-reviewed conference proceedings such as ICC, ICASSP, VTC, SAM, WSA, EUSIPCO, SPAWC, and EuCAP.

C.3. Research projects

- [1] Project PID2022-137099NB-C42: **Enabling communication, coding and processing technologies for next-generation classical-quantum networks (MADDIE)**.
Funding: Agencia Estatal de Investigación of Spain (MCIN/AEI/10.13039/501100011033).
Principal Investigators: Luis Castedo, **José A. García-Naya**
Duration: 01/09/2023 – 31/08/2026; Budget: 182.500,00 €
- [2] Project: **European Digital Naval Foundation (EDINAF)**.
Funding: European Defence Fund ([EDF-2021](#)); call: Smart ships (EDF-2021-NAVAL-R).
Principal Investigators: Salvador Naya, Luis Castedo, Alicia Munín
Duration: 3 years; Budget: 377.461,76 € (for UDC only), total budget: 29 M€
Participation: **member of the research team**
- [3] Project TED2021-130240B-I00: **Integrated video and radar sensing for device-free human indoor positioning with guaranteed privacy based on edge AI (IVRY)**.
Funding: Green and digital transition projects, Agencia Estatal de Investigación of Spain (MCIN/AEI/10.13039/501100011033).
Principal Investigators: Carlos J. Escudero, Luis Castedo
Duration: 2 years. Budget: 208.495,00 €
Participation: **member of the research team**
- [4] Project 2020-1-BE01-KA226-VET-082730: **Heritage Efficient management through Relevant IT use (HERIT)**. Agence francophone pour l'éducation et la formation tout au long

de la vie (AEF-Europe), Erasmus+ KA226 - Partnerships for Digital Education Readiness.
Coordinator: Marie-Alice Budniok (European Landowners Organization).
Duration: Jun. 2021 – May 2023. Budget: 74.505,00 €
Participation: **member of the research team**

- [5] Project PID2019-104958RB-C42: **Advances in coding and signal processing for the digital society (ADELE).**

Funding: Agencia Estatal de Investigación of Spain (MCIN/AEI/10.13039/501100011033).
Principal Investigators: Luis Castedo, **José A. García-Naya**
Duration: 01/06/2020 – 31/05/2023; Budget: 214.775,00 €

- [6] Project 783174: **High performant Wide Band Gap Power Electronics for reliable, energy efficient drivetrains and optimization through multi-physics simulation (HiPERFORM).**

Funding: ECSEL Joint Undertaking. Call: H2020-ECSEL-2017-2-RIA-two-stage
Principal Investigators: Francisco J. Cuadrado Aranda, Luis Castedo
Duration: 1/5/2018 – 31/10/2021; Budget. UDC: 496.825,34 € (Grant UE: 173.888,87 €);
GTEC: 190.600,34 € (Grant UE: 66.710,12 €). DOI: [10.3030/783174](https://doi.org/10.3030/783174)
Participation: **member of the research team with coordination responsibilities**

- [7] Project TEC2016-75067-C4-1-R: **Coding and Signal Processing for Emerging Wireless Communication and Sensor Networks (CARMEN).**

Funding: Agencia Estatal de Investigación of Spain (MCIN/AEI/10.13039/501100011033).
Principal Investigators: Luis Castedo, **José A. García-Naya**
Duration: 30/12/2016 – 31/12/2020; Budget: 227.359,00 €

- [8] Project TEC2013-47141-C4-1-R: **Radio access techniques for heterogeneous wireless networks (RACHEL).**

Funding: Spanish Government. Principal Investigator: Luis Castedo
Duration: 01/01/2014 – 31/12/2017; Budget: 200.618,00 €

C.4. Contracts, technological or transfer merits

- [1] **DETEV. Desarrollo de dispositivo de telemetría embarcado en vehículos**

Freezz España S.L. Principal investigators: Luis Castedo Ribas and José A. García Naya.
Duration: Feb. 2026 – May 2026. Budget: 18.752,20 €. Participation: **co-principal investigator.**

- [2] **ChatUDC. Desarrollo e implantación de un chatbot para portales de la UDC.**

Universidade da Coruña. Principal Investigators: José A. García-Naya, V. Barral.
Duration: 19/09/2024 – 31/10/2024. Budget: 10.000,00 €
Participation: **co-principal investigator.**

- [3] **INRA-CBTC: Interfaz Radio para Soporte de Sistema CBTC (Communications-Based Train Control).** CAF Signalling S.L.

Principal Investigator: Luis Castedo. Participation: **co-principal investigator.**
Duration: June 1, 2018 – July 1, 2021; Budget: 262.487,86 €
Participation: **member of the research team with coordination responsibilities.**

- [4] **LOCREA: Localización en Interiores para Realidad Aumentada.**

Xoia Software Development S.L., Principal Investigator: Carlos J. Escudero Cascón.
Duration: Oct. 2019 – Jan. 2020; Budget: 18.000,00 €
Participation: **member of the research team**